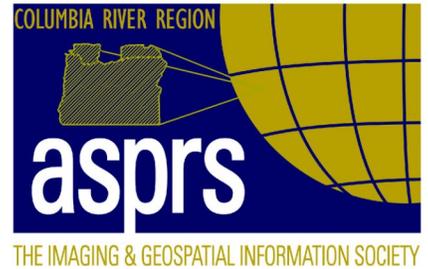


# Wavelengths Columbia River Region



<http://www.asprs.org/ColumbiaRiver>

**Volume 2012:2 — June 2012**

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## A Message from Michael Boeder, President, Columbia River Region

Greetings all, I trust that the last few months have been busy and productive for ASPRS CRR members. Several west coast professional conferences are approaching rapidly in the geospatial sciences. Regardless of the organizing entity, professional conferences are an opportunity to share and experience leading research in our field, technological advancements, and methods advancements. They are an opportunity to interact with the individuals and organizations driving these changes. They are also a means of observing the approaches and information offered by similar professions that one may not be as current with.

The ASPRS 2012 Specialty Conference will be co-hosted with MAPPs in Tampa, Florida. The theme of the conference is *Cloud to Ground (R)Evolution—Emerging Technologies Supporting Geospatial Application* which will held October 29—November 1. More information about the conference can be found at <http://www.asprs.org/Conferences/Tampa-2012/blog>.

The ESRI user's conference in San Diego takes place July 23—July 27. More than simply a marketing vehicle for ubiquitous software, a quick glance at various agendas shows the breadth of issues affecting the spatial science industry, from open source development, to cloud processing, to climate research tools. <http://www.esri.com/events/user-conference/>.

Locally, the international ForestSAT conference September 11 - 14 is hosted this year by Oregon State University in Corvallis, Oregon and organized by CRR member Michael Wing. This conference has a host of timely topics, including fire behavior and monitoring, as well as larger data analysis and technical sessions. For more information about the conference please see <http://2012forestsat.com/2012/04/12/forestsat-2012-11-14-september-oregon-state-university-corvallis-oregon-usa/>. The CRR is pleased to offer financial assistance to members who wish to attend this conference. Please contact any CRR officer for information.

Finally, slated for late October (date yet to be decided), the CRR Technical Session will provide a day of speakers presenting current research and methods, for an intimate view of what our immediate colleagues are pursuing.

Recently, the ASPRS hosted a conference call among all available Regions (organized by Roger Crystal) to address society membership. It is my feeling that conferences such as these four in the coming months are critical to maintaining viability and relevance for existing and new society members. They provide a look at what other organizations are doing for membership, and also provide a means of integrating and interacting with other user groups and technical groups that make their livelihoods in this field of spatial science.

Best wishes for a productive summer,

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## COLUMBIA RIVER MEMBERSHIP NEWS

The Columbia River Region sponsored 7 new members during the month of May 2012 and, as a result, was awarded the Region of the Month.

In recognition of the Columbia River Region's commitment to the Society, we received the following:

- A certificate from ASPRS acknowledging our work in membership recruitment.
- ASPRS Buck\$ vouchers valued at \$50 to be used toward merchandise in the ASPRS bookstore.
- Recognition in the July issue of *PE&RS* of our designation as "Region of the Month".

## CONGRATULATIONS TO ALL COLUMBIA RIVER REGION MEMBERS



**The Columbia River Region welcomes the following new members to ASPRS:**

**Active Members:**

Dr. Christopher Bone  
Elizabeth Goralski  
Curtis Joyce

**Student Members:**

Debra Blackmore  
Taylor Gibson  
Sarah Harbert  
Jonah Horn  
Allison Jones  
Imran Qureshi

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### **A word from Chris Aldridge, Director, Columbia River Region**

Greetings, Columbia River Region. We are now in through the second quarter of 2012, which quite frankly was something of a snoozer. I did recently attend an Executive Committee meeting, so I can give you some insight into what things have happened at the national level in the last three months.

Headquarters is physically in good shape and will shortly under go some “improvements.” In the last few months, plans have been negotiated for the development of the land that HQ sits on. I am happy to report that these plans have been accepted and provide for the development of surrounding area, some physical upgrades to the condo that we share with several other groups, and the protection of the wildlife preserve that has made HQ’s location so attractive and pleasant. A “temporary wall” will be replaced with a permanent brick wall, the parking areas will be relocated and improved, power and communication lines will be place underground, among others.

The Society is preparing for the upcoming ISPRS Symposium in Melbourne Australia, which will be attended by the societies President, Vice President, Executive Director and Assistant Executive Director. Mike Renslow will also attend as the ISPRS Treasurer. ASPRS will have an exhibit booth where preview versions of the LiDAR manual will be available for review and the manual can be pre-ordered.

The LiDAR manual is now at the publishers and will be available at the fall meeting in Tampa. This represents the culmination of several years of work by the staff, contributing writers, and editor (Mike Renslow).

The society continues to be financially secure, however 2012 is presenting some financial challenges. Revenues have fallen off on certain key services, like advertising, that are going to have an impact on the years bottom line. The HQ staff have been carefully monitoring finances as the year progresses, and we are taking actions to ensure that no serious issues will befall the society.

The Landsat Data Continuity Mission, or LandSAT 8 is progressing towards a now slightly delayed launch in 2013. The mission appears to have slipped to February, primarily due to the late addition of another sensor. There is currently a great deal of finger pointing and legal action occurring between the players involved in the development and launch, but we are still confident that the bird will fly sometime in early 2013.

The restructuring task force has been forming under VP Steve Degloria This is the continuation of the ASPRS ad-hoc Branding Committee, tasked by then president Gary Florence to review the Society from top to bottom in an effort to understand our place in the professional world. The group has been tasked by President Lencowski develop suggestions for the future path and “look” of the ASPRS and guiding the inevitable changes in our governance, structure and membership models that the future will require. Work has only just begun, so there is currently nothing concrete to present, however numerous suggestions from members representing all aspects of the society have been received and are being considered. Basically nothing is off of the table, so stay tuned. Much of this work is focusing on the strengthening and elevation of our technical divisions to a more prominent roll and a greater prominence in the outward appearance of the society.

The Student Advisory Council was forced to cancel the first summer assembly. High costs of attendance as well as numerous other factors contributed to the decision. The SAC is committed to moving forward with the program and has already begun to analyze their “lessons learned” and begin the planning for a session in 2014.

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The fall meeting will be held October 29 to November 1, in Tampa, Florida. Between then and now, look for the usual events sponsored in our region including the Technical Exchange with PSR and another technical program to be determined.

Until our next newsletter, thank you for your continued involvement in the ASPRS and keep looking for notifications of the activities being planned by our regions Executive Committee.

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### **ASPRS FILMS PROJECTS**

The Films Project is an ASPRS endeavour to document the history of our society and the mapping industry. It does so by conducting video and audio interviews of people in the profession and collecting historical photographs, documents and other media from such sources as the US Geological Survey and the Tennessee Valley Authority. To expand its sources it has created an online archive that allows members and the public to not only view the historical material but to also contribute to that collection by submitting electronic versions from their own personal archives. Most recently the Films Project also added "The Wall of Honor" – an ASPRS web site raises money for the ASPRS Foundation and this committee. Those web sites are owned by individuals who have created them to honor those in the profession who they feel have made an important contribution to that profession.

A summary description of the various activities of the Films Project is presented below. The descriptions also provide links to more detailed description of these endeavors.

**Video-Taped Interviews:** Since 2007, the ASPRS Films Committee has been conducting video interviews of individuals who have participated in the technological development and application of photogrammetry. In so doing, it is capturing the interesting and heart-warming stories and personal insights of the pioneers who made the profession the exciting and rapidly evolving industry that it is.

About a hundred such interviews have been conducted so far and plans call for a continuation of these interviews as funding and opportunity permit. [Some of these interviews are available on ASPRS Online Archive.](#) The videos produced so far have served to create a series of one to two-minute vignettes that focus on various aspects of the map making history. The video vignettes may now be viewed and shared [via the ASPRS Films Viewer](#) and/or the [ASPRS YouTube Channel](#).

**The ASPRS Online Archive:** The ASPRS Online Archive is a repository of historical assets relevant to photogrammetry and remote sensing. It derives its material from submissions by ASPRS members and interested members of the general public and includes electronic versions of photographs, movie films, videos, audio recordings, documents, and other media. [Learn more about and search the Online Archive.](#)

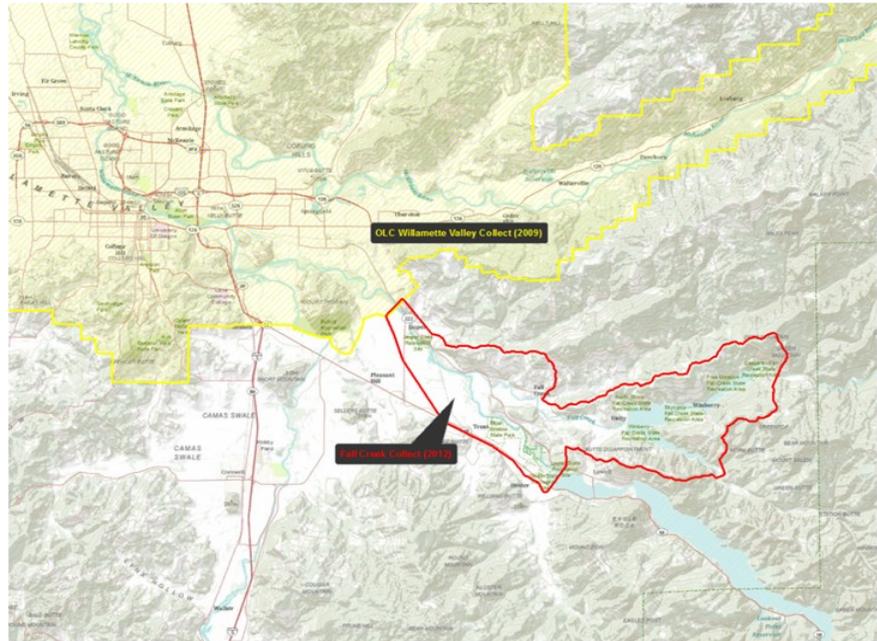
**The Wall of Honor:** The Wall of Honor is a project that uses an ASPRS-managed web site to serve as a gathering point for links to other web sites. Those sites represent the creation of individuals or corporations who want to recognize and honor the achievement of others in the field in particular those who they feel have played an important role in the advancement of photogrammetry and remote sensing. [Visit and learn more about the Wall of Honor.](#)

For more information on the ASPRS Film Projects, visit <http://www.asprs.org/ASPRS-Films.html>.

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The CRR Newsletter continues to publish highlight articles showcasing projects that are being accomplished by ASPRS-CRR members. If you have a project that you would like to share with CRR members, please submit them to the CRR Newsletter Editor. The following are project was submitted by Jake MacDonald, USACE, Portland District:

**Fall Creek Dam**, constructed in 1966, is a U.S. Army Corps of Engineers flood control project located southeast of Springfield on Fall Creek, a tributary of the Willamette River. When it was constructed, the water storage potential of Fall Creek Reservoir was calculated based on topographic mapping performed prior to construction. In the 46 years Fall Creek has been in operation, the reservoir had not been mapped again to update its storage potential to account for possible sedimentation or inaccuracies in 1966 era mapping techniques.



**Fall Creek Reservoir bathymetry**

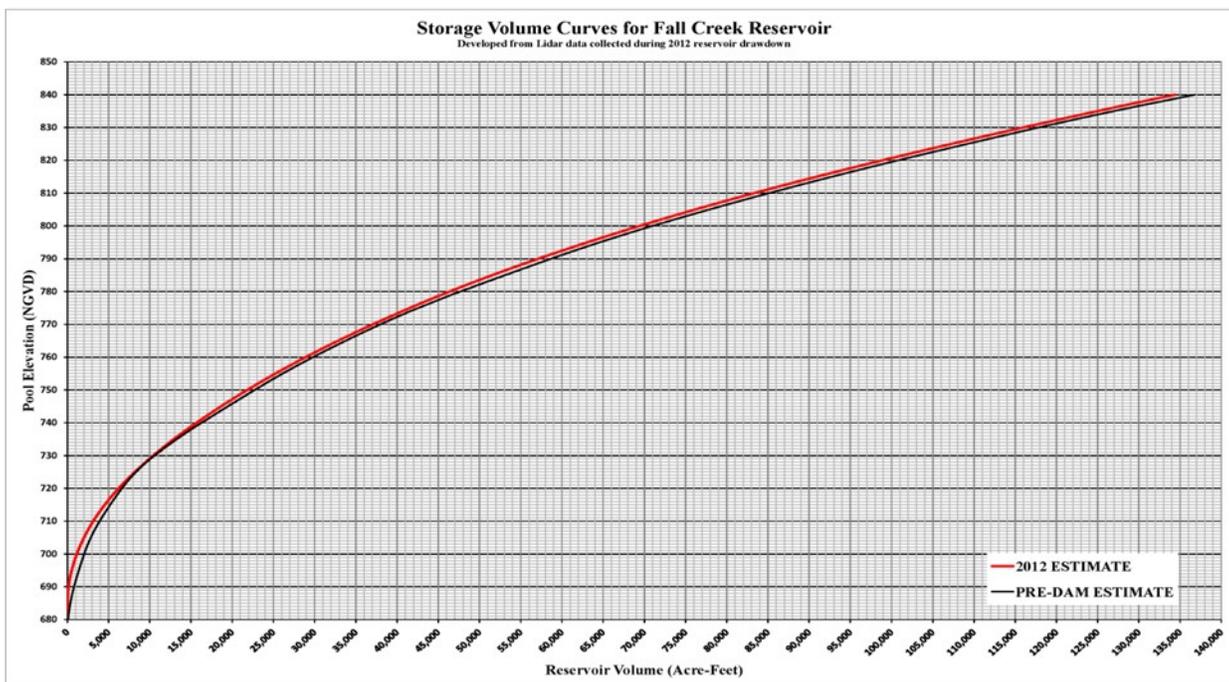
This past winter, Fall Creek Reservoir was completely emptied in an attempt to expedite the downstream migration of protected fish species.

The drawdown of the reservoir provided a perfect opportunity to obtain a cost-effective, very high resolution elevation dataset of the reservoir bottom via airborne topographic LiDAR. It's like bathymetric LiDAR without the fancy green light! David C. Smith and Associates provided project management and LiDAR bathymetric water delineation, Watershed Sciences, Inc. collected and processed the LiDAR data and CC Patterson and Associates provided QA and data formatting.

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The Corps of Engineers used a simple custom Python script in ArcGIS to analyze the data and develop a very detailed elevation-storage relationship curve for Fall Creek Reservoir. Comparison of this curve to the previously accepted curve developed during the design of the dam shows the difference between the two to be quite small. The quality of mapping and volume computation in 1966 was very good. This surely isn't surprising to a photogrammetrist, but it's pretty impressive to those of us GIS'ers who grew up with RTK GPS, IMU's, running water, electricity, etc. Previous estimates of reservoir volume at Fall Creek are high by about 1,000 acre feet toward the bottom of the reservoir, a signature consistent with probable sedimentation. A real GIS geek will find it interesting to investigate the difference between the two curves by comparing a surface generated from digitized 1966 topographic sheets to the current LiDAR surface. Can one find a real explanation for why the two curves meet around elevation 730 then diverge as elevation increases? (students- what else are you going to do with your summer, what could be more fun than a GIS project?).



**Comparison of two storage volume curves developed from 1960's era photogrammetric data and 2012 topographic**

The Fall Creek lidar project covers more than just Fall Creek Reservoir, it includes data along Fall Creek downstream to its confluence with the Middle Fork Willamette River as well as the Middle Fork from Dexter Dam downstream to meet the 2008 Oregon Lidar Consortium Willamette Valley Project boundary. The data is currently being used for flood insurance studies and for design of new facilities at Dexter Dam. The Fall Creek lidar data, as with all lidar data collected by the Corps of Engineers in Oregon, is publically available by contacting me at [Jacob.Macdonald@usace.army.mil](mailto:Jacob.Macdonald@usace.army.mil).

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## **Student Chapter Liaison Committee Update: Daniel Craver, Chair**

Thank you to our outgoing student chapter officers, especially this past year's chapter presidents for their leadership; Madeline Steele (PSU), Didi Martinez (UofO), and Pablo Tostado (OSU). As summer gets underway I think back to my time between academic years working in the field and the needed break to synthesize and rest for the coming year! I hope many of you are working internships and other seasonal jobs, to broaden your experience, hopefully apply some of your hard earned knowledge, and network for the future.

To student volunteers at the GIS in Action conference this past March--we are dependent on your help to succeed. Thank you Masoud Momeni, Joe Rouse, Steve Pilson, Matthew Holdgate, Chris Weaver, Eric Butler, John Richardson-Meyer, Kendra Chatburn, Betsy Breyer, J Garrett Armstrong, Matthew Curry, Jessica Kuonen, and Ryan Pemberton. Extra special thanks to volunteer coordinators Nadia Jones and Madeline Steele—your commitment to your profession is recognized.

Also at GIS in Action, the Columbia River Region hosted our first ever all-student chapter meeting. In attendance were several PSU chapter students and David Banis, faculty advisor; UofO members Didi and Josef Gordon made the trip from Eugene; Portland Community College's recent GIS program graduate Eric Butler; and many of the ASPRS CRR board and members at large. Thank you all. The meeting started with a welcome impromptu visit from an Oregon surveying firm to announce a GIS job opening, and report that conversation among conference attendees from surveying offices has been the need to integrate GIS into their business. In the end we succeeded in seeing ideas and resources shared between chapters, providing another networking opportunity for students (one of whom I know landed a job in part because of introductions made at this meeting), and we the ExComm learned more about how we can better help our chapters in the future. I hope to integrate all-chapter meetings into more regular ASPRS events that student members would hopefully attend anyway. Please note: you can use your chapter funding for travel expenses related to professional development.

In June the CRR board and guest members Roger Crystal and Erik Brewster met with Christina Friedle and her students in the Portland Community College (PCC) advanced GIS class. Christina has been a long time member of ASPRS and active proponent of student-professional development--we were excited to receive her invite and happy to spend a little time promoting ASPRS and the benefits of student membership. We look forward to future collaboration with PCC and to see the graduating students we met join our profession.

To next year's officers, continuing, and incoming student members: I highly recommend kick-starting this coming academic year by attending the CRR Technical Exchange, traditionally held in the fall in Vancouver, WA (details to come). Even more so, I encourage you to present some of your work from this past year—practice part of your thesis defense, show off a cool term project, etc. This CRR event is another great opportunity to hone your presentation skills, network with professionals, and learn where the cutting edge is in of our field—take advantage of it.



## **Report from Portland State University Student Chapter**

By Madeline Steele, President

This spring, the PSU ASPRS organized three events. Jimmy Kagan gave a talk on his work at the Institute for Natural resources, including the use of CART models to prepare classified vegetation datasets. Jimmy is very influential in his field, and we really appreciate him taking time out to come and talk to us!

Amy Esnard gave a talk on the RAPTOR (Real-Time Assessment and Planning Tool for Oregon) project, which she leads. She also told us a bit about Oregon URISA (she's president this year). I think we'd all like to see more exchange and interaction between our two complementary GIS groups, and it was interesting to learn about what they're focusing on these days.

We also had our annual career panel, which was a great success. We did not get an accurate headcount, but David Banis estimates that there were 60 or 70 people in the audience. Our speakers were Dan Craver of the USF&WS (filling in for a sick David Drescher), Kevin Martin of the City of Portland, Analisa Fenix of Ecotrust, and Mike Boeder and Tim Nortz of Watershed Sciences, Inc. Thanks so much to all of you for coming in! Students are really eager to hear what seasoned professionals have to say about trends in the industry, and how to get their careers off the ground in this competitive economy. And the panelists not only discussed which skills are most important, but shared wisdom about how to flourish as a professional and a person. I definitely benefitted from the event! Thanks again!

This term also saw the official start of the SEP (Student Experience Program). Jacob Macdonald and Adam Mosbrucker came into to David Banis's GIS II class and described some of the amazing Mt. St. Helens datasets that they are willing to share with students. It was an inspiring and fun presentation, but of course, many of the students already had projects in mind, or were more focused on human geography. Still, two projects for GIS II were completed using Mt St Helens data: "Modeling Mt St Helens Sediment Retention Structure Height Increase," and "Site Suitability Analysis for Fish Habitat on the Toutle River." David Banis made the following comment on the SEP:

"Although one would like to see more students take advantage of the availability of these datasets, I still think there is great potential for SEP. The GIS II class this spring term had a large number of students interested in human rather than physical geography, and that limited the interest in data from Mt St Helens. For that particular set of data, the Digital Terrain Analysis class (Fall term) might be a better fit. Given the wide variety of interests of our GIS students at PSU, any particular set of data will only be of interest to a relatively small subset of students. The greatest challenge for students remains defining a project that can be completed in a reasonable amount of time. Project definition is part of the learning process, but also a limiting factor in making use of the data available."

This term, we also elected next year's officers! My hearty congratulations go out to:

Alexa Todd - President (last year's webmaster)  
Sonia Singh - Secretary  
Debbie Blackmore = Treasurer  
Wes Hoyer - Vice-President  
Sara Lorenzo – Webmaster



## **Report from University of Oregon Student Chapter**

By Adriana Martinez, President

The University of Oregon ASPRS student chapter would like to welcome new member Sarah Harbert. We would also like to congratulate our new chapter secretary Aquila Flower, vice president, James Dietrich, and thank member Josef Gordon for his service to the chapter.

This term our student chapter is proud to provide support for the research and professional development of three members. Pollyanna Lind, Adriana Martinez, and Jake Prickett have all received partial funding for summer activities. Pollyanna Lind will be using the funds to purchase camera-mounting equipment so that she can test the use of cutting-edge Structure From Motion (SFM) modeling to replace tedious sampling of cobble/boulder river channel bars at her study site in Costa Rica. Adriana Martinez will be using the funds to complete her final summer of fieldwork investigating the geomorphic impacts of the invasive Reed Canary Grass on the Sprague River, Oregon. Jake Prickett will be using the funds to travel to Langley, Virginia for a NASA DEVELOP internship. Congratulations to our three scholarship winners!

Our chapter's most exciting event of the quarter was a tour of 3diWest, a local provider of aerial mapping and GIS services in Eugene. During the tour, we were able to see the various steps involved in the workflow to produce usual spatial products from raw LiDAR and aerial imagery. We learned about the various software packages being used in the industry, and got to see a lot of spectacular scenes in 3D. We would like to extend our thanks to Brett Hazell, Danuta Greblowska and Leanne Mitchell for graciously hosting us on this exciting tour.

The summer term ahead will be busy with research, but we will squeeze in one more guest lecture before everyone heads out to the field. Dr. Charles Reinholtz from Embry Riddle Aeronautical University will be joining us to talk about robotic vision, remote sensing, and his latest project monitoring the Galapagos from unmanned aircraft.

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In May, we held our bi-annual fundraiser and pizza social. The chapter also held its annual banquet this June honoring our two local speakers this year, Mark Fonstad and James Dietrich, and our long-running secretary, Amanda Reinholtz, who will be graduating this year.



At the UO ASPRS chapter banquet from left to right: Aquila Flower, Amanda Reinholtz, guest Dan Harrison, Jake Prickett, Sarah Harbert, Mark Fonstad, guest Maggie Dietrich, James Dietrich, and Sarah Praskievicz.

## Upcoming Meetings

### October 2012

ASPRS/MAPPS Fall Specialty Conference  
Marriott Tampa Waterside Hotel  
Tampa, FL  
October 29 - November 1, 2012

### 1st Annual ASPRS Student Advisory Council (SAC)

Summer Conference  
*Multi-source Geospatial Data Fusion*  
June 10 - 16, 2012 -- Fairfax, Virginia USA  
<http://www.asprs.org/Conferences/SAC-2012/>

### March 2013

ASPRS 2013 Annual Conference  
Baltimore Marriott Waterfront Hotel  
Baltimore, Maryland  
March 24-28, 2013

### October 2013

ASPRS/ CaGIS 2013 Fall Conference  
Crowne Plaza San Antonio Riverwalk  
San Antonio, Texas  
October 29-31, 2013

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An advertisement for Bergman Photographic Services, Inc. The background is a scenic view of a lake with snow-capped mountains in the distance. In the foreground, there is a yellow airplane flying over the water. The text "BPS" is written in large, bold, black letters on the left side. To the right, the text "Bergman Photographic Services, Inc." is written in a white, serif font. Below this, the names "Bruce and Larry Bergman" are written in a yellow, serif font. Underneath the names is the email address "info@bergmanphotographic.com" in a smaller, white, sans-serif font. At the bottom left, the address "7816 SE 13th Avenue Portland, Oregon 97202" is written in a yellow, sans-serif font. At the bottom right, the phone number "503.239.6010" and fax number "FAX: 503.239.4637" are written in a yellow, sans-serif font.

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