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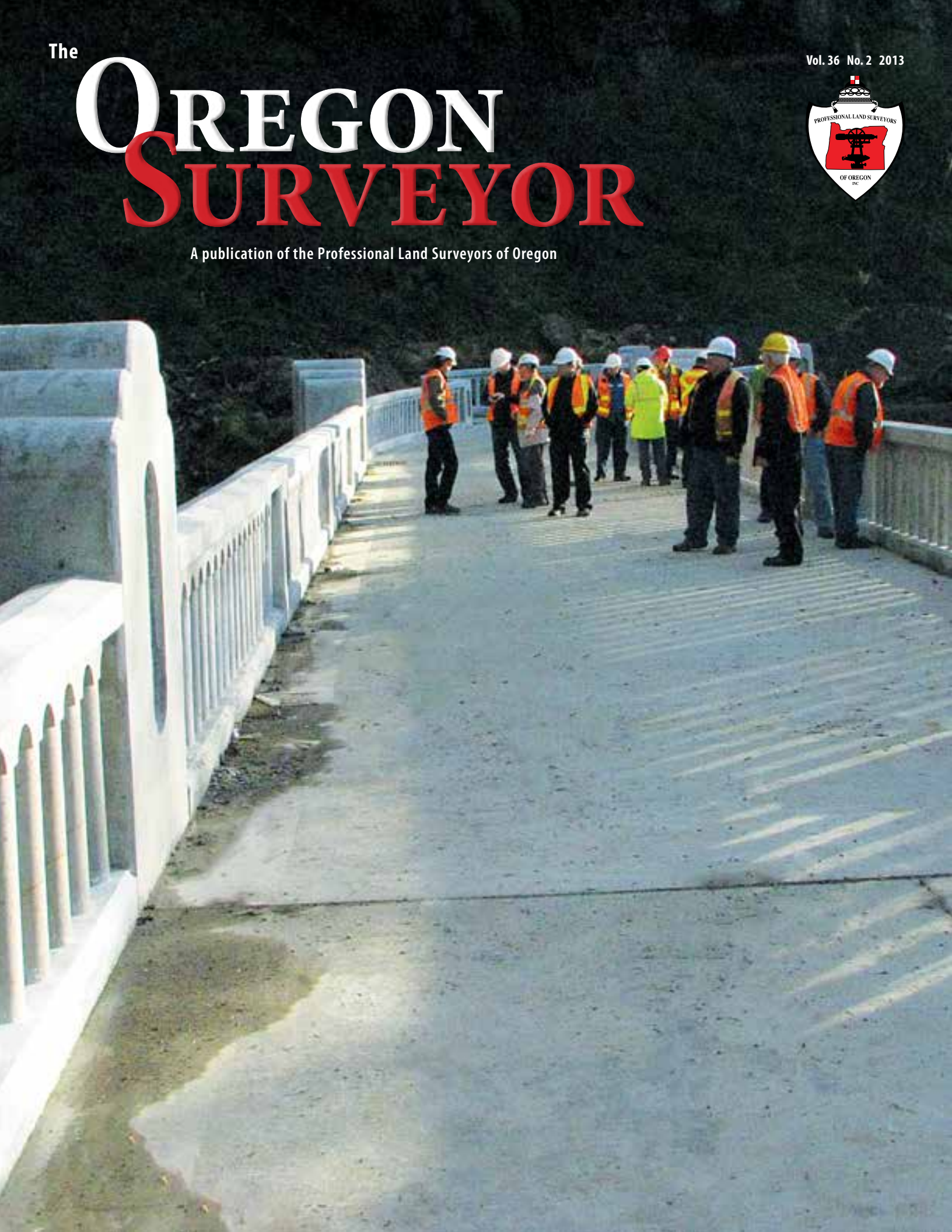
The Oregon Surveyor

A publication of the Professional Land Surveyors of Oregon



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PROFESSIONAL LAND SURVEYORS OF OREGON INC

The Oregon Surveyor

Volume 36, No. 2, 2013

Professional Land Surveyors of Oregon

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From your Chair

■ *Lee Spurgeon, PLS; 2013 PLSO Chair*

Waging PEACE

As professional land surveyors, we are frequently asked to become involved in conflicts and protracted battles between neighbors. Our professional credentials and the reputation of our honorable profession are often enough to provide an air of authority which ends the conflict and allows neighbors the opportunity to repair their relationships and live in peace. To me, there is nothing more satisfying than to leave a neighborhood more peaceful than when we came into it.

As a profession, through dealing with conflict on a regular basis, through the belief by the public that we operate under the principles of mysticism and enchantment, and learning from making mistakes in dealing with people, most surveyors actually become quite adept at waging peace. At a recent seminar, Rob Sullivan, a well-respected land attorney in Portland, made a comment that he believed "the best arbiter for boundary disputes was the surveyor himself!"

With surveyors being so skilled and experienced at the art of waging peace, I find conflicts and rifts within our own profession to be all the more vexing. In particular, I am concerned about the rift between private surveyors and the county surveyors who review our plats and maps. I have been told by more than a few employees who work with the County Surveyor that they are not interested in being active members of the PLSO if they are going to be pilloried for doing their jobs. This is both understandable and unfortunate.

I could address the problem of the rift between private surveyors and County Surveyors as a matter of policy. The PLSO is an inclusive organization and we need the views, perspectives, and active participation of all surveyors to be able to effectively serve the surveying community and to serve the public.

I could address the problem as a matter of professionalism. County Surveyors have an important job to do that was mandated by state statute. We need to understand and respect that they are merely doing their jobs. If you disagree with a decision or policy of a County Surveyor, talk to him or her about it. I have found that they are always more than willing to give you a fair hearing. If you cannot work out an accommodation, then professional etiquette allows no excuse for letting acrimony spill into your local chapter meetings.

Unfortunately, resolving animus between private and county surveyors based upon policy and professionalism still seems to miss the point. I believe that the relationship between private surveyors and county surveyors is essentially symbiotic. There would be no need for County Surveyors if private surveyors were not drafting maps and submitting maps. Private surveyors require profit in order to continue surveying. This is an absolute and incontrovertible fact that seems to be forgotten at times. Likewise, without County Surveyors, the profession would quickly devolve into a chaotic mess where the least reputable would soon develop huge economic advantages over the most professional practitioners. I am pretty sure that nobody wants to go back to the "good old days" when a typical survey consisted of four straight lines with dots in each of the corners and little or nothing else.

But I am not asking that we merely look for ways in which we can achieve an icy truce in our chapter meetings, although that may be a good first step. Instead, I would hope that we can relish the symbiotic role between private surveyors and County Surveyors and start a new era of cooperation in which private surveyors recognize the tremendous resources that County Surveyors can offer.

For example, if I am going to do something unusual to resolve a boundary line, I like to take a preliminary map into the County Surveyor's office and lay out the problem and my proposed solution with the person who will likely review the map. It is always wise to get a second perspective. Allowing the map checker a more in depth view of the problem as opposed to rejecting it out of hand makes it more likely that the solution won't be rejected when the map is submitted for review because the County Surveyor already has some buy in. A beneficial consequence of this approach if the resolution goes to court might be your ability to say, "I discussed the solution with the County Surveyor."

An example of the cooperation I would like to see between private surveyors and the county surveyor involved a boundary dispute in which a fence which was built by one party was torn down by the adjoiner.

Continued on next page ▸

PAY TRIBUTE TO THOSE WHO HAVE SERVED THE PROFESSION SO WELL

NSPS Foundation

NSPS

Berntsen International and the National Society of Professional Surveyors Foundation (NSPSF) are pleased to announce the **Final Point** Project. This is a joint effort to build an endowment for surveying scholarships. At the same time, it is an opportunity for you to honor that surveyor who had been important to you personally and to your career. For every customized marker purchased, $25.00 will go into the NSPS Foundation and $50.00 will go into the Berntsen/NSPS Scholarship Fund. The price of the customized marker is $100.00. The price of the stemless marker is $120.00.

Each marker is a beautifully engraved, solid 4" diameter bronze marker. It is personalized with the name of the surveyor being honored, with the latitude and longitude of his/her resting point. It is available with a high polish or brushed finish.

We think this is a unique way to honor a special surveyor and promote surveying education.

NATIONAL SOCIETY OF PROFESSIONAL SURVEYORS FOUNDATION, INC.

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Editor's Note

■ *Greg Crites, PLS*

Well, I trust this issue of *The Oregon Surveyor* finds you all happy, healthy and working! For those of us who have been able to ride out this recession, we should be thankful for being granted this blessing. After going through some serious financial struggles within the PLSO, I am so glad to see this magazine is alive and well, and I am truly grateful for the wonderful contributions contained herein!

It is probably a given that many of us chose this profession because of the opportunities it provided to hold our interest. The number of different jobs, the inherent difficulties that came along with them, and the constant barrage of change—change in the types of work, change in the clients, change in the technology and of course, change in our knowledge. I can't think of too many professions that are so rife with opportunities for change, especially with the added benefit of being able to work outdoors and in many cases around beautiful places, of which Oregon has so many to offer.

This issue does a marvelous job of showing some of those opportunities. Experimenting with bathymetry, researching surveys with obscure records, navigating a river while retracing the footsteps of one of our earliest surveyors, wrestling with mathematical problems, and shoot, there's even a little snippet about coincidences in surveying, something I'm betting many of us have encountered though seldom considered for their entertainment value to our peers. I'm hoping that after reading this issue you pause to think about what you do every day and recall some of the wonders that awaited you around every bend of your career. Maybe you'll remember some serendipitous event of your own that is worth sharing. We'll all be enriched by the telling.

Speaking of serendipity, did you happen to notice who Andrew Plett was talking about in his article when he mentioned the surveyor of the Charlesworth estate? Now believe me when I tell you that though I had the privilege of reviewing Andrew's article some time ago, I had no idea that our paths would collide in this magazine. Apparently Alonzo Gesner left a wider swath than even Andrew discovered. GLO Surveyor? Coincidence? I'm betting Tim Kent might have a thing or two to say about this! Hmm. ⊙

From your Chair: Wage PEACE, *continued*

Immediately, both parties lawyered up, whereupon I was called in. I knew from the very beginning that this case was going to go to court, so I asked the County Surveyor to go over my record of survey with as much diligence as he could. He reviewed the survey and asked pertinent questions about a couple dozen items on the map. I was not upset that the map came back full of red. As a matter of fact, I would have been upset if it didn't. Because I asked for extra scrutiny, I was able to tighten up the language of the narrative for added clarity. I was able to fine tune the survey so that I believed it would be unassailable. The end result was a better survey than is normally sent in to the County Surveyor's office and the two parties settled their dispute without going to court. I truly owe the County Surveyor a huge debt of gratitude for his extra effort.

Another example involved a disputed line with a client who had been into the County Surveyor's Office several dozen times over the course of a few years. It was widely believed by everyone involved that this dispute was going to court. The boundary resolution was very complex and involved retracing an unrecorded plat from 1928. I turned in the record of survey and the County Surveyor distributed my survey to every licensed surveyor in the office. It seemed they scrutinized my work harder than any opposing counsel ever would. I have to admit I was shocked when I got back ten pages of red line revisions, but when I saw that the County Surveyor was merely watching my back, I felt grateful that he was interested enough and invested enough that he took what I perceived as extraordinary measures to help me out. Was my survey better for all of their efforts? Of course it was.

The point of these examples is that it is pretty easy to become upset when you get back a survey map dripping in red, but I think one is better off if you realize that another set of eyes on your work is actually a blessing. The County Surveyor can be a tremendous resource, offering some very different perspectives for our professional practice. If they are not warmly welcomed and actively engaged in the PLSO at the chapter level, then it is a loss to all of us in the profession.

With that being said, I hope you all go out there and wage some peace of your own. ⊙

■ *Mary Louise VanNatta, CAE; PLSO Executive Secretary*

Past the crisis…*now what?*

PLSO DID SOME DIFFICULT WORK last season including significant financial cutbacks. A recently adopted dues increase has allowed some important services to continue while the Board continues to evaluate or modify others. Now, we are in the middle of our membership renewal process. The dynamic membership team, led by past state chair Gary Anderson, has a goal to reach current and potential members with the message that PLSO is active, forward-thinking and ever-changing to meet the needs of the surveying community in Oregon. Many challenges, both political and professional, face the industry and there is plenty of work (and fun) to be had.

Where is the fun you might ask? Well let's look at what the next chapter of PLSO might bring to your career.

It's good to be part of the team. It is time to make sure your membership status is up-to-date. Have you put it off until the last minute? On July 1, the new membership year began. If you haven't paid your dues, use the improved online process to update your data and pay your dues. Want to be even more popular? Get your surveyor friends to join PLSO and make each meeting a social occasion.

Take advantage of your member benefits. PLSO can answer the question, "What's in it for me?" Besides the access to research and meetings, corporate members should benefit from the newly formed relationship with NSPS. If you have been a member of NSPS, this new relationship represents a significant financial savings to you. If you haven't, you might not be fully aware of all the services that the extra NSPS dues will provide. Some of those:

- Online subscription to the *Surveying and Land Information Systems Journal* (SaLIS).
- Professional books at a significant discount.
- Government affairs newsletter updates via email.
- Reduced fees for conference registration.
- Fellowship and scholarship programs.
- Continuing education programs and workshops.
- Insurance programs (professional liability, individual life and health, group health).
- Car rental discounts from Hertz, Avis and Budget.

Find out more on the NSPS website through links on www.PLSO.org.

Membership meetings can be fun. There is recognition from the PLSO board that the organization needs to continue to make association communications and meetings more timely, relevant, interesting and dynamic. This is as much the responsibility of the attendees as it is the Chapter leadership. Your input does make a difference. You can start with small suggestions or actions. Help identify good speakers. Look for interesting meeting locations. Invite members to your house or business for a member social. All of this helps make your meetings a great place to bring guests, associates, students and potential members.

PLSO can influence the future of surveying. When we hear, "Someone should do something about that… surveying issue," we have to wonder if not PLSO, then who? Which group in Oregon is more suited to identify political issues to the surveying profession? Which group is most skilled to speak to these issues in public and governmental forums? Only *you* and PLSO.

To share your ideas contact your chapter leadership. You can find contact information on the website at www.PLSO.org. ⊙

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Layne Caswell

December 18, 1937 – May 27, 2013

Walter Layne Caswell, age 74, died on Memorial Day, May 27, 2013.

He was born December 18, 1937, and spent his childhood in Las Cruses, NM; Santa Barbara, CA and Salem, OR. His military career started in the high school Marine Corps.

Shortly after graduation from high school, he joined the Navy and studied surveying while in the Seabees. For four years he trained and worked in the U.S. Naval Mobile Construction Battalion One, building facilities for Navy personnel in Guantanamo Bay, Bermuda and Spain. During this time, Layne perfected his surveying skills, rising to professional surveyor.

After his discharge from the Navy, he obtained his surveyor's license in 1966, after a long apprenticeship. He worked for Robert E. Meyer Engineers in Beaverton, OR until 1971. At that time, he started his own surveying firm, Layne Caswell Surveying, which later evolved into Layne Caswell Surveying, Inc., and eventually Caswell/Hertel Surveyors, Inc. During his years of surveying, he hired over 100 workers, filed over 1500 surveys, and traveled to Oregon, Washington, California and Idaho.

Layne took pilot's training on the GI Bill, and bought a 250 Comanche 4-passenger airplane that he enjoyed flying.

In 1987, Layne, and three others, formed "Eagle GPS Survey Corp" and bought the first survey grade GPS units in the Northwest. As pioneers in the GPS world, Layne traveled to 16 of the Western states, with jobs from federal, state and local governments. He also helped adapt the GPS to airplanes during aerial photo missions.

Danna Bernhardt and Layne Caswell

Layne retired in December of 1999. He was an active member of the PLSO. His contributions included Pioneer Chapter President, State Chair, and editor of the *Oregon Surveyor*. After retirement he was honored with a life membership to PLSO.

Layne married Jean Hagen in the early 1960s and they had three children, Jeff, Jim and Jodi. Layne and Jean later divorced.

Layne moved to Council, ID soon after his retirement, where he found a partner in business, and in life, with Danna Bernhardt. They established a business, D&L Herbs, which deals in herbal products such as valerian, choke-cherry cough syrup, arnica flowers for arthritis and bruising, and many ointments, salves and lip balms.

Layne's ashes were buried at his favorite hunting spot: Mount Emily near LaGrande, OR. ⊙

25 state societies sign MOUs for NSPS 100% membership effort

■ *Reprinted with permission from* NSPS Dual Frequency

WE'RE JUST OVER SIX MONTHS into NSPS's campaign to dramatically increase its membership, and 25 state surveying societies have signed Memorandums of Understanding (MOU) to have 100% of their members join the national surveying society.

NSPS executive director Curt Sumner commented, "With full implementation of the MOUs already signed, we automatically go from under 3,000 members to well over 10,000 members, with many more coming. Along with having recently engaged the well-respected government affairs consultant, John M. Palatiello & Associates, these numbers put clout behind our legislative affairs program.

"These are exciting times for NSPS and the surveyors across the country," Sumner continued. "Only through the continued support and direct input from the members and administration of the state societies will NSPS be able to present to the public, and prospective surveyors, the true story of the benefits provided by surveying professionals."

Executives from a few of the states described their decision process and what they now expect to see from NSPS.

Maine

Members of the Maine Society of Land Surveyors (MSLS) had the simplest decision of any state in the union to make when they were asked whether they would be a part of NSPS's 100% membership program. "We already are!" they replied.

"When we heard this was being proposed and likely to be offered by NSPS, our reaction was 'well, it looks like the rest of the country is about to join MSLS,'" recalled MSLS executive director Bruce Bourgoine.

"MSLS asked this same question of its members over ten years ago and we acted back then to have 100% of our membership join NSPS. Back then it was costing each of our members an additional $100 a year. Since we treat this membership as a pass through [cost to MSLS members] this action by NSPS [in 2012] ends up saving each of our members $60 a year. Talk about easy decisions!"

"We've always felt that surveyors nationwide need to have a strong national voice, so for us this action is exciting. We're glad to see other states seeing it the same way we've seen it for the past decade," Bourgoine added. "With a nationwide membership of less than 3,000 [NSPS membership prior to implementation of the 100% program] our voice can easily be dismissed when we chime in on a national issue. However, as we approach 25,000 members, that will no longer be possible. We will be a force to be reckoned with."

The nearly 300 members of MSLS look to NSPS to provide the strong national voice, as well as programs designed to attract the next generation to the surveying profession, such as scholarships and Trig Star.

Tennessee

Volunteers, the motto and image Tennesseans like to espouse, is one reason the Tennessee Association of Professional Surveyors (TAPS) rallied its members to become the first state to officially join the 100% membership program.

"Tennessee volunteers like to be first when called to duty," explained Bennie Moorman, TAPS president. "When the Texans called for a certain amount of volunteers to help them defend the Alamo, Tennessee sent ten times the number of troops that were requested."

In a more fundamental way, TAPS always tries to provide its more than 500 members with extra benefits. Moorman says strong representation at the national level is essential.

Two issues that come to immediate attention, Moorman explained, are keeping surveyors from outside the U.S. from working within U.S. borders. Moorman said he would also like NSPS to present a strong voice in preventing the FAA from prohibiting drones to be used commercially in the U.S. "Drones will soon become an important tool in the surveyor's toolbox, and the NSPS should be the driving force in ensuring that the FAA doesn't take this tool away from us."

Moorman also hopes the revitalized NSPS will help surveyors to become more savvy businesspeople. "We are notorious for being bad businessmen," he opined. He gave an example of a surveyor in Tennessee who invested $40,000 in a robotic total station to make him more efficient. He could now do a job in 70% of the time. So what did this surveyor do with his increased productivity? Cut his fees. "That's bad business," Moorman said.

New Jersey and Maryland

Mark Husik, of Mark Husik and Associates, manages the Maryland and New Jersey surveying societies, with 700 and 500 members respectively.

For these two state societies, the decision by both boards to join the 100% effort was almost unanimous.

Husik, indicated that both states will keep a close watch on how NSPS improves with having the backing of far greater numbers of surveyors and their respective state societies.

"Both of our boards would like to see a focused leadership. They'd also like to see an evaluation of all the programs that NSPS has been operating for a number of years. NSPS needs to see which programs need to be retained, improved, or dropped entirely. We are not sure if all the programs operated by NSPS are effective in, for example, bringing young people into our profession. We cannot afford to operate programs that are not effective."

Husik opined that NSPS should elevate the profile of certification programs such as the ones for hydrographic surveying and CST, stating, "On a whole, we think NSPS is not charging enough for these programs."

Both Maryland and New Jersey boards want NSPS to initiate a concerted national effort to broadcast the role of surveyors in modern society.

"Legislators don't have a clue as to what surveyors do. If they don't, how is the average citizen supposed to know? It's almost like surveying is a secret profession.

Husik emphasized that both the Maryland and New Jersey society state boards are not giving NSPS an open-ended time frame to show progress. "We expect to see change fairly rapidly. The best and the brightest should be able to come up with some ideas to let people know what we do. My members want to have more input to the national organization. They want change." ⊙

NSPS 100% Membership Participation (as of 7-2-13)

Note: The process for a state society to approve the NSPS 100% Membership Participation Plan varies. Some states only need board approval, while other states need membership approval. The categories for this map reflect the current status of the state society as reported.

PLSO legislation update

June 25, 2013

■ *Scott C. Freshwaters, Legislative Committee Chair, PLSO Liaison to OACES*

SB 550

This bill changes the "dig law" to allow digging with hand tools to be exempt from the utility locate requirement, and also the first 12". The bill was pulled from the docket by Sen. Prozanski at the request of the OUNC OAR Committee who agreed to work with all concerned parties "in good faith."

6/25/13 UPDATE The OUNC OAR Committee reviewed their manual and is proposing sweeping changes, some of which clarify when we need to call for locates. It appears that we will have a "free pass" while searching for pins in the first 12". Furthermore, they are proposing a FAQ that defines exempt surveying activities.

HB 2869

This bill would change the corner preservation fee from the maximum of $10 to "Actual Cost of Services." This bill originated from AFSCME, which is a union representing state, county and municipal workers. At an OACES meeting in Salem, the County Surveyors were unanimous in their opposition to this bill. Their concern is that by opening up this bill it could conceivably be subject to the elimination of the fee by groups who were opposed to the increase proposed during the last general session.

UPDATE We had been told that this bill was pulled, but the miner's lobbyist brought a hearing notice to our attention. OACES, along with the miners are prepared to testify against this Bill in hearing if it comes to that. The AOC lobbyist is going to contact the AFSCME representative to try one more time to get this killed.

4/1/13 UPDATE The bill was heard in the House Revenue Committee, with 1/6 giving favorable testimony.

4/26/13 UPDATE This bill is probably dead for this session as it is sitting in the House Revenue Committee with no further hearings scheduled.

HB 3089 and 3085 are sponsored by Rep. Bill Kennemer at the request of OACES.

HB 3089

This is the Boundary Line Agreement bill in the identical form as amended during the 2011 general session.

UPDATE HB 3089 will not require the County Surveyor (CS) to certify the BLA. They will only check for compliance to ORS 209.250; like they would any ROS. If it is determined that the law needs some kind of CS approval we will push to only have the CS state that he/she has determined that the BLA is not being done to circumvent the PLA process, or similar language. Some other edits have been made and the bill is with Legislative Counsel.

HB 3085

This bill amends ORS chpt. 92 to define "Tract." This bill has been amended to drop the condominiums from being able to create tracts. One other edit was made that eliminates confusion about who is authorized to create tracts.

4/01/13 UPDATE HB 3085 and 3089 were heard in the House Land Use Committee. No one spoke in favor of HB 3085, although those who testified against it said they would remain neutral or change to favor it if some modifications were made. I was the only one who spoke in favor of the BLA Bill, the Committee did show a lot of interest and had some very thoughtful questions. An employee of DLCD, along with a lobbyist advocating for the American Planners Association, Oregon Chapter, spoke against HB 3089. Matt Dunckel also spoke against it, although about the provision for certification by the County Surveyor. Written testimony against this bill was submitted by 1,000 Friends of Oregon, APA, and DLCD. I believe that the planners, can be swayed to either remain neutral or support the BLA Bill if we take the time to meet with them.

At the request of Mike Eliason to Rep. Bill Kennemer, Chair Clem of the House Land Use Committee will not hold any further hearings this session on HB 3085 and 3089. This has the effect of "killing" each bill for this session.

4/26/13 UPDATE Both HB 3085 and 3089 are effectively dead. No more hearings are scheduled.

SB 208 and 209

SB 208 allows a student enrolled in an OSBEELS-approved curriculum to take the FLS exam in their Senior year. On schedule for Third reading in the House.

SB 209 allows OSBEELS to suspend, revoke, or refuse to renew the license of person not complying with the Board's sanctions.

6/25/13 UPDATE Both bills are enrolled, meaning they are on their way to the Governor's desk. ⊙

Please let me know if you have any questions about the legislative process, and/or thoughts about proposed legislation or amendments to present law. 541-593-1792 or 541-420-1822.

Old-style partitions and their history

■ *Andrew Plett*

IN RETRACING THE STEPS OF THE ORIGINAL SURVEYOR, surveyors have a myriad of tools at their disposal. One tool is the current and repealed statutes of state and federal law. Because the law is different at different times, an understanding of the law in force at the time of a particular survey can be helpful in understanding the why and how in a survey. This article examines one such law, ORS 105.205-405, entitled "Partition." A quick read through the statute reveals something quite different than the familiar partitioning of ORS 92. This "old-style" partitioning, as I will refer to it, is a much older statute than that in ORS 92, and while it is seldom used today, it has an interesting history and important ramifications for land surveyors.

This law provided an important relief to the early residents of Oregon. The pioneers who first came and settled here claimed land under the Donation Law and other acts. They often had large families, and when the original settlers died, their children received their parents' land with an undivided proportional interest. For example, in a family with six heirs, each would receive an undivided 1/6th interest. Since it is hard to farm land when you don't know what portion you own, the courts needed a process to divide the land equitably. By 1862, this had become enough of a problem that the legislature addressed it.

On October 11, 1862, the Oregon legislature passed a number of laws relating to the civil code, one of them entitled "Suits for the partition of real property." (Deady's, Title V, §419, pg. 255) Interestingly, this law has continued on to the present day in ORS 105, unchanged since its inception. It provided for the heirs of an estate who held title as tenants in common to sue to partition the property according to their respective rights. The plaintiff would be one or more of the heirs, and the defendants would be the remaining heirs and any lienholders. If the land could be divided equitably, the circuit court

Continued on next page ►

would appoint three referees to oversee the partition; if not, the court would order the sale of all or part of the land. The three referees were required to divide the property among the respective parties according to their rights, considering both the quality and quantity of the land. They were to mark the boundaries of the lots with "proper landmarks" and were allowed to employ a surveyor, although it was not required. The referees would then issue a report to the court, and the court could accept or reject what they did, or even appoint new referees if needed. After the court case was finished and the survey completed, the individual lots would be conveyed individually by deed, with the grantee being a single heir, and the grantors being the remaining heirs.

So how does this apply to surveyors? Most of the available records for surveys prior to the 1940s (when the survey filing statute was passed) are from the county surveyors' office. Other surveyors were not required to file surveys, except for town plats. Thus, the potential exists that a large number of old monuments have no record of their setting. During my research for several complicated boundary surveys in the past few years, I have come across another small, but important, source of early survey records: the circuit court archives. When referees partitioned land, they usually employed a surveyor, and the referees report usually mentions the name of the surveyor, always contains the surveyor's description of the lots of the partition, and sometimes contains a plat of the partition. The surveyor's description usually reads like the early text descriptions of surveys done by county surveyors, and mentions the markers set at each corner and bearing trees, if marked. The plat is usually bare-bones, listing the name of the estate and the dimensions and acreages of the lots. If you're lucky, the plat will be filed in the county surveyors' records, but oftentimes it is not.

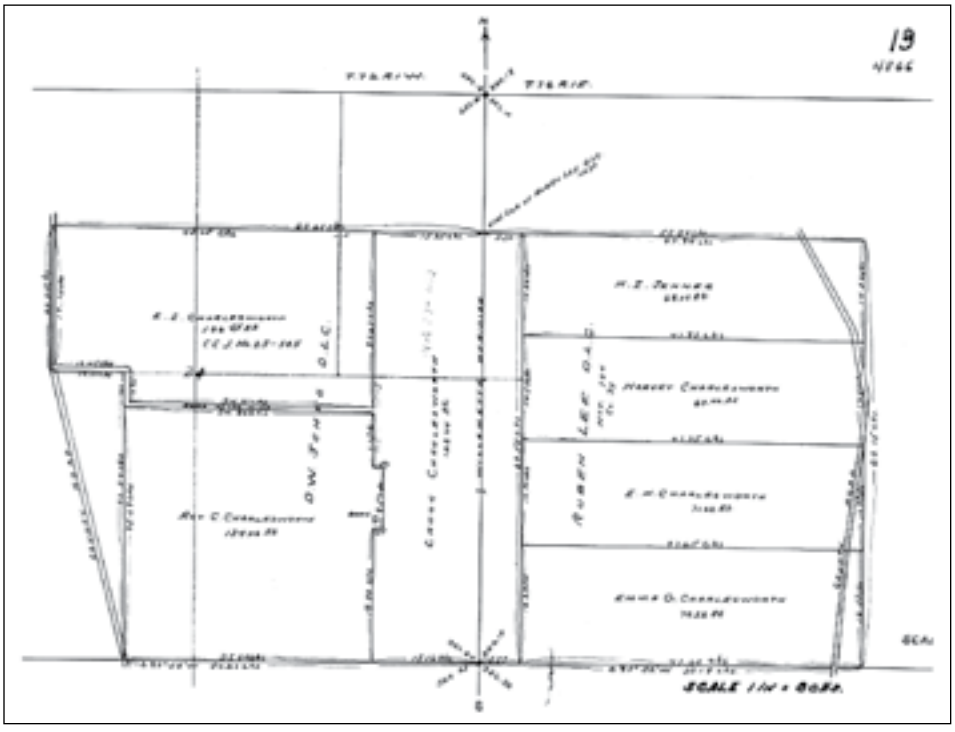
Some indications that the property you are surveying might have been part of an old-style partition include:

- Finding deeds recorded at the same time or within a few months of each other for adjacent parcels with complementary descriptions, and with the surnames of the grantors and grantees being mostly the same.
- Deed descriptions that reference circuit court case numbers.
- Deed descriptions that mention bearing trees that aren't in county surveyor records.
- Old survey plats that list volume and page numbers that don't make sense with deed volume and pages. (They may be circuit court journal volumes!)
- Old survey plats that list numbers that don't match survey numbers. (They may be circuit court case numbers.)
- Rectangular or cardinal-only shaped tracts with no survey record near or within a donation land claim.

Circuit court records are usually either in one of three places: the circuit/county court, county archives, or state archives. The Oregon State Archives website has a comprehensive inventory with the locations of all county records at http://arcweb.sos.state.or.us/pages/records/local/county/index.html. Circuit court records usually have indices, although some are missing. To search through the records, you will need to have either the plaintiff or defendants name and an approximate date. Getting the name and date usually requires a chain of title search to find suspected deeds or using the name of owners listed on an old plat. If you're desperate, a Hail Mary approach that is sometimes successful is to search by the surname of the original donation land claim holder.

Figure 1 shows a typical turn of the century estate partition. This survey, Marion County Survey Record 4866 was done for the partition of the Charlesworth estate in 1906 by Alonzo Gesner, a former county surveyor. It is typical of early survey maps in that no monuments or bearings are shown,

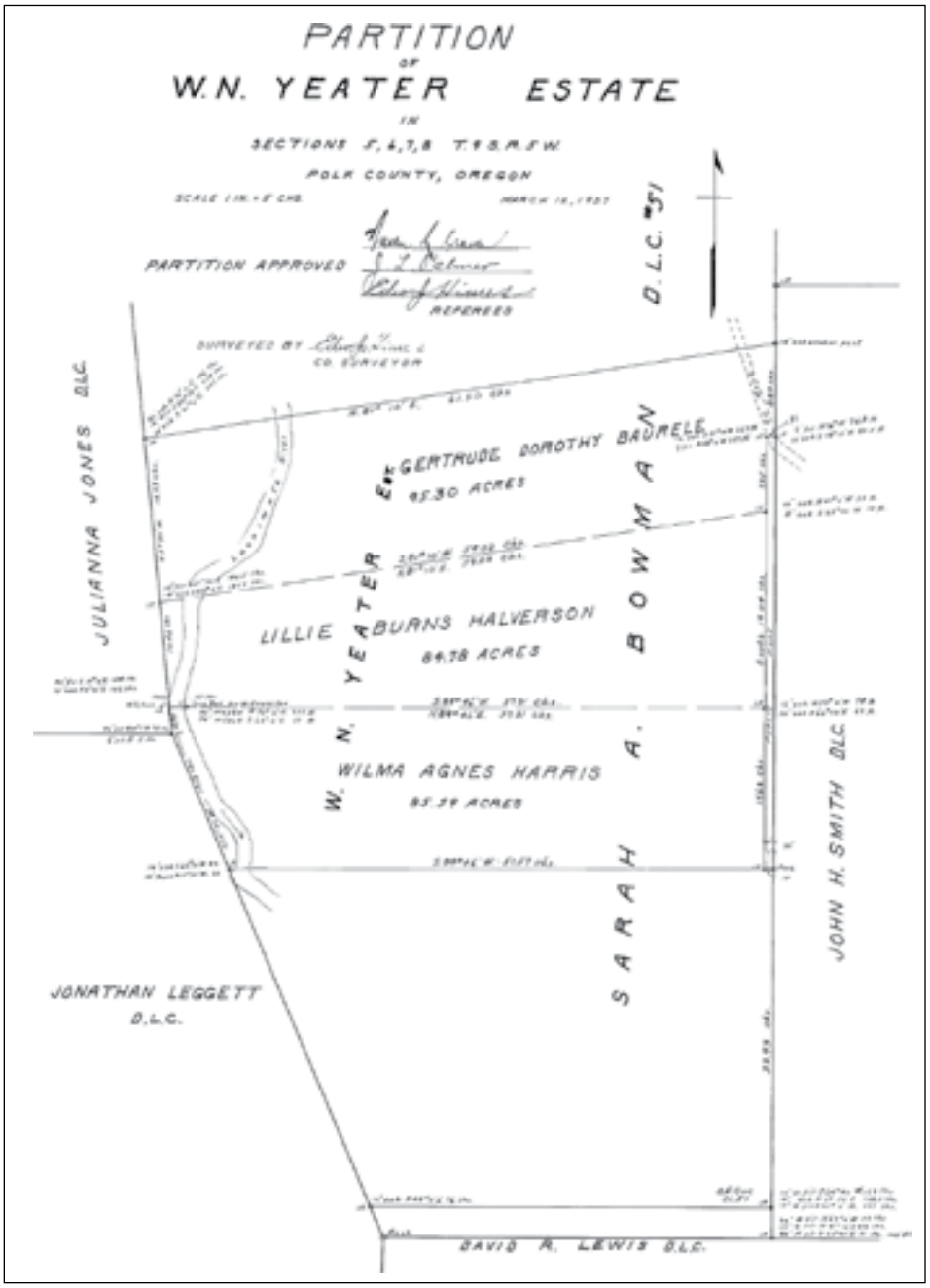
Figure 1. MCSR 4866 by Alonzo Gesner, Marion County Surveyors Office



only distances and acreages. However, the surveyor graciously has noted in the northwest lot "C.C.J. No. 25-545." This is a reference to Marion County Circuit Court Journal, vol. 25, page 545. On that volume and page is a complete description of every lot shown on the plat, including monument descriptions for each corner, which indicated that stones and bearing trees were used. It also lists an easement for the road leading into the lot for Crook Charlesworth. The monuments in the court record are not mentioned in any other survey records, and the road easement is not mentioned in any deed. Thus, the court record for this survey would be of vital interest to a surveyor retracing boundaries in the area.

Figure 2 shows a more modern estate partition. Himes, the Polk County Surveyor, does a really good job, showing monuments set and bearing trees marked, bearings, distances, and acreages, and even a list of the referees. He neglected to add a case number, but with the quality of the plat, the lot descriptions aren't really needed.

Figure 2. CS 9528 by Edward Himes, Polk County Surveyor's Office



In 2010, my company did a survey in the foothills of the coast range of Polk County (CS 15451, Polk County Survey Records). The survey had a number of difficulties, including donation land claim corners that had been unrecovered for a century. While doing a chain of title search on the property to reconcile descriptions with neighboring properties, I came across some deeds that mentioned circuit court case numbers, some that had bearing trees, and a bunch with grantors and grantees having the same names. We searched state archives and found two cases from the 1890s for two adjacent donation land claims. In the case files were copies of the referees report with descriptions. One of the referees was T.L. Butler, the Polk County Surveyor, and the surveyor they employed was H.S. Maloney, a former Yamhill County Surveyor. The descriptions for the lots listed wooden stakes and bearing trees at each corner. A search of Maloney's field notes at the Yamhill County Surveyor's Office yielded identical descriptions to those found in the case. We went back out into the field and located many of the bearing trees, cutting into them and finding scribing. From the trees, we were able to reestablish the lot corners and a donation land claim corner. The discovery of the cases was vital to our resolution of the survey.

These "old-style" partitions are a thing of the past, but they played an important part in giving a start to the second generation of Oregonians. The surveys ordered by the courts, while not in county surveyor records, can play an important part in retracements in rural areas. Following in the footsteps is always easier when we know of the different paths the original surveyor might have taken. ⊙

Crater Lake

■ *Oliver J. Loftus*

IN THE SPRING OF 2010 as a student at the Oregon Institute of Technology I, along with four classmates, participated in the 2011 ACSM student surveyor competition. At that time, we had no idea what the subject would be, and honestly, I hardly gave it a thought all that summer as I surveyed some of the remote areas of Alaska's interior. Upon our return to academics in the fall, we were informed that the topic would be Hydrographic Surveys. We were given no other direction and it was up to us to determine the scope of our project, write a 10–30 page paper, design a poster, and prepare a 20 minute presentation for judging in Las Vegas, Nevada in March of 2011. Luckily, Oregon is home of the deepest lake in the U.S., seventh deepest in the world, Crater Lake. The depth of the lake has inspired a series of surveys over the past 130 years and we decided to use these expeditions to explore the evolution of hydrographic technologies and techniques. We mostly focused on bathymetry, which is the data pertaining specifically to the floor of the lake, and the maps that can be drawn from this data.

Before there was Crater Lake, there was a volcano that stood approximately 12,000 feet tall. Some 7,700 years ago this volcano, which we now refer to as Mount Mazama, began to spew magma, dust, and rock. The explosion would later be determined to be 42 times the magnitude of the eruption of Mount St. Helens. In the end, the magma chamber beneath the mountain could no longer support the weight of the mountain above. The earth gave way and the mountain collapsed in on itself leaving a great crater, or caldera, behind. Once the lava floor cooled, water began to accumulate eventually filling the caldera. Crater Lake has no natural inlets or outlets so the water is comprised entirely of rain fall and snow melt and the level is regulated by evaporation and seepage. As a result of these unique conditions, Crater Lake is comprised of pristine clear blue water with very few particulates.

Crater Lake's blue waters were the inspiration for the first survey of the lake in 1886. Headed by William Steel, the expedition hoped to map not only the surrounding area in an attempt to preserve its beauty for future generations, but also determine the depth of the lake. This first expedition to the lake began with the construction of boats in Portland which then had to be shipped by train to Ashland and then carted over rough trails 100 miles to the rim of the lake. The next challenge was to lower the boats down the steep 1,000 foot sides of the lake to the water. Once this had all been accomplished, the men were eager to

get to work. The depth of Crater Lake was determined by dropping a lead weight attached to over 2,000 feet of piano wire, with depths marked every six feet, to the bottom of the lake. Horizontal positions were determined by engineers on the rim of the lake turning angles to the boat.

In a week, those men took approximately 170 soundings of the lake, the locations of which were roughly plotted on a map, and determined the lake to be about 1996 feet deep. The depth astounded those first surveyors, as they had expected the lake to be only a few hundred feet deep. In our research, we were unable to determine how they had decided to bring as much piano wire as they did given their expectations. I can only conclude that it had to do with the remote aspect of the lake, access was so difficult that they must surely have wanted to be prepared for any circumstance.

That first expedition was instrumental in designating Crater Lake as a National Park preserving it for future generations and future surveys. In 1959, another survey of the lake was made using the latest technology, Single Beam Echo Sounders. The echo sounder was initially designed to locate underwater icebergs in an attempt to prevent another *Titanic* tragedy. Icebergs, however, did not return echoes well enough to determine their position, but the sea floor did. This technology was the first substantial step forward in hydrographic technology since people first began mapping the bottom of bodies of water.

Using two echo sounders mounted on the side of a National Park Service vessel, dubbed *Ranger*, a crew of surveyors and engineers gathered 3,600 soundings of the floor of Crater Lake. Horizontal positioning had also improved and with the data collected fairly accurate contour maps of the lake's bottom could be drawn. For the

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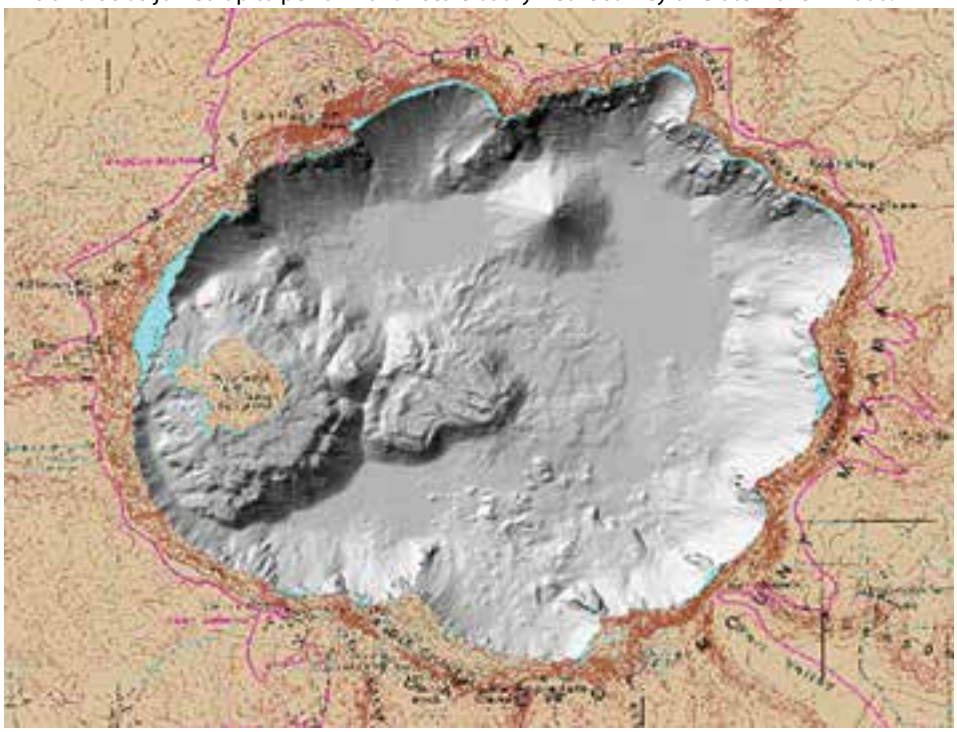
The first survey of the Crater Lake, 1886, headed by William Steel.

NPS and USGS joined up to perform a full scale bathymetric survey of Crater Lake in 2000.



Our surveying project in 2010 included a home-built depth sounder.

first time, there was a picture of what lay beneath the surface of the water allowing for a better understanding of how this natural wonder was created.

In 1987, curious about what lay at the bottom of the lake, the National Park Service sent a one man submersible, named *Deep Rover*, to the caldera floor. While the primary mission was one of scientific exploration, there was also an attempt to map a small portion of the lake. An echo sounder was mounted on *Deep Rover* and soundings were taken throughout the exploration site. Unfortunately, due to a complicated system of microwave ranging systems and underwater transducers, their ability to provide horizontal positions for these readings was highly inaccurate. At best, they were able to locate the submersible within a 10 meter by 10 meter square.

It was obvious from this survey that in order to justify another full scale bathymetric survey of the lake horizontal positioning would need to be improved. Likewise, there would be little point in resurveying the lake if the floor could not be depicted with greater clarity.

By 2000, both of these aspects had seen great improvements in quality. The consistent progress in GPS technology allowed for positioning to within half a meter or better, and echo sounders had evolved from single beam to multi beam systems.

Armed with cool new technology, the NPS and USGS joined up to perform a full scale bathymetric survey of Crater Lake in the summer of 2000. A couple years prior, a similar survey had been done for Lake Tahoe and the same company, C & C Technologies, was hired to collect the data for Crater Lake. Their boat, named the *Surf Surveyor*, was driven to the rim of the lake and then safely lowered to the water surface via helicopter. The boat was equipped with two Trimble GPS antennas and positions were determined using differential corrections from a base station set up on a known point on the crater's rim. For the collection of depth data, a Simrad multi beam echo sounder was used. The Simrad was capable of sending out large swaths of sound beams every couple seconds and allowed the team to collect 5 million sound beams in just five days.

The resulting imagery far exceeded anything that had been accomplished before. The tight formation of sound beams, along with the sheer quantity, showed all the ridges, valleys, and subtle variations of the lake floor. The map produced gave as good a look at the bottom of Crater Lake as one might get short of draining the lake.

In the time it took for us to compile all our research and write the paper, I became intrigued by those first surveyors. It took a great amount of dedication and forethought to pull off a survey like that. Crater Lake is difficult enough to reach today and must have seemed so incredibly remote in 1886. Additionally, Crater Lake receives a lot of snow every winter, 12 feet is not uncommon, and it can last until July some years so that the window of opportunity for surveys is quite short. I have also been told that the wind can pick up without warning and thoroughly churn the surface of the water so as to make navigation quite difficult.

Given all these difficulties, and the limited technology, how did those men manage to give their data any sort of positional accuracy? And how could they be certain that the depths they were recording were accurate, especially since the weight they dropped had travelled nearly 2000 feet to the bottom? How did they keep the boat from drifting about as the weight fell and the men on the rim turned angles to them?

I decided the only way to get an idea for how they dealt with all these factors would be to go out and perform a similar survey. Originally, I had hoped to get out on Crater Lake and perform my depth soundings, but as I mentioned, access is limited and I wasn't able to get out on the lake before school ended and I graduated. I scaled down my fantastic ideas and found a reservoir near OIT that would serve my purpose.

In preparation for this project, I decided to build my own depth sounder. I considered borrowing one, or perhaps purchasing a simple model that can be found on the Internet, but in the end I decided it would be more fun to build my own. By constructing my own model, I could design it for any depth I wanted, and the school could keep the end project. In the old days piano wire was used with depths marked every 6 feet, or one fathom, by leather tabs. The wire had a lead weight attached to the end so it would drop fast and true, and was spooled up so that it was easy to play out and reel back in. I planned to follow this same construction design as close as I could.

Limited as I was by tools, funds, and skill, I put a lot of thought into the easiest way I could go about constructing my depth sounder. I struck on the idea of using an old bicycle frame; the rear fork could hold the spool and the gears and pedal could be used to wind the spool back up. I lucked out and a bicycle shop in Ashland donated a child's bike to my cause. I found a company, also in Ashland, that manufactured piano wire in a variety of lengths and thicknesses and purchased 500 feet of 0.016 inch wire. I could not figure out how to attach leather tabs to the wire and instead used electrical connectors, called butt-splices, which I crimped to the wire. I then wrapped a piece of duct tape to each butt-splice so that I could mark my fathoms. 500 feet of wire requires approximately 83 tabs and my room became a workshop for

one weekend as I unwound and rewound the wire crimping, taping, and marking it every 6 feet. By the end, I was quite glad I had not been able to make it out to Crater Lake as that would have required me to perform this task for no less than 2,000 feet of piano wire.

I mounted the spool on the rear fork and built a platform that sat over the spool on which I could mount a prism and a GPS receiver. The whole contraption I mounted to a 6 foot plank of wood 6 inches wide. I drilled a hole so that the weight could drop freely through the board, and smaller holes so it could be tied to the cross members of a canoe. A wing nut and lock washer held the spool so that it wouldn't unwind on its own; when loosed the spool spun freely, and when tight the pedal could be used to wind the wire back up. I tested out my creation and to my surprise it worked quite well, except that I dropped a couple wing nuts in the lake. After devising a way to keep the wing nut in place, I was ready to perform my survey.

I set control along the edges of the lake, just three points, so that I could have two instruments set up with a common backsight turning angles and shooting distances to a 360° prism. I ran my GPS base station on a known NGS monument and had a receiver in the boat so that I could gather RTK data and compare it to the angles turned from the instruments. Two of my classmates volunteered to turn angles and another bravely joined me in the canoe to help hold it steady while the weight was dropped and the angles turned. We had pleasant weather and there were no technical difficulties with either the instruments or the depth sounder. After a few hours, we had reached the sight limit of the instruments and I was content with the amount of data we had collected.

It was an interesting learning experience. Trying to hold the canoe still enough so that both the instruments turned angles to the same spot was quite difficult, especially when there was even the slightest bit of wind. I do not know how those men in 1886 were able to maintain a consistent position floating around in that vast blue lake. We were lucky enough to have a lake that was only 5 fathoms, 30 feet, at the deepest and the readings went fast enough both in dropping the weight and reeling it back in. I cannot imagine how long it must have taken to reel in 1500 feet or more of that wire.

In the end, our data came out fairly consistent. The angles and distances

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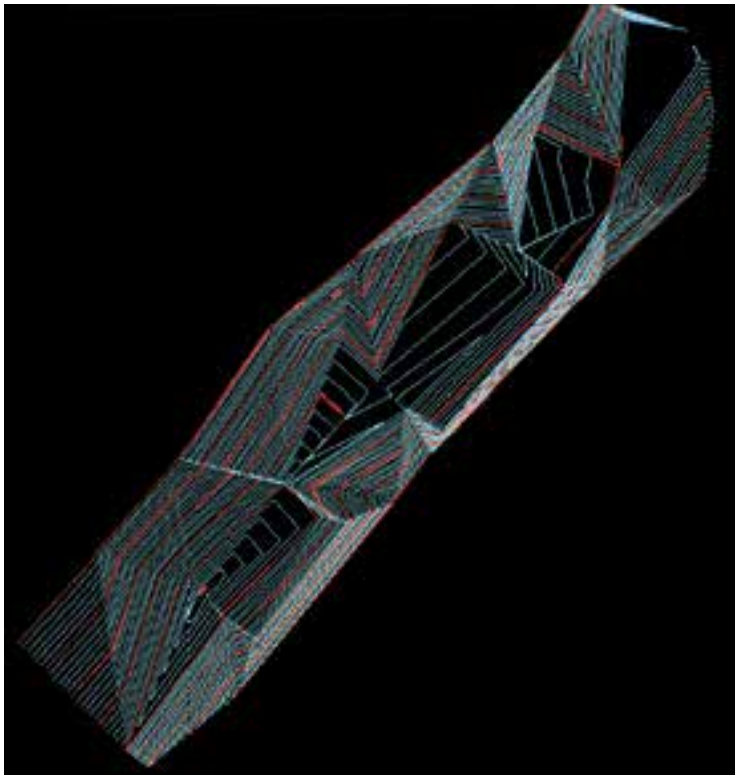
from the instruments placed the respective points close enough together to make a decent picture. You can see the flat spots to the Northwest.

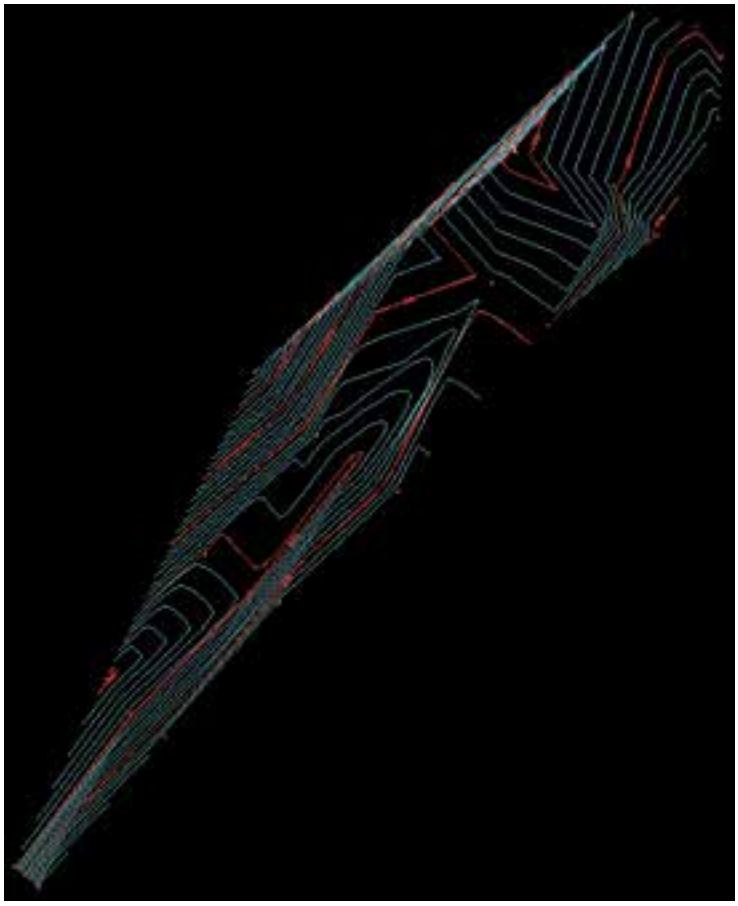
The RTK data was likewise enlightening, and a little easier to deal with as far as I'm concerned. I had a lot of difficulty translating the instrument data to match up with the RTK data and so did not get to make the comparisons that I had hoped to.

By comparing the two drawings, one can see that the greater number of contour lines in the first drawing are a result of multiple points for the same position of the boat. This is eliminated in the RTK drawing. My meander points did not translate over and so that has caused some of the discrepancies in the two drawings.

On the whole, I think that while my drafting skills are still developing, the practical knowledge I gained from this survey will stay with me forever. There is a lot of logistics involved in a survey like this, as there are in many projects. I did not know the amount of data I would need to draw a clear picture, but I think that what I've gathered is still indicative of what the floor of the reservoir really looks like. If anything, this project was given me an even greater appreciation for what those early surveyors accomplished. The work they accomplished may have taken more effort but the work they did was nonetheless accurate and enlightening. And who wouldn't want to have been one of those men out on that boat in the crystal blue waters of Crater Lake watching that spool of piano wire unreel. That lead weight dropping so many hundreds of feet to that mysterious bottom so much deeper than anyone expected. ⊙



By comparing the two drawings (above and below), you can see that the greater number of contour lines in the first drawing are a result of multiple points for the same position of the boat. This is eliminated in the RTK drawing. My meander points did not translate over, so that has caused some discrepancies in the two drawings.



About the author

My name is Oliver J. Loftus. I was born October 8, 1980, and live in Fairbanks, Alaska, where I also grew up. I began surveying in the summer of 2001 to help pay for tuition at the University of Alaska Fairbanks where I was studying philosophy. That summer was full of helicopter rides, long hours running a chain saw, hot sun, cold rain, crossing creeks, and climbing hills. By the end of the season, we had surveyed 26 miles of the center line of a proposed road out to a gold mine, and I was hooked on a path that has kept me interested, excited, and begging for more. I graduated with a degree in philosophy and bounced around in the winters for a few years trying to decide what to do with my life. Then it occurred to me, since I always came back home for the summer survey season, I ought to just get my degree in Geomatics and seriously pursue the underlying theme of my life. I studied Geomatics at the Oregon Institute of Technology and have been home in Alaska, working for two years now. I am currently employed at R&M Consultants, with offices in both Fairbanks and Anchorage, and am working to get experience so I can take the Professional Exam. I have traveled all over the great state of Alaska, and seen many things I never would have; had I not been a surveyor. Some summers have been easy and others have been tough, but I have enjoyed every one of them and am both proud and happy to call myself a surveyor.

Thank you to PLSO proctor, Daren Cone!

Trig-Star 2013
Sprague High School, Salem

Sprague High School students, under the direction of teacher, Bryan Hatzenbihler, challenged the Trig-Star test.

Kootenay River resurvey project
July 31, 2012

■ *Robert Allen*

Part 1

After crossing the mountains on horseback, Thompson's crew reached a large river. Using crooked knives to shape canoe planks, they built boats to transport people and baggage upstream.

Crooked knife
Northwest Museum of Arts and Culture, 251.24

Jack McMaster, *Crossing the Rocky Mountains*
Courtesy of Sasquatch Books

Uncharted Territory

In the spring of 1807, David Thompson crested Howse Pass in the Canadian Rockies and gazed west at uncharted territory. He had come to explore the course of the great Columbia River, and over the next five years, he completed the first scientific survey of its entire length.

But Thompson was not just a geographer out to map a river. He was also a fur trader in search of beaver pelts, an ambassador to the native tribes, a citizen of the British Empire, and a naturalist of abiding curiosity. His arrival was a catalyst for revolutionary change in the Inland Northwest.

H.J. Warre, *Crossing a Ford*
American Antiquarian Society, H9918

Gustavus Sohon, *Crossing the Bitterroots*
Washington State Historical Society

On his first trek across the Divide, Thompson was accompanied by his wife Charlotte and their three children (ages 5, 3, and 1), clerk Finan McDonald, and eight French-Canadian voyageurs with expertise as paddlers, guides, and hunters. Two voyageur families completed the party.

Background on David Thompson

In 1916, Joseph Burr Tyrrell described David Thompson as: "an excellent traveller and an exceedingly accurate and methodical surveyor with an accuracy that has rarely been equalled." He goes on further to describe him as a man of "great natural ability and strong moral character" as well as being "the greatest practical land geographer the world has ever known." Almost 100 years later, we too believe this to be true and wish to reiterate it even more.

David Thompson's early life and career

David Thompson was born in England in 1770, and by 1784 was on the western shores of Hudson Bay working for the Hudson's Bay Company. A few short years later, he was working for the North West Company and while doing so crossed westward over the Rocky Mountains for the first time on June 25, 1807. Once on the Columbia River, he headed upriver and south to what is now Invermere and established Kootenae House. A few months later, he crossed over to the Kootenay River (Thompson's McGillivray's River) at what is now Canal Flats and by October 3, 1807, he travelled as far south as the junction of what he called the Torrent River, now the St. Mary River. On that day, he turned around and went back to Kootenae House to spend the winter. On April 24, 1808, he paddled, surveyed, and made copious notes as he passed the Torrent River (St. Mary River) and on April 25, 1808, he did the same as he passed the Bad River, now known as the Bull River.

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Project participants

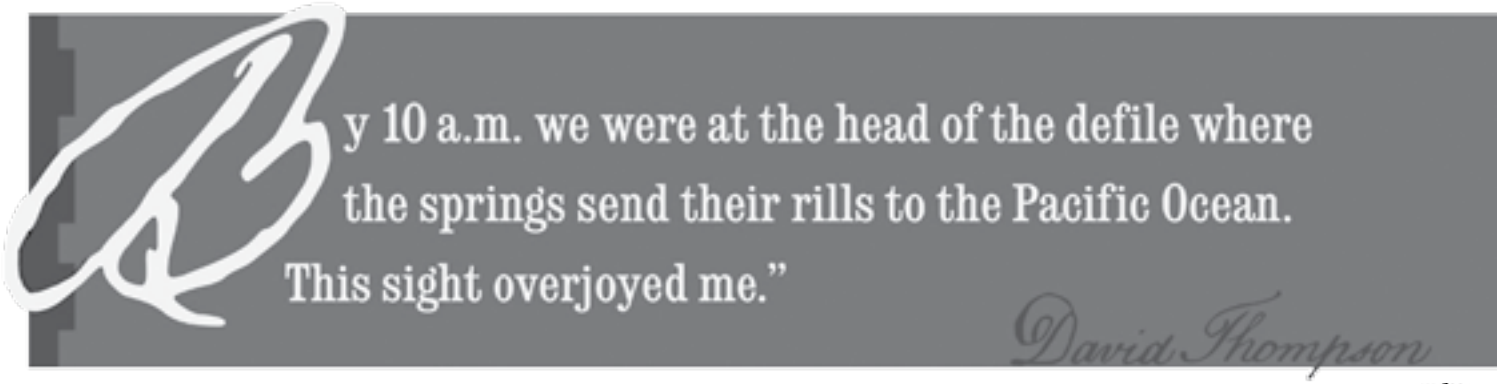
Robert Allen (project lead), John Armstrong, Barbara Belyea (author of Columbia Journals: David Thompson*), Bill Chapman, Denny DeMeyer, Delores DeMeyer, Don Watson, and Bill Watson. All of us, except for Barbara Belyea, were involved in GPS, photography, paddling and logistics.*

Sponsors

This project would not have taken place without the financial support of the 2011 David Thompson Columbia Brigade Society, The North American Land Surveyors Canoe Team and their sponsors, and the participants.

Questions

Contact: Robert Allen, Box 607, Sechelt, BC, V0N 3A0, 604-885-9581, robert_allen@dccnet.com.



Description of project

In October 2005, there was a symposium on David Thompson in Calgary during which a number of speakers gave presentations on David Thompson and his wife, Charlotte Small. Denny and Delores DeMeyer, Bill Chapman, and myself (Robert Allen) were among the attendees at that symposium. One of the speakers was Barbara Belyea (author of *Columbia Journals: David Thompson*), and she asked me if there was any project that we land surveyors could do to commemorate David Thompson. I immediately thought of comparing a handheld GPS survey of the Kootenay River with that of David Thompson, from Fort Steele to Wardner. Our 2012 paddling team consisted of John Armstrong, Denny DeMeyer, Bill Chapman, and Robert Allen.

Our ground support team consisted of Delores DeMeyer, Don Watson, and Bill Watson. The first five listed were all part of the North American Land Surveyors Canoe Team that participated in the 2011 David Thompson Columbia Brigade. That brigade of ten 25-foot-long voyageur canoes passed through Fort Steele on its way down the Kootenay River eventually making its way to Astoria, Oregon, on July 15, 2011, exactly 200 years to the day that David Thompson first arrived there. Our canoe team was a major force in the Brigade as we participated with two canoe crews that consisted mainly of land surveyors from western North America. It was while the team was camped at Fort Steele that this idea was discussed further and a tentative timing was reached. Our hope is that the information in this report will further the knowledge and appreciation of David Thompson to many more people all across North America, leaving a lasting legacy about him, his surveying skills, and his later-in-life mapping of the area.

Preparing to get underway at Fort Steele: Bill Chapman, Denny DeMeyer, John Armstrong

Denny and John working their way down the Kootenay River

Looking up Wild Horse Creek Valley (Thompson's Skirmish Brook), site of a gold rush in the 1860s

John, Denny, and Robert at our 'bio' break and rest location

A view of The Steeples

The pristine mountains as David Thompson would have viewed them over 200 years earlier

The paddle itself

On July 31, 2012, we paddled in two tandem canoes down the Kootenay River from Fort Steele, located just downriver from the St. Mary River, to Wardner, near the north end of Lake Koocanusa. We surveyed the course of the Kootenay River by the use of a handheld GPS. As well as the GPS survey, we took a photographic record of the trip as well and noted the items mentioned in David Thompson's journal, such as the rivers and creeks, he passed and the valleys and mountains he observed. We had hoped to take sextant observations wherever practical to determine latitude, but unfortunately due to the difficulty of transporting liquid mercury across the border (necessary for the mercury artificial horizon), that did not happen.

We launched the canoes at about 7:45 AM on July 31, 2012 and paddled southward and down the Kootenay River. It was a warm sunny day, an excellent one for paddling. In the first photo, we are just downstream from the Highway 93/95 Bridge at Fort Steele and about 2.5 KM downstream from the St. Mary River (Thompson's Torrent River). Shortly after starting, we passed Wild Horse Creek although its mouth wasn't discernable given the heavy tree cover in the area.

In the first half, we started out in some current with a few shallow spots to manoeuvre through and also a couple of tricky corners where we came close to being capsized once. However, we made it all the way without getting wet. The second half was much calmer and we were in flat water given that we were actually in part of the upper reaches of Lake Koocanusa.

Part way down the river, we stopped for a 'bio break' and rest at the same location we had stopped in 2011 during the David Thompson Columbia Brigade.

Continued on next page ▸

We didn't see much for wildlife or birds other than an eagle and its nest. Most other birds and animals would have been sleeping out of the hot sun at that time of the day.

Our route took us through a variety of areas from farms, to residential developments, to pristine country side. There were a number of log jams on the edge of the river and numerous places where the river had changed its course over the years. Some of it would have been the same as David Thompson and his men saw it while other parts changed considerably. Other than the normal discoloring from run off water, the river was clean and the only pollution on this stretch appears to come from the farms and their animals.

To be continued in the next issue of the Oregon Surveyor

Bald Eagle

Bald Eagle nest

An often-used artist's rendition of David Thompson taking a sun observation

Robert and Bill paddling past the Bull River (Thompson's Bad River)

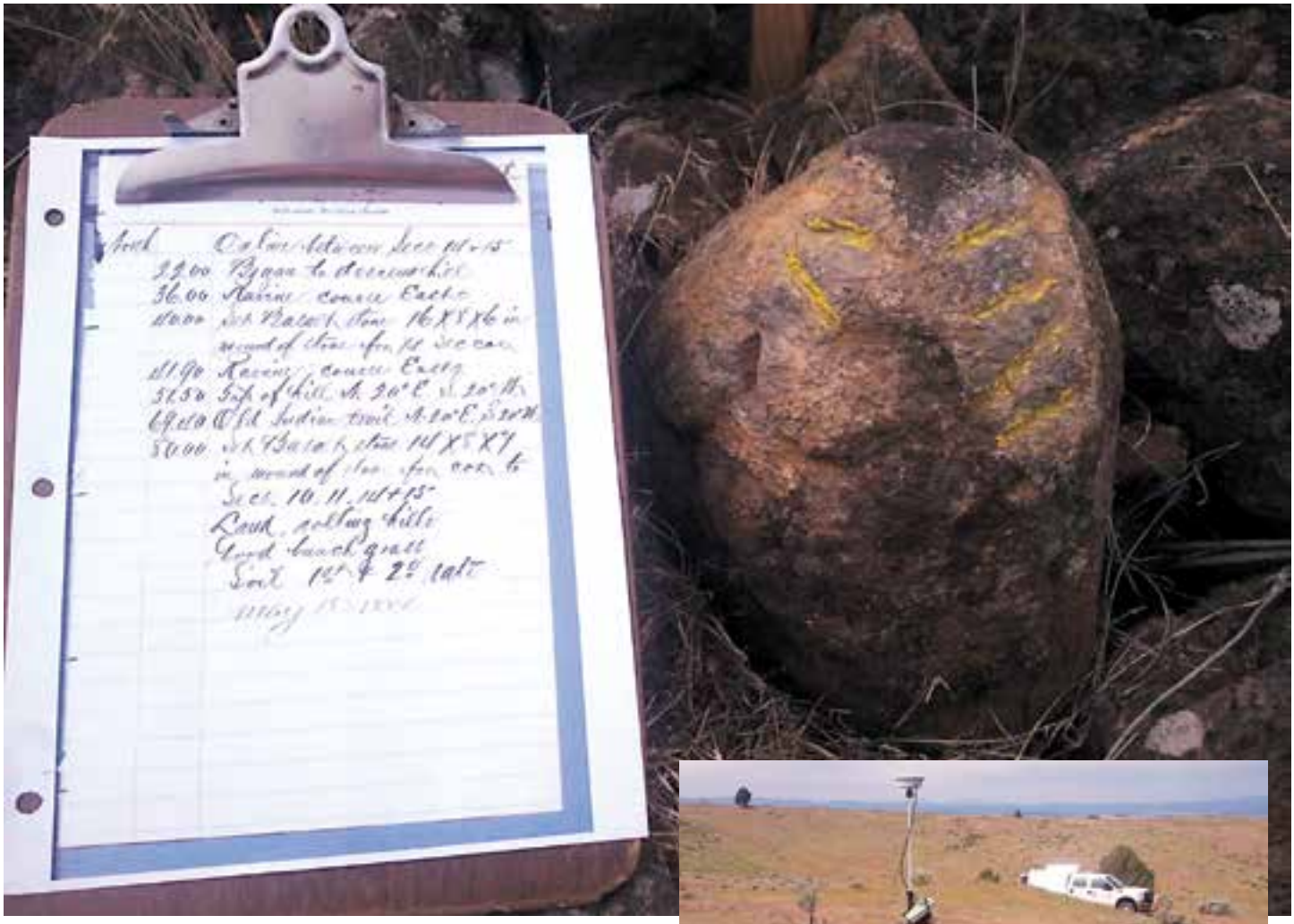
BLM public land survey plats

Approved and filed May 2012 through May 2013

The following public land survey plats for Oregon were approved and/or filed during the period of May 2012–May 2013. This list is also available electronically by emailing this office at khensley@blm.gov.

Oregon, Willamette Meridian

T. 15 S., R. 27 E.	Dependent Resurvey & Subdivision of Section 30
T. 5 S., R. 3 E.	Dependent Resurvey & Subdivision
T. 27 1/2 S., R. 8 W.	Dependent Resurvey & Subdivision of Section 19
T. 39 S., R. 4 W.	Dependent Resurvey & Subdivision of Section 19
T. 40 S., R. 7 E.	Retracement
T. 17 S., R. 17 E.	Dependent Resurvey & Subdivision of Sections
T. 20 S., R. 8 W.	Dependent Resurvey & Subdivision of Sections
T. 38 S., R. 2 E.	Dependent Resurvey & Subdivision of Section 6
T. 21 S., R. 6 W.	Retracement
T. 22 S., R. 7 W.	Retracement
T. 25 S., R. 3 W.	Retracement
T. 20 S., R. 7 W.	Retracement
T. 29 S., R. 9 W.	Retracement
T. 8 S., R. 19 E.	Dependent Resurvey & Survey
T. 39 S., R. 6 W.	Dependent Resurvey & Subdivision of Section 26
T. 33 S., R. 5 W.	Dependent Resurvey
T. 22 S., R. 6 W.	Dependent Resurvey
T. 22 S., R. 10 E.	Supplemental Plat of Section 12
T. 28 S., R. 12 W.	Dependent Resurvey & Subdivision of Sections 13, 23, 25, & 35
T. 22 S., R. 10 E.	Remonumentation
T. 12 S., R. 2 E.	Dependent Resurvey
T. 15 S., R. 6 W.	Retracement
T. 33 S., R. 6 W.	Dependent Resurvey
T. 21 S., R. 4 W.	Amended Plat
T. 12 S., R. 13 E.	Dependent Resurvey
T. 40 S., R. 44 E.	Remonumentation
T. 40 S., R. 8 W.	Dependent Resurvey & Subdivision of Section 10
T. 39 S., R. 5 E.	Dependent Resurvey & Subdivision of Section 12
T. 38 S., R. 6 E.	Subdivision of Section 20



Serendipity?

■ *Greg Crites*

Wikipedia defines serendipity as a "happy accident or pleasant surprise; specifically, the accident of finding something good or useful while not specifically searching for it." I can't honestly say that one of our field crews had a serendipitous experience because they *were* specifically searching for this monument, but then again, I'll let you decide.

May 15, 2013

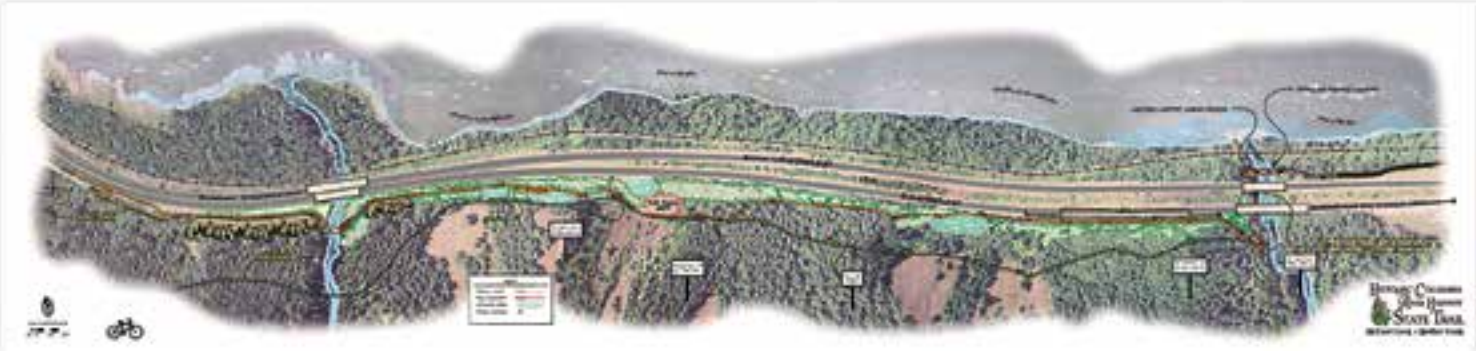
My field crew was looking for an original stone set by Alonzo Gesner, deputy surveyor for the General Land Office at the one-quarter corner between Sections 14 and 15, Township 4 South, Range 14 East, of the Willamette Meridian, Wasco County, Oregon. Surveyor Gesner indicated he set a "Basalt stone, 16 x 8 x 6 inches in mound of stone for ¼ Sec. cor." The accompanying copy of his field notes and a photograph of the found monument clearly illustrates that this wasn't a particularly difficult endeavor.

What is interesting, and made me think of serendipity, coincidence, karma or other circumstances that might cause the hair on the back of your neck to go all tingly was the date of the field notes. Alonzo Gesner set the monument that is still in place on May 15, 1880. Exactly 130 years later, to the day, our crew found the result of Mr. Gesner's work! Call it an amazing coincidence that we would be searching for that specific corner on that specific day and that the evidence was still present, not to mention nearly perfectly preserved! You've got to love that dry climate on the east side of the Cascades when it comes to preserving evidence!

On the Cover

■ *Oran Abbott*

At the April, **PLSO Pioneer Chapter** meeting in Cascade Locks, Oregon, we toured the new trail from Elowah Falls to Moffett Creek bridge. This is a continuation of the old highway through the Columbia Gorge. When completed, the trail will allow one to bike or hike from Crown Point to Cascade Locks. This portion is about three miles long and includes a very nice bridge over McCord Creek.



Chapter happenings

The **PLSO Mid-West Chapter** held a work party on June 15 to perform maintenance on their local calibration base line, located along the Northwest Expressway in Eugene.

Thanks to ODOT and Delta Sand & Gravel for providing the materials and Steven Anderson, Brent Bacon, Kent Baker, Ted Baker, Ryan Erickson, Jon Oakes, and Don Rowe for providing their time and effort.

After our hard work on the base line we held our annual Mid-West picnic. Thanks to Dave Wellman for hosting us at his office. See you all next year!

Registry of Stolen Surveying Instruments

Need help finding stolen survey equipment? List your information on the NSPS website and your equipment may be found!

Email this information to **trisha.milburn@acsm.net**:

- Description of instrument including serial number
- Location where equipment was stolen; include nearest town and state
- Date stolen
- Contact person; include phone and/or email

FOR MORE INFORMATION CALL YOUR TRIMBLE DEALER

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