



Association for Women Geoscientists

Puget Sound Chapter

Spring/Summer 2004

Editor's Comments by Amanda Taub

Greetings and salutations! Welcome to the latest AWG Puget Sound Chapter newsletter. The newsletter is packed with all sorts of news and goodies this time. You will find below some articles and some really cool web sites that I hope might be of interest to you. We will also hear from our Chapter President, Marcia Knadle, on what the board has been doing for the last few months. In addition, she asks chapter members to step up and volunteer for board positions that are coming open. Marcia also proposes some changes to our by-laws.

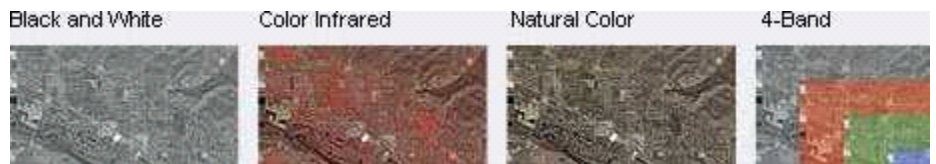
We have a short report from Carla Whittington, our Treasurer. Shawn Blaesing-Thompson, our Vice-President, has written a report on the February 25 board and chapter meetings, as well as, a report on the judging at the International Science and Engineering Fair in Portland, OR. Lynn Hultgrien, our Scholarship Chair, announces the recipient of our latest scholarship award. In addition, there are two announcements for upcoming events.

These three articles are from the May 13 & 27 editions of the e-newsletter GIS Monitor, written by Adena Schutzberg.

May 13, 2004

DigitalGlobe Offers DOQQs

DigitalGlobe this week announced a new product: [Digital Ortho Quarter Quads](#) (DG DOQQ) that match the areas of existing USGS ones. The differences between both DigitalGlobe and USGS' offerings DG DOQQs are (1) 2-ft resolution images built from QuickBird data (vs. 1-meter from USGS), (2) more recent (many USGS DOQQs are several years old), and (3) can be projected as the user requests. Moreover, users can select from black and white, natural color, color infrared, and 4-band Pan-sharpened images. The images are delivered as GeoTiffs. And, for readers in Alaska and Hawaii... the company offers just the continental U.S.



I spoke with a representative to ask a few key questions. First off, how are these DOQQs made? The imagery from the ever-expanding DigitalGlobe library is processed per the user's request. That is, the files are not sitting on a server available for immediate download. Second, is there minimum order size? Yes, there's a four-quarter quad minimum.

I think this is a brilliant idea. Instead of trying to convince local government to buy scenes in some mysterious way, one fundamentally different from the familiarity of the DOQQ, DigitalGlobe offers that same chunk of geography, just with more options. To keep things as familiar as possible, DigitalGlobe even follows the USGS naming conventions! For local governments the DG DOQQ offers a chance to update the data without waiting for the next USGS DOQQ cycle. One final thought: I was

reading the GITA report recently and was surprised at how many users electric) cited USGS as their data provider. DigitalGlobe is simply leveraging that loyalty.

across all the areas (telecom, gas, water, local government, pipeline, and

psd.communication.gc.ca/Collection/M44-2001-E12E.pdf

The Rand Study Hits the Papers

Recall that the Rand [study](#) funded by NGA and USGS and released in March found that almost none of the federal websites with mapping data would really "help" terrorists. On May 10, an Associated Press [article](#) began making the rounds of the major papers. I guess since the findings were, "we are pretty safe," this was not breaking news back in March.

GIS Monitor May 27, 2004

Canada Up, US Down

No, that's not stock's to which I refer, but the height of these locations. By combining 10 years of data from the U.S. and Canada researchers have [determined](#) that Canada is "bouncing back" as the ice shield melts. Other coverage of the same story explains that Chicago is sinking. I suppose they are trying to keep the story local.

Really Cool Web Sites

Emergency Preparedness

For more information about recent geologic findings on earthquake history in the Puget Sound area, see:

<http://geography.about.com/b/a/060037.htm>.

From Forest Information Update e-newsletter Assessing the Vulnerability to Environmental Hazards -A HERO protocol. 3 p.

http://hero.geog.psu.edu/products/protocol_vuln.pdf

Keefer, Donald A. 2002. Techniques for Improved Geologic Modeling. Digital Mapping Techniques '02 -- Workshop Proceedings. U.S. Geological Survey Open-File Report 02-370. (Paper) <http://pubs.usgs.gov/of/2002/of02-370/keefer.html>

Remote sensing as a geological mapping tool in the Arctic ...

[### **Department of Corrections**](http://dsp-</p></div><div data-bbox=)

Cathy Hickson was accidentally omitted from the Vulcan's Daughter story in the January newsletter. I regret any confusion this might have caused.

President's Column by Marcia Knadle

As summer rapidly approaches, another busy year of AWG business is nearing a close. This fiscal year, the business of the chapter was very lopsided, focusing in the fall on the AWG convention we hosted. After that, we seemed to go into recovery mode – easily mistaken for hibernation – reviving only long enough to hold a well-attended winter meeting featuring a panel of women who opened their own geoscientific consultancy firms (see related story). Contrary to all appearances, we've been fairly busy behind the scenes, having also awarded our annual chapter scholarship and AWG's Certificate of Excellence at the international science fair held in Portland in May (see related stories).

With mixed feelings, I also approach the end of 3 years as chapter president. Under our chapter bylaws, no one can serve longer than 3 consecutive years as president. The same is true for our vice-president, Shawn Blaesing-Thompson. Lynn Hultgrien (scholarship committee chair) and Amanda Taub (newsletter editor) are also ready to seek new challenges after several years of outstanding service. During our collective tenure (along with continuing Treasurer Carla Whittington), the chapter became involved in judging science fairs through the board's efforts; the chapter organized the 2003 AWG Convention; established chapter bylaws; and doubled the amount in our treasury. So, I think we have a

lot to be proud of – and we've left the chapter with a lot of future potential.

Nevertheless, our chapter **desperately** needs new leadership, and not just because of the bylaws. There's a reason we included the term limits provision in the bylaws – to prevent the chapter board from turning into a clique where no new ideas or leadership visions could break in. We're a stable group with a very healthy treasury – we could be doing all sorts of fun and important things, but we need new ideas and new blood. If you have ideas about where we should go as a chapter, or are willing to help develop some, please step up. Running the chapter is not hard and really doesn't require a lot of time or experience – unless we take on a big AWG project, and having run a national field trip and convention within the past 4 years, I think we're pretty safe there. I plan to continue on the board in some capacity, and will remain a source of institutional knowledge. I've also agreed to run for a second three-year term as a Pacific Region alternate delegate on the AWG Board of Directors to maintain our connection with AWG's governance.

Also included in this issue is our chapter member directory for your networking needs. Please note that we DO NOT post the directory on our chapter website; however, if you lose it, you can contact me and I'll send you another copy. Also, please let me know if there are any changes or corrections I need to make. In addition, I'd like to welcome several new chapter members:

Elaine Brouillard (Richland)
Haley Brown (SCS Engineers, Bellevue)
Katlin Hanson (Shaw Environmental, Bellevue)
Chris Jonientz-Trisler (FEMA)
Linda Palla (Solutions IQ, Bellevue)
Susan Roth (Roth Consulting, Seattle)
Constance Schultz (WWU student, Seattle)
Erin Taylor (ENSR International, Seattle)

I hope to meet you all at some meeting or field trip this year. We'd be especially thrilled if any of you volunteered to be on our board.

We're not done yet for this year. Please look for the announcements for a summer meeting (a Geofilm Fest at the end of July) and a late summer field trip in north central Washington (Sept. 18-19).

Call for Officers – PLEASE don't make me beg!

As you saw above, we need several new board members. Our board is currently set up to have a mix of elected and appointed positions (the chairs of our 2 standing committees). According to AWG's bylaws, we have to have at least 3 separate people serving as president, secretary and treasurer. Otherwise, offices can be shared, i.e., 2 people can share one office (e.g., 2 co-presidents) or one person can take on 2 different offices (e.g., vice president / secretary). Ideally, we have one person in each position.

Elected positions:

- President (1 year term, 3 years term limit)
- Vice President (1 year term, 3 years term limit)
- Secretary (2-year term alternating with Treasurer, 4 years term limit)
- Treasurer (2-year term alternating with Secretary, 4 years term limit)

Positions appointed by sitting board (1 year terms, no limits)

- Outreach Committee Chair (functionally the Scholarship Committee Chair)
- Publications Committee Chair (functionally the Newsletter Editor)

The terms of office coincide with the fiscal year (or water year, for you hydrogeologists), October 1 through September 30.

The treasurer position is the only one that won't be open this year, since Carla Whittington is currently in the first year of her second 2-year term. (The bad news is this means we'll need a new treasurer next year.) Paula York has agreed to run again for the Secretary's position, and we've had a couple of nibbles for outreach

and publications, but we really need someone who's willing to step up and be president. Please call or e-mail me at 206-553-1641 or knadle.marcia@epa.gov if you'd like to be a board member, if you have any questions about office duties, or if you'd like to come observe our next board meeting. (I'll be in Sweden from June 23-July 14.) Board members job descriptions and duties will be posted on our web site at www.scn.org/psawg. PLEASE don't make me call all of you up next month and make pitiful whining noises!

Proposed Chapter Bylaws Changes

Oh, boy! Everybody's favorite topic! No? Well, at least we don't bring this sort of thing up very often. Our bylaws haven't been amended since they were adopted in August 2001. In the meantime, we've discovered a few things that are inconsistent (or at least not clearly consistent) with AWG's bylaws (which take precedence), are inconsistent with how we actually end up doing business, or are needlessly restrictive.

As a result, I'd like to propose three amendments to our bylaws. If you'd like to look at the existing bylaws, you can find a link to them on the chapter website at www.scn.org/psawg at the bottom of the "Chapter Information" page. If we get a quorum (9 members) at the July 31 meeting, we'll vote on these amendments then. If not, we'll place these motions on the officer's ballot in August. If you have comments (or friendly amendments to suggest), please let me know at knadle.marcia@epa.gov or 206-553-1641. If you come to the July 31 meeting, please come prepared to vote.

Here are the existing sections and my proposed amendments:

EXISTING: ARTICLE V. AWG-PS BOARD OF DIRECTORS

Section 2. The Board shall include the current Chapter President, Vice-President, Secretary, and Treasurer. These officers shall be members in good standing affiliated with the

Chapter and shall be elected as outlined in these Bylaws. Offices may be shared or combined as long as there is a minimum of three elected officers. Non-elected Board members shall include any Chapter member who is a Regional Delegate to the AWG Board of Directors and chairs of any standing committees.

Bylaws Amendment Motion 1 -- I move to amend the 3rd sentence of Art. V, Sec. 2 to state:

Offices may be shared or combined as long as there is a minimum of **3 separate elected officers serving as President, Secretary, and Treasurer.**

(This is to bring our bylaws more clearly in line with the AWG bylaws.)

Bylaws Amendment Motion 2 -- I move to amend the 4th sentence of Art. V, Sec. 2 to state:

Non-elected Board members shall include any Chapter member who is a Regional Delegate **or Alternate** to the AWG Board of Directors and chairs of any standing committees.

(This is to ensure that an Alternate Delegate is familiar enough with chapter business to be able to effectively represent our interests at any AWG Board meeting they may be called to attend. In addition, Alternates are supposed to track the business of the AWG Board and should be able to serve as a liaison whether or not they attend any AWG Board meetings.)

EXISTING: ARTICLE VI. ELECTION OF OFFICERS

Section 2. The candidates shall be announced in the Chapter newsletter and a ballot may be enclosed at that time or mailed separately, but mailed no later than July 30th.

Bylaws Amendment Motion 3 -- I move to amend Art. VI, Sec. 2 to state:

The candidates shall be announced in the Chapter newsletter and a ballot may be enclosed at that time or mailed **or e-mailed** separately, but **distributed** no later than **August 15th**.

(This allows us to e-mail ballots separately from a chapter newsletter, which brings us in line with AWG practices. I already maintain a members-only e-mail distribution list, and we're down to only one member who doesn't have e-mail. The change to Aug. 15 brings us more in line with actual practice, and if we can distribute ballots via e-mail, we won't need as much lead time before Sept. 1 [when the Chapter Annual Report and the list of new officers needs to be submitted to AWG].)

AWG Sierra Nevada Field Trip – Cancellation Notice

Unfortunately, one of the main organizers of this field trip has become seriously ill. Consequently, this trip has been postponed indefinitely. We're hoping it will be offered again in a few years.

Treasurer's Report by Carla Whittington

Puget Sound AWG has had a very good financial year! The chapter's hard work on the 2004 AWG Convention last October may have tired a few board members and activists out, but we made a whopping \$1,600.84! It was a very profitable event for us, nearly doubling our treasurer.

The chapter is on good financial footing; just in time for the upcoming change of officers. As of 06/15/2004, we have \$3,692.15 in our account.

Thanks to all of you for your continued support.

February 25, 2004 AWG-PS Board Meeting by Shawn Blaesing-Thompson

We had our last chapter meeting on February 25th, 2004 in Lynnwood. After a dining and social hour, we discussed chapter business, which included:

- Convention wrap-up, awards – The Puget Sound Chapter was awarded the President's Award for hosting the 2003 AWG Convention.
- Call for officers: Need scholarship chair. Need funds for scholarship. This is one of the few scholarships that allow women to use it for whatever her needs are to help her with her academic goals. New AWG-PS officers needed – president, vice-president, secretary, and newsletter editor. We **have** to have a President, Secretary and Treasurer, per AWG bylaws. The President can't be Marcia Knadle for at least a year, and we have a Treasurer.

February 25, 2004 Chapter Meeting & Panel Discussion by Shawn Blaesing-Thompson

Then we had a panel discussion of women geoscientists who have gone out and started their own one-woman companies. The panelist list is below, as well as, a recap of the questions and answers discussed.

Panelists:

- Sue Perkins – Erosion control studies, geomorphology
- Susan Roth – Geotech, mineral explorations, now environmental consulting
- Anne Udaloy – Forest worker, sets up business contracts for geology work
- Lynne Rodgers-Miller – former legislative worker, geomorphologist

Q: How to get started?

A: Work hard, pay your dues, and make contacts who believe in your work.

Q: What were some of the hardest things about being your own boss?

A: Hard to regulate the amount of work needed to make ends meet. Hard to gauge the time needed to complete a job.

Q: Downfalls to being own employee?

A: Cannot bill for all the hours you will put in.
Must be insured to do field work. It is difficult to obtain insurance.

Q: How do you decide what to bill?

A: Bill what the market will bear, between \$50 & \$100 per hour. Want to have invoices matching your debts.

Q: What are some things to contemplate for billing rate?

A: Money set aside for retirement and for slow times, funds to cover vacation weeks, funds to pay for training, presentations and holidays. Figure out the total number of hours after that minus number of hours spent working on administrative work and figure out total wished income to calculate hourly rate. Don't forget insurance...

Miscellaneous advice

- Retain a lawyer to help review contracts
- Team with other consultants to share overflow business
- Advise against having full-time "permanent" employees
- Work directly with the clients rather than working through a larger company except when running into barriers with the male dominated world.
- Project management is a "good gig"
- Take the IRS class "How to Be a Sole Proprietor"

Judging the International Science & Engineering Fair by Shawn Blaesing-Thompson

Our chapter had the opportunity this year to go the International Science and Engineering Fair held in Portland, OR this year. Since we did not have any volunteers for the Washington State Science and Engineering Fair, we did not send a representative for the first time in three years. We did however get to hand out \$1200 in scholarship money to three young women attending the fair in Portland.

Sarah Langberg, a junior from Fort Myers, FL was our first prize winner. She received \$1000 for her topic was called Petrology, Morphology, and Geochemistry of the Southern Juan de Fuca Ridge: Evidence for Off-Axis Volcanism. Her talk was very professional and her research was more encompassing than some master's theses I have seen. The Grand Awards judges agreed with our high opinion of her work, as they awarded Sarah one of the \$50,000 finalist prizes. She also earned several other Special Awards and government prizes.

Here is Sarah Langberg at her poster.



We awarded two \$100 prizes to Caroline Larson, a freshman from Springville, UT, and to Shannon Babb, a sophomore from Highland, UT. Caroline looked at fossils from several formations to determine correlations between the sites. While Caroline is just a freshman, her research shows great potential for next year.

Here is Caroline Larson at her poster.



Shannon Babb was our other \$100 prize winner. Her project was titled “Troubled Water: A 6 Month Longitudinal Water Quality Study of the Spanish Fork River Drainage System & Remediation Strategies; The Ins & Out of Utah Lake – Phase 3” and was the third phase of a three-year project. She studied the effects of human interactions around several area tributaries. She truly believes that finding out what damage humans are doing, and educating people on how to do better will make all the difference in remediating the local tributaries she studied. She is even applying for a grant for funds to remediate a section of the water shed she studied.

Here is Shannon Babb in front of her poster.



Overall this was a great experience. It is wonderful to see bright young women interested in science. We all need to do our part to promote science to young women in our region!

Melinda Menke Receives 2004 AWG Puget Sound Scholarship by Lynn Hultgrien

Melinda Menke is the recipient of the 2004 AWG Puget Sound Chapter's Scholarship. Melinda attends Central Washington University and is currently working for Dr. Tim Melbourne. She is modeling the effects of transient creep events, also known as slow or silent earthquakes, a recent hot topic for the Cascadia Subduction Zone.

The \$1000 award was established to aid undergraduate women who intend to pursue a career in the earth sciences. Recipients are chosen on the basis of their commitment to a

geosciences career, financial need, and academic achievement.

We hope to be able to give Melinda her award at the upcoming AWG meeting this July or schedule a meeting with her in conjunction with

our field trip this September.

Lynn Hultgrien
Chair, AWG Puget Sound Chapter Scholarship
Committee

AWG Puget Sound Chapter July Meeting Announcement

THE "HEADS IN THE SAND" GEOFILM FESTIVAL

Featuring:

The Core

With short films:

The Chunnel and The Mole

Saturday July 31, 2004

At Marcia Knadle's residence:
8025 36th Ave. S.
Seattle, WA
206-723-8379

4:00 PM – Social

4:30 – 6:30 PM – *The Core*

6:30 – 7:00 PM – Short business meeting and pizza dinner

7:00 - 8:00 PM – *The Chunnel and The Mole*

This time it's the geophysicists who get their turn in a really cheesy Hollywood movie! And what could be a better accompaniment to a really cheesy movie than pizza? Come join us for a fun evening dissecting just why none of the stuff in *The Core* (2003) could actually happen. After dinner, we'll dive underground again with some entertaining short films.

Dinner will be semi-potluck. I'll provide beverages and snacks, and we'll order take-out pizza. Please bring either \$5 to cover pizza OR bring a salad or dessert. If we have a quorum of 9 members, we will vote on the proposed bylaws amendments during the short business meeting. We'll also present the 2004 scholarship if our awardee can attend.

Directions:

From southbound I-5: Take the Swift-Albro exit (#161), turn left at the light and cross over the freeway. Turn right at the light onto Swift AVE S, go straight through 2 lights, and continue traversing up the hill to the light at Beacon AVE. Turn right and go about ¾ mile to Rose ST (the African American Academy will be coming up on your right). Turn left, go down the steep hill, and turn left at the bottom onto 36th AVE S (dead-end). Look for a brown house on the left about ½ block up the street.

From northbound I-5: Take the M. L. King Jr. Way exit (#157) and continue straight through 3 lights. Turn left at the light at S Cloverdale ST, continue about 2-3 blocks to 37th AVE S, and turn right (just before you start climbing a steep hill to a four-way stop). Go north 2 long blocks and turn left on Rose ST, then turn right onto 36th AVE S (dead-end) after a short block (again, just before starting to climb a steep hill). Look for a brown house on the left about ½ block up the street.

Parking will be tight, so you may need to find street parking nearby and walk.

AWG Puget Sound Chapter's Fall Field Trip

RESERVE THE WEEKEND OF

SEPTEMBER 18 & 19, 2004!

Come see the grandeur and splendor of

North Central Washington!

Our guide will be the esteemed Dr. Ralph Dawes, Division Chair of Sciences at Wenatchee Valley College in Wenatchee. We are looking for ideas of what people would like to see in the Wenatchee-Leavenworth-Ellensburg area. So, if you are just dying to see some spectacular formation or scenic spot, let me know. E-mail me, Amanda Taub, at ahstaub@yahoo.com or call me at home at 509.548.3466. Also, I am looking for help in planning the logistics of our field trip. If you would like to assist me in planning our weekend, PLEASE contact me at the above e-mail or phone number.

AWG Puget Sound Officers and Chairs, 2003-2004

| | | | |
|--------------------|-------------------------|-------------------|--|
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