

February 2011

# SIDE SHOTS

Professional Land Surveyors of Colorado

Volume 42, Issue 1



Bryan Baker



Alan Blair



Randy Bloom



Bob Dahl



Dave Doyle



Randy Fortuin



Warren Geissler



Brian Hailey



Bill Henning



Angie Kinnaird Linn



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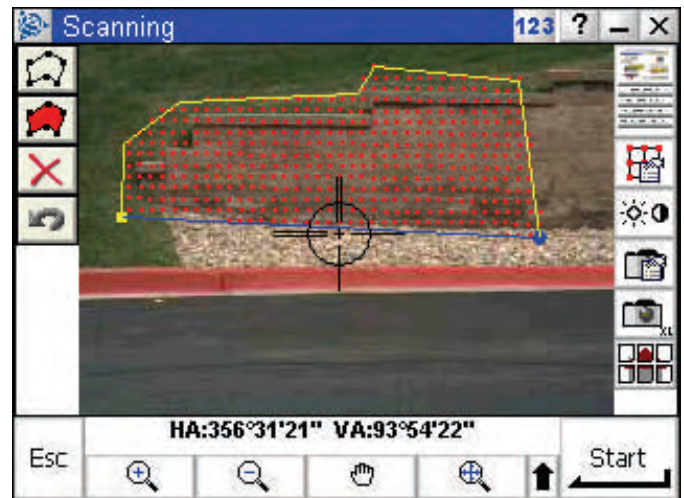
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# SIDE SHOTS

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**VOLUME 42** **NUMBER 1**

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Dear Fellow Members:

I hope that everyone had a happy holiday; now it's time to shrug off the winter doldrums and embrace the challenges and changes of the New Year. The best way for a PLSC member to jump start their interest and dedication to the surveying profession is to attend the first ever "Rocky Mountain Surveyors Summit," followed by the 2011 PLSC Annual Membership Meeting. After years of effort to consolidate our resources, talents and energies into one statewide conference, this is it. Please join us on March 3rd, 4th and 5th for one of the largest and most comprehensive conferences in PLSC history. If you haven't registered yet, you can do so conveniently on line, or by responding to your email notice, or the ad in this issue. We have an exciting new venue this year as well, at the Arvada Center.



These courses will enhance and sharpen your knowledge and skills of our profession, allow you to meet and network with other surveyors that you have known for years, and with new ones you haven't yet met. You can also gain continuing education credits, of course. And the summit will conclude with the Annual Membership Meeting on Saturday evening, where new officers will be elected and current agenda items discussed. The board always welcomes input from anyone, and the annual meeting is a great opportunity to learn more about the leadership of your PLSC organization, find out what issues are being decided, and if you choose, let your voice be heard. This meeting usually attracts the most members from the more distant corners of Colorado because of the course offerings, and participation and input from those members is particularly welcome.

Note that the PLSC Annual Conference is the annual general membership meeting for all members to participate. You are welcome to come to the annual meeting whether you are able to attend the conference or not. Although this year is an election year and the primary focus of the meeting is to install the new officers and directors, this is the place for your voice to be heard and/or ideas for the New Year can take place. If anything is going to turn around for the surveying profession, the PLSC is a good place to try to make that happen. In 2011, the PLSC will begin working with the AES board to look at Sunset Review for 2013 on laws that affect land surveying. If you have a good idea, or a strong opinion on an issue, I encourage you to bring it up through your professional organization and to participate in the annual meeting.

There is no doubt about it, 2010 was another very tough year for most of our members; this year has just got to be the one where we see that long-awaited turnaround. I look forward to seeing as many of you as possible at the conference and annual meeting, and wish you the best in this New Year.

Sincerely,  
Tom Adams, PLS

DEDICATED TO THE IMPROVEMENT OF LAND SURVEYING EDUCATION AND PRACTICE.

# FROM THE EDITOR

Happy New Year to all of our members!

After much planning, and a lot of work from our volunteer committee members, the first combined "Rocky Mountain Surveyors Summit" is scheduled for March 3-5 at the Arvada Center. As you can see from the photographs on the cover, we have an impressive list of instructors who will cover a wide range of topics. Complete course descriptions are listed in this issue. In these difficult times, don't underestimate the value of networking at a statewide meeting like this.

I was pleased to receive the article in this issue from Joel Schmidt of the City and County of Denver on the new online research resources for surveyors. This valuable resource for Denver-area work includes searchable records for subdivisions, site plans, land survey plats, tie books, as well as ordi-

nances and resolutions. Thanks Joel!

We also have the latest installment of Control Points by Warren Andrews, this one on the origins of time and our calendar. The feedback I receive on his articles is always positive, and he helps the PLSC in its mission to provide continuing education as well.

Angie Kinnaird-Linn has written an excellent summary of how the Board Rules have changed as of January 1 of this New Year, valuable information for anyone pursuing licensure. Diana Askew, PLSC Executive Director, did her usual superb job of presenting us with minutes of the PLSC Board, as well as the treasurer's report. Any comments you have on the proceedings and/or issues are always welcomed by any member of the board. Dave DiFulvio provided us with an excellent summary of the news from the

state chapters of the Western Federation of Professional Surveyors. I was asked by WFPS to provide a summary of the Four Corners project, for which they made a contribution, and they put a prominent link to my article right on their home page at [www.wfps.org](http://www.wfps.org) - please take a look when you are online. And Dean Glorso has provided another very entertaining piece that is worth reading. I hope that Dean inspires a few other members to submit articles of their own for future issues.

I hope to see as many of you as possible at the Summit, to reunite with old friends and to meet a lot of new ones.



JB Guyton  
Editor

## Your deadlines <sup>are our</sup> deadlines

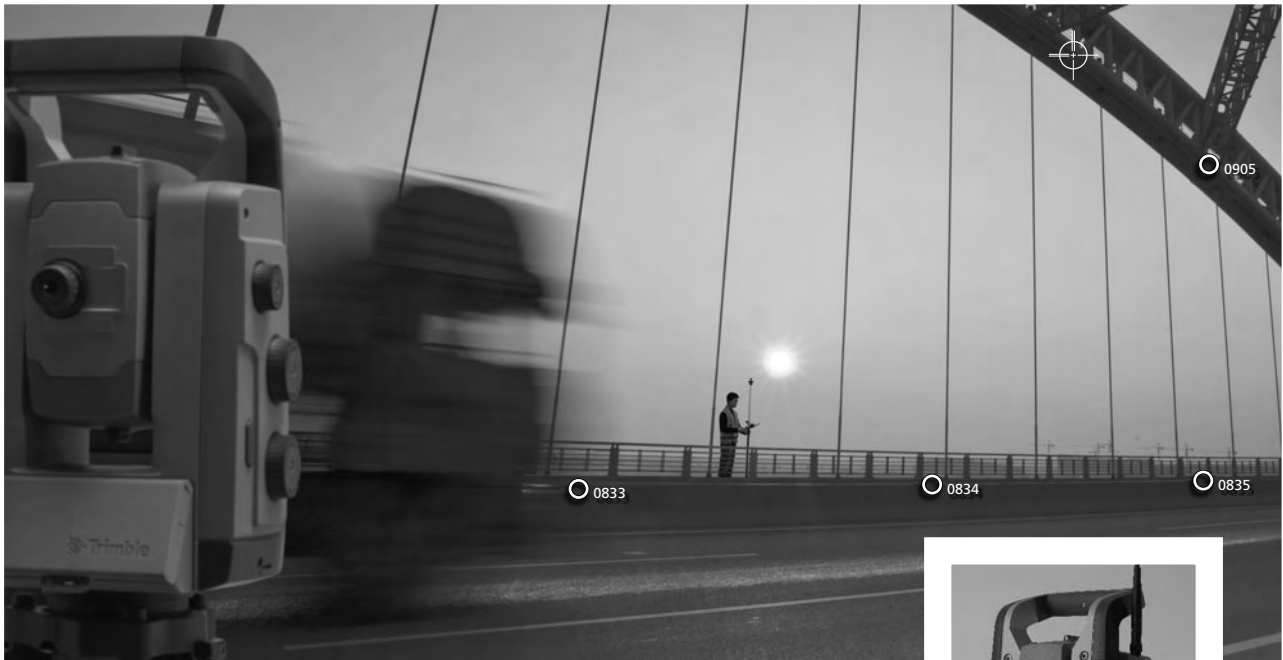


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# 1st Annual Rocky Mountain Surveyors Summit and 2011 PLSC Annual Membership Meeting

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## PROGRAM

### Thursday, March 3, 2011

#### 8:00 AM - 5:00 PM

- Writing Legal Descriptions, A Two-day Workshop; Part I – Laying a Foundation for Writing Legal Descriptions; Presented by John B. Stahl, PLS, CFedS

#### 8:00 AM - 12:00 PM

- AutoCAD Map 3D: CAD to GIS; Presented by Mr. Brian Hailey, PE
- New Developments in OPUS; Presented by Dr. Mark Schenewerk
- So You Need to Perform a Survey in Denver; Presented by Brad Peterson, PLS and Randy Fortuin, PLS and Roger Nelson, PLS

#### 1:00 PM - 5:00 PM

- GPS Derived Heights; Presented by Dave Doyle, PLS
- Surveying for Civil 3-D; Presented by Warren Geissler
- The 2009 Manual of Surveying Instructions Part I; Presented by Bob Dahl, PLS; Randy Bloom

### Friday, March 4, 2011

#### 8:00 AM - 5:00 PM

- Writing Legal Descriptions, A Two-day Workshop; Part I – Fundamental Practice for Writing Legal Descriptions; Presented by John B. Stahl, PLS, CFedS

#### 8:00 AM - 12:00 PM

- AutoCAD Map 3D: CAD to GIS; Presented by Mr. Brian Hailey, PE
- GNSS Real Time Reference Networks and the Surveyor; Presented by Bill Henning, PLS
- Pricing Professional Services; Presented by Larry Phipps, PLS

#### 1:00 PM - 5:00 PM

- Marketing for the Small Professional Office; Presented by Larry Phipps, PLS
- Modernization of the National Spatial Reference System; Presented by Dave Doyle, PLS and Bill Henning, PLS
- Surveying for Civil 3-D; Presented by Warren Geissler

#### 6:00 PM - ? PLSC Annual Membership Meeting \* Mixer \* Awards Dinner (Free for Members and one Guest)

### Saturday, March 5, 2011

#### 8:00 AM - 12:00 PM

- Ethics for the Land Surveying Professional and AES Board Updates, Activities and Issues; Presented by Alan and Angeline (Angie) Kinnaird-Linn
- Ground to Grid or Why Don't Those Coordinate Values Agree with Ground Measurements?; Presented by Gaby Neunzert, PLS

#### 1:00 PM - 5:00 PM

- Contract Basics for Land Surveyors; Presented by Larry Phipps, PLS
- Cutting Edge Technology; Presented by Bryan Baker
- Surveying for Civil 3-D; Presented by Warren Geissler
- The 2009 Manual of Surveying Instructions Part II; Presented by Bob Dahl, PLS; Randy Bloom, PLS and Roger Nelson, PLS

## EARLY REGISTRATION FEE SCHEDULE 2011

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**Student:** \$75 One Day - \$125 Two Days - \$200 Three Days

**Exhibitors:** \$400 Three Days + plus \$230 for 2011 Sustaining Membership

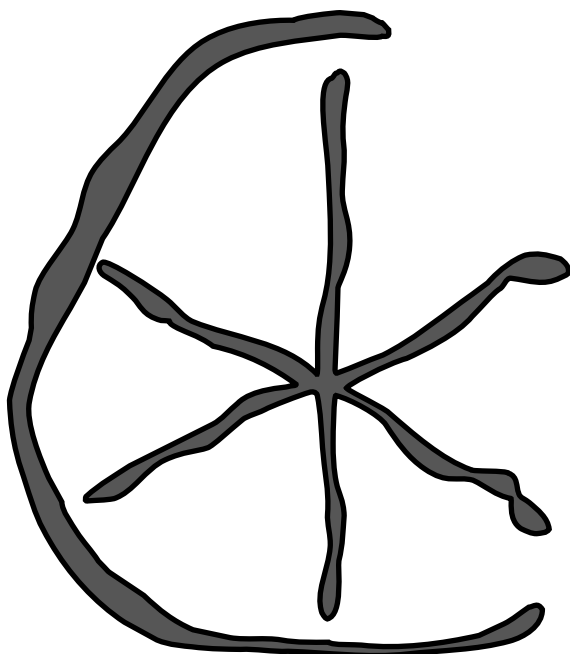
An Additional \$25 fee will be added to registrations received after February 1, 2011. Catered lunches and snacks will be provided both days.

**ONLINE REGISTRATION IS AVAILABLE AT [WWW.PLSC.NET](http://WWW.PLSC.NET)**

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WCLS - Included ☐

##### Additional Chapter(s) \$20 ea

CCPS - Additional ☐

CSRN - Additional ☐

NCPLSC - Additional ☐

NW1/4CLS - Additional ☐

SCPLS - Additional ☐

SWPLSC - Additional ☐

WCLS - Additional ☐

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The opportunity for 2011 membership ends July 1.  
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 the Online Membership application at [www.PLSC.net](http://www.PLSC.net)

# Land Records Search – City and County of Denver

By Joel Schmidt, Land Surveyor  
City and County of Denver



FIGURE 1: New survey "home" page research links.  
[http://www.denvergov.org/DES\\_Survey](http://www.denvergov.org/DES_Survey)

Over the last 15 years, the City of Denver has made a sustained effort to digitize and make available to the public a variety of land records. As our web masters and GIS department make improvements to our Internet presence the Survey Department has had the opportunity to make significant changes in how we serve our most important customers - private surveyors working in the City and County of Denver.

The Denver City Surveyor's web page contains links to search engines for the most popular records that are available to the public. It can be found at: [http://www.denvergov.org/DES\\_Survey](http://www.denvergov.org/DES_Survey).

The list of items that one is able to research with links from this page is:

- Subdivisions**
- Site Plans (PBG's)**
- Land Survey Plats**
- Tie Books**
- Ordinances (links to Clerk and Recorder's search page)**
- Resolutions (also at Clerk and Recorder)**
- (See Figure 1.)**

## Subdivision Records:

The **Subdivisions** link opens a page to search the City Engineer's set of recorded subdivision plats. These are not the Clerk and Recorder official copies. When a new subdivision plat is approved and recorded it is scanned and added to this data set. It is numbered and indexed for City Surveyor purposes but no other modifications are made to the recorded document. Older subdivision plats were used as an on-going index to City land issues so on older images you may find notes and annotations leading to deed information for land transactions (vacations, dedications, revocable permits, etc.). Newer subdivisions will not have these types of notes. **(See Figure 2.)**

In addition to the subdivision plats, this data set also contains copies of the Official City Resurveys, Minor Boundary Adjustments, and Annexation Plats. After a little practice it will be simple to find the exact documents you want.

## Recorded Site Plans (generically called PBGs):

**Site Plans:** This data set includes Planned Building Groups, Planned Developments, Development Plans, Residential Site Plans, Industrial Site Plans, and General Development Plans as well as some minor plans. The earliest document in this set was filed in 1967.

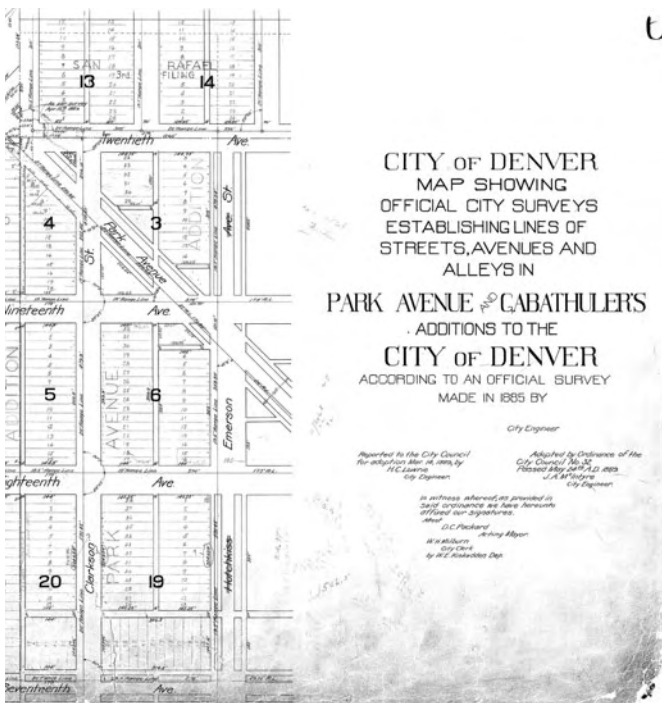


FIGURE 2: Sample re-survey maps from subdivision collection also showing range points.

Most site plans contain land surveys and many of the surveys in the site plans include ties to range points, which are important for survey control.

Proposed developments in the City go through an extensive review by many City agencies and utility companies. The City Surveyor enforces State Statutes for Minimum Standards for Land Surveys, the Perpetuation of Land Survey Monuments along with the requirement that site plans be tied to range points in areas where those original monuments control block lines. Additionally, a development may be required to deed land to the City to be used for right-of-way purposes. These recorded site plans can be very useful for understanding the status of and proposed changes to the right-of-way as of the time of approval of the site plan document.

Once a development is approved the final documents are recorded with the Clerk and Recorder. The City Surveyor then scans a copy of the recorded site plan documents and makes it available on the Internet.

## Land Survey Plats:

**Land Survey Plats** are required by State law to be deposited with the County Surveyor. All plats deposited with the County Surveyor going back to 1987 are online in this data set. They are indexed by quarter section, section, township, and range. Entering this data is the best way to find a needed plat. One can also search by PLS number or name. It is possible to use one or more fields to search for a needed plat. The more data entered, the smaller the list of “hits” that will be found.

## Tie Book Records:

**Tie Book Records** are the “monument records” filed for range points. Range points are the primary control of the City right-of-way. The City has an aggressive range point recovery and rehabilitation program that is coordinated with our street paving program. We recover hundreds of range points each year and add range boxes to them per State Statute so that they can easily be used without having to dig in the pavement. The tie books include our historic records and also new tie records based on our recovery program. The new records indicate whether the monument was found, not found (“NF”), or set. The tie book record may also show the accessories that were set in order to perpetuate the range point location. The tie book records also include those submitted to the City Surveyor’s office by private surveyors. *(See Figures 3 and 4.)*

## Bench Marks:

The **Bench Mark** page contains a list of all of the official bench marks for the City and County of Denver with NAVD 88 published elevations. All development projects approved in Denver must be tied to at least one City Bench Mark. The list includes a short description

of the monument along with the street intersection near which it may be found.

## Ordinances:

**Ordinances** are maintained by the Denver Clerk and Recorder. This data set contains all ordinances passed since 1996.

The City Surveyor’s office maintains a set of books that contains hard copies of ordinances that primarily affect public right-of-way. These books date back to 1873. Recently this office scanned the City Surveyor’s collection of ordinances from 1966 through 1995. These scanned copies were provided to the Clerk and Recorder who then added them to the existing Clerk and Recorder’s set. The majority of the ordinances that affect public right-of-way are now online and are included in the Survey records scanned from 1966 to 1995 are included with the full set of ordinances from 1996 forward - all in one place under Clerk and Recorder which is linked from the DES Survey page.

As time and resources allow we intend to scan the City Surveyor’s collection of ordinances going back to the mid 1800’s. When accomplished, these will be added to the data set. For now though, thousands of additional ordinances previously only available by hard copy are online.

## Resolutions:

**Resolutions** are also maintained by the Clerk and Recorder’s office. Since 2007 dedications of public right-of-way and acceptance of subdivision plats have been accomplished at City Council by resolution instead of by ordinance. This has reduced the approval time by at least a full week. Any additions to right-of-way since mid 2007 will be found here. Don’t forget to look!



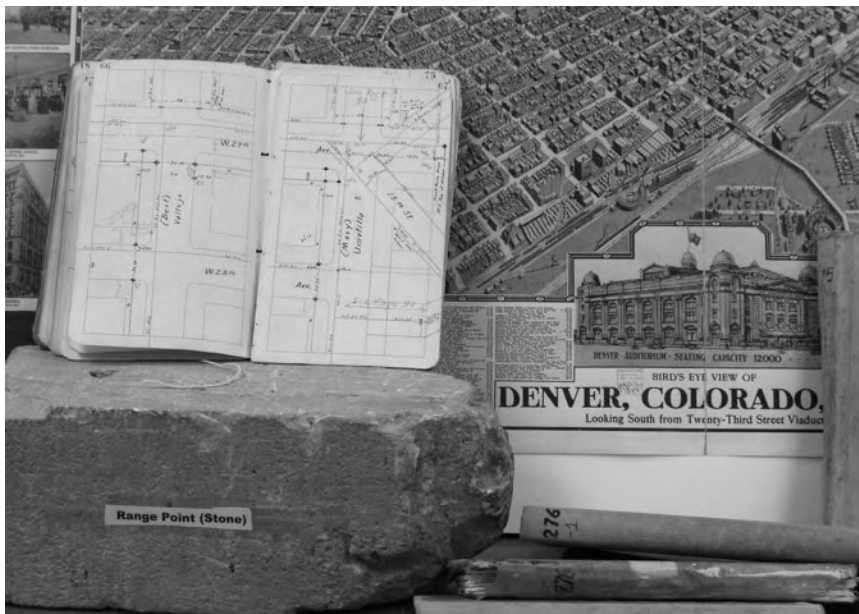
**FIGURE 3:** Looking for a range point.

## Looking Forward:

Many important technological changes are coming to Denver in the next few years. Changes in our document management systems and our City GIS will make it much easier to find and access our records. Today only some of our records mentioned above may be searched using GIS. The "Denver Maps" link in the upper right hand corner of our web page links to a GIS application that uses either maps or text to search for documents. In the future we hope to have all of our documents indexed and mapped through GIS, which will make them easier to find just by typing in an address and some other parameters.

Your feedback is important to us. Let us know of the pluses or minuses of our existing search pages. If you have suggestions to improve our online presence, please let us know. We sincerely want to provide the best possible service by making our records available online and making them easily researched. Tell us what we can do better. We will do our best to implement all good suggestions.

You can see a list of survey staff and their phone numbers at: [http://denvergov.org/DES\\_Survey/StaffList/tabid/433347/Default.aspx](http://denvergov.org/DES_Survey/StaffList/tabid/433347/Default.aspx). Feel free to call with questions or input. Or email us at [311@denvergov.org](mailto:311@denvergov.org), and put "For City Surveyor" in the subject column.



**FIGURE 4:** Tie books with range point stone.

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# Control Points – Number 12

By Warren Andrews, PLS

## TIME and the CALENDAR

If as a surveyor you are involved with time, such as with astronomical positions to determine bearings, you have to have an ephemeris which depends on time. Most people have never really considered our rather odd system of keeping time, both short and long. By short I mean seconds, minutes and hours and by long I mean days, weeks, months and years. Wouldn't it be easier to use a decimal system for short time such as the original French metric proposal for a ten-hour day with one hundred minutes per hour and one hundred seconds per minute? That would mean there would be 100,000 seconds per day instead of the present 86,400; not that much difference, really.

Our current system of a double twelve hours to the day plus sixty minutes to the hour and sixty seconds to the minute is really antique from the ancient Babylonian or earlier Sumerian system of counting and their Zodiac. I think modern efficiency could be improved from that 60-60-24 system. (But look at the millennia

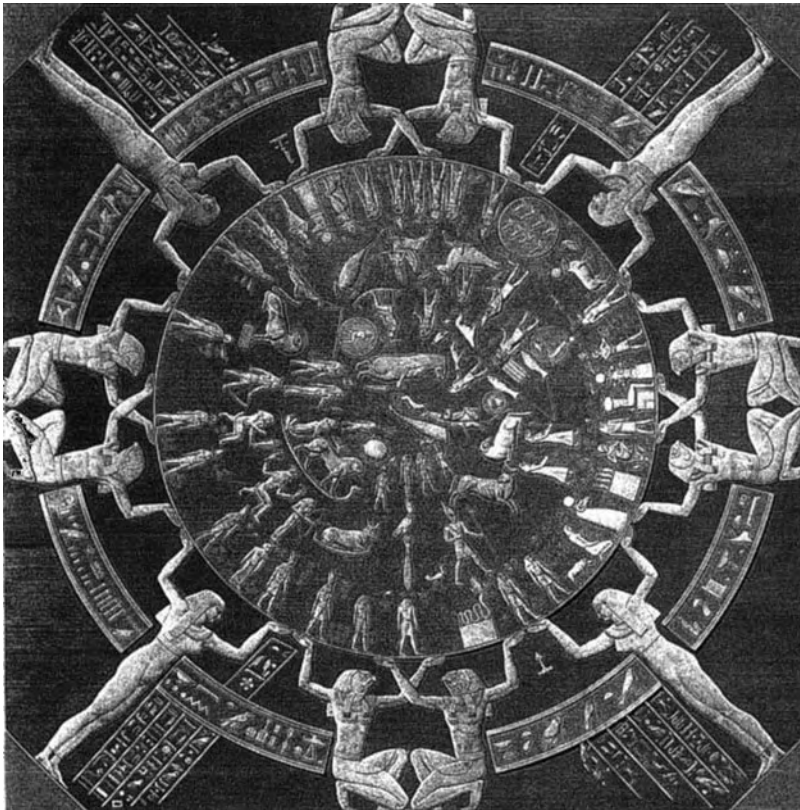
and more that it took the English to change from 12 pence to the shilling and 20 shillings to the pound sterling into 100 pennies to the pound now.)

The long system of timekeeping is where it really gets weird. I acknowledge that 365.2422 days for the earth's annual travel around the sun is hard to divide up neatly but you already have the daily rotation of the earth to start with. This fits humans better. The next repeating pattern is that of the moon, the lunar cycle. The present day lunar calendars, such as the Jewish and Muslim, have their months based on the moon which makes their calendar rotate through the solar year. But if you go to a twenty-eight day month then you end up with thirteen months – not very divisible, as any prime number is not!

The Jewish-Christian-Muslim week is another anachronism that doesn't fit very well either. Oh! For a rational calendar reform, but it jams up against all the religious prejudices deeply rooted in the ancient past. One reform enacted by Pope Gregory XIII in 1582 that has worked relative to the solar calendar is going from the older Roman Julian calendar (still used by some but which is now out of sync by almost two weeks) to the present Gregorian calendar. To fit that almost quarter day the Gregorian calendar goes like this:

1. Every fourth year is a leap year and one day is added beginning in the year 1700. (It's purely arbitrary to use February)
2. No century year is a leap year unless it is exactly divisible by 400. (1900 was not a leap year, 2000 was with a day added.)
3. A further change was made later that in the years 4000, 8000, 12,000, etc. they would not be leap years.

This makes the calendar correct to fit the motion of the earth to within one day in 20,000 years! This begins to fit the precession of the equinox of some 26,000 years; the slight wobble of the pole to point to different pole stars down through the ages. These are the ages of the Zodiac.



*The Zodiac of Dendera, circa 50 B.C. was on the ceiling of an Egyptian temple believed to be an observatory. The twelve arms of the supporting figures represent the 12 months of the year. It is now on display in the Louvre, Paris.*

# State Board Update

By Angie Kinnaird Linn, Program Director

## State Board of Licensure for Architects, Professional Engineers, and Professional Land Surveyors

### Application Deadlines Changing for All Surveyor Applicants in 2011

The deadline to submit surveyor applications is changing in 2011 to June 1st and December 1st to be eligible for the October and April examinations, respectively. Previously, the deadlines have been July 1st and January 1st.

Applications and other information about licensing for land surveyors can be found at [www.dora.state.co.us/aes/licensing/PLS](http://www.dora.state.co.us/aes/licensing/PLS).

Please pass this information on to all of your staff and colleagues who may be contemplating submitting a surveyor application for intern or licensure status.

### Changes in Law, Rules and Policies

Although I have provided information in the last couple of Side Shots about recently passed legislation and an overview of the changes to the AES Board Rules and Policies, I thought it might be helpful to give you a comprehensive view. Please share this information with your colleagues, co-workers, and employees so that everyone is well informed.

#### Legislation:

- **House Bill 10-1085:** The legislation requires that the Board specify appropriate surveying course work through the rulemaking process that would meet the statutory requirements for a 2-year surveying curriculum, a 4-year engineering curriculum, or a 4-year non-surveying curriculum in order to qualify to take the Principles and Practice of Surveying licensing examination. This must be done and in effect by January 1, 2011.

The bill also eliminates the ability to become licensed as a Professional Land Surveyor without education beyond graduation from high school on July 1, 2020.

The bill additionally specifies procedures for issuance of a surveyor's affidavit of correction. The subdivision regulations as defined in section 30-28-133, C.R.S., were amended to allow the use of a Surveyor's Affidavit of Correction on approved plats for

"technical errors." Allowed uses of affidavits of correction, as defined in section 38-51-111, C.R.S., include corrections on land survey plats and any other recorded plats. Affidavits of correction shall not be used for purposes of changing description calls or reconfiguring any lots or parcels and can't be used to circumvent subdivision regulations. Affidavits of correction aren't subject to review before recording, but shall be submitted to the appropriate reviewing authority after recording.

### Major Rule Changes Effective January 1, 2011 Affecting...

#### All Licensees:

- A new rule effective January 1, 2011 requires licensees to inform the Board of any address, phone, or email changes within 30 days. Refer to **Rule 4.11**. Changes can be made at [www.doradls.state.co.us](http://www.doradls.state.co.us).

#### Surveyor Applicants:

- Requirements for a Board-approved 2-year surveying degree, a Board-approved 4-year engineering degree, and a Board-approved 4-year non-surveying or a non-engineering degree have been revised or created at the behest of House Bill 10-1085 and can be found in **Board Rule 4.7.2**.

- Changes have been made as to what credit is allowed for those without a surveying degree. The major change is that trigonometry is now allowed. Please refer to **Board Rule 4.7.2.5**.

- Effective January 1, 2011, no credit for employment experience will be given for summer jobs, part-time jobs, or full-time jobs when attending undergraduate school full time. Please refer to **Board Rule 4.6.4**.

- No employment experience that is less than 6 months continuous duration with one employer will be credited. Please refer to **Board Rule 4.6.5**.

### Licensed Professional Land Surveyors:

- **Board Rules 6.4.3 and 6.5.3.2**

have been revised to refer to the "United States Department of the Interior, 2009 Manual of Surveying Instructions: For the Survey of the Public Lands of the United States."

- Previous Board Policy 60.1 Basis of Bearing Statements has been promulgated into **Board Rule 6.8**.

- Previous Board Policy 60.2 Depiction of Easements and Rights of Way on Subdivision Plats has been promulgated into **Board Rule 6.10**.

- Previous Board Policy 60.3 Required Monumentation for Land Survey Plats has been promulgated into **Board Rule 6.11**.

- Previous Board Policy 60.4 Monumentation of ALTA/ACSM Land Title Surveys has been promulgated into **Board Rule 6.12**.

- Previous Board Policy 60.5 Description of Monuments has been promulgated into **Board Rule 6.13**.

### Major Policy Changes in October and November 2011 Affecting...

#### Engineer and Surveyor Examinees:

- Elimination of Policy 40.5 (a new rule is being developed).

#### Licensed Professional Land Surveyors:

- Previous Board Policy 60.1 Basis of Bearing Statements has been repealed and promulgated into **Board Rule 6.8**.

- Previous Board Policy 60.2 Depiction of Easements and Rights of Way on Subdivision Plats has been repealed and promulgated into **Board Rule 6.10**.

- Previous Board Policy 60.3 Require Monumentation for Land Survey Plats has been repealed and promulgated into **Board Rule 6.11**.

- Previous Board Policy 60.4 Monumentation of ALTA/ACSM Land Title Surveys has been repealed and promulgated into **Board Rule 6.12**.

- Previous Board Policy 60.5 Description of Monuments has been repealed and promulgated into **Board Rule 6.13**.

If you have any questions about these changes, please let us know at [aes@dora.state.co.us](mailto:aes@dora.state.co.us) or 303.894.7775.

# PLSC Board of Directors Meeting Minutes

December 9, 2010 5:00 p.m.; URS, 8181 East Tufts Ave; Denver, CO

**Call to Order: 5:05 PM**

## **Recognition of PLSC Board Members and Officers:**

**Present:** Tom Adams, Stan Vermilyea, Mike Greer, Diana Askew, Warren Ward, Doug Berling, JB Guyton, Parker Newby, Dave DiFulvio, Patrick Green, Mike Bouchard, Peter Kent

**Absent:** Roger Nelson, Gary Gable, Russ Clark

Russ Clark hasn't attended a meeting since May 15, 2009. Tom asks if anyone heard from him and asks the board to consider appointing another board representative to serve through March. Di indicated that Russ Clark's 4-year term is about to end so it is probably best to do nothing at this time.

## **Approval of Minutes from Previous meeting(s): Secretary-Treasurer, Diana Askew**

**Motion:** Stan Vermilyea motions to approve the minutes from September 9, 2010 meeting;

Patrick Green Seconds; Discussion: None; Vote: Unanimous approval

## **Education Committee, Peter Kent, Chair**

The Board recommends that we add separate subcommittees for the conference and education.

## **1st Annual Surveyors Summit and Annual meeting**

Di has almost finished the online membership application and hopes to be able to connect it with the online conference registration; however, the information for the conference is coming in bit by bit. We have plenty of volunteers to help with the conference tasks. The BLM gave us two more instruments and one very nice alidade. No plane table though. We will need to add these to the silent auction in March.

Our contact at the Arvada Center, Michelle, left and we have a new contact, Barbara. The committee still needs to meet at the Arvada Center and have a tour. We need a hotel, reserve a room for the Awards Dinner and a computer room. Todd

Beers sent Peter a checklist. We will need an evaluation sheet. Di sent the Bar association John B. Stahl's course outline and has not heard back. JB Guyton needs some help with the Side Shots issue, including pictures of the speakers for the cover. Mike Greer will send pictures of the venue. Di is arranging to have the new chapter directors and officers announced and introduced at the annual meeting.

## **Nominations Committee, Doug Berling, Chair**

We need nominations from SW Chapter, Northern chapter, and the NW 1/4. Doug would like some help getting candidates from the Northern, NW, S, and SW chapters.

## **Awards Committee, Stan Vermilyea, Chair**

Stan is revamping the award descriptions revised by January 1. He will OCR the existing descriptions and will have help from Tom Sylvester and Mike Bouchard. JB asked if all of the awards will continue. People should be recognized

## **PLSC Treasurer's Report Last Quarter 2010 - As of 12/31/2010:3**

(Includes unrealized gains)

As of 12/31/2010

	9/30/2010	10/31/2010	11/30/2010	12/31/2010
<b>PLSC General Fund Accounts</b>				
<b>PLSC Bank Accounts</b>				
Checking at Wells Fargo - Main	17,166.65	10,594.69	12,711.38	6,858.79
Merchant Checking at Wells Fargo	4,237.17	4,192.17	4,232.17	13,708.24
PLSC Savings at Well Fargo	40,235.31	40,243.86	30,250.11	30,250.11
<b>TOTAL Bank Accounts</b>	<b>61,639.13</b>	<b>55,030.72</b>	<b>47,193.66</b>	<b>50,817.14</b>
<b>PLSC Investment Accounts</b>				
Investment at Merrill Lynch Investments	24,164.50	24,164.50	24,164.50	24,512.05
<b>TOTAL Investment Accounts</b>	<b>24,164.50</b>	<b>24,164.50</b>	<b>24,164.50</b>	<b>24,512.05</b>
<b>OVERALL TOTAL</b>	<b>85,803.63</b>	<b>79,195.22</b>	<b>71,358.16</b>	<b>75,329.19</b>
<b>PLSC Scholarship Accounts</b>				
<b>Scholarship Fund Bank Accounts</b>				
PLSC Scholarship Fund Inc	2,480.06	2,472.16	2,464.25	2,380.25
PLSC Scholarship Fund Savings	48,386.63	48,396.90	48,406.58	48,506.58
<b>TOTAL Bank Accounts</b>	<b>50,866.69</b>	<b>50,869.06</b>	<b>50,870.83</b>	<b>50,886.83</b>
<b>Scholarship Fund Investment Accounts</b>				
ICA	24,496.64	24,496.64	25,640.53	26,572.58
WMIF	24,258.55	24,258.55	25,524.54	26,362.42
<b>TOTAL Investment Accounts</b>	<b>48,755.19</b>	<b>48,755.19</b>	<b>51,165.06</b>	<b>52,934.99</b>
<b>OVERALL TOTAL</b>	<b>99,621.88</b>	<b>99,624.25</b>	<b>102,035.89</b>	<b>103,821.82</b>

and it is important for us to thank our volunteers and those who make a difference in the profession. The chapters should participate in the nominations from their chapters as well. Make sure everyone who has an award is notified to attend the conference.

#### **President, Tom Adams**

Estimate from Ed Bristow regarding case-law book: JB suggests we wait until a time that we will be able to afford the upfront expense to publish the material. Other States have had a difficult time recouping their funds on a similar venture. It makes sense that we do this together with a conference or session where other legal associations will be invited and the material has been approved by the legal associations.

**Library:** Update, Diana updated the board on the recent events regarding possible library space. Our options include boxing up the books and storing them temporarily or finding another temporary location. JB has offered to store the books if nobody else can.

**Motion:** Stan moves that we discontinue the rent for the library and move the books to another location by the end of January; Mike Greer seconds; Discussion: Pete would like the books moved first. PLSC's insurance can cover the books at Di's home and she can store them in bookshelves so they can be available for people to review them in her home. Vote: unanimous approval.

#### **Vice President, Mike Greer**

The December AES Board meeting has been cancelled.

#### **Secretary-Treasurer, Diana Askew**

Di will be requesting a draft budget from the chapters that are participating in our March conference event and will include their proposed budget with the PLSC budget. She will be reminding the chapter treasurers to get the end of year tax data to her as quickly as possible. We will be offering logo merchandise on the PLSC Website and need to get this done before Mike Greer retires from the board.

#### **Executive Director, Diana Askew**

At the end of December I will prepare a new draft budget for the PLSC for 2011.

Bob Stollard's books and other

survey related items are in the PLSC Shed, which is now full. It would be nice to plan a day next summer to go through the stuff and decide what to do with it.

I will order new board member name tags as soon as we have the results; hopefully we can get them before the conference. Pete will get his at that time as well.

Need a volunteer to check the AES Board Website and prepare a list of new PLS's and LSI's. I can prepare the post cards and get them mailed out. Tom Adams volunteered to prepare the list.

#### **NSPS Governor – Warren Ward**

See attached report and hand-out. Di asked that we get some photos of the Four Corners monuments for the Web site. Warren explained that he made several trips to the site and he spent many hours working on the project. JB asked Warren to pen an article for Side Shots about his story and experience with the four corner monuments.

Warren asks that the next NSPS governor needs to be active in TrigStar and CST.

#### **WFPS Delegates Dave DiFulvio and JB Guyton**

The next WestFed meeting is the same day as PLSC Annual meeting

There needs to be one organization for surveyors nationwide. It is possible that it will be named ACSM, but will be a surveyor's organization. JB would like to stay here and attend the conference. Dave would like to attend the WestFed conference in Spokane. WestFed reps are appointed at the pleasure of the PLSC president. Dave will attend the conference and the PLSC will fund his expenses as is usual.

#### **MSCD Surveying and Mapping Advisory Council, JB Guyton, Chair**

The Four Year Surveying Degree Program is now a special area of interest under the GIS Degree Program. There is no longer a surveying degree program and there is not a lot of interest in MSCD to revive the program. The distance learning program is continuing as usual.

#### **Legislative Committee, Roger Nelson, Chair (absent)**

**Lobbyist:** There was a brief discussion and overview of the

events surrounding the CCPS's desire to fund a lobbyist to monitor during the 2011 legislative session. Taking that into consideration, will the PLSC Board of Directors contract with a lobbyist for the 2011 legislative session? Warren Ward supports not contracting with a lobbyist at all in 2011. He also mentioned that the PLSC had gone many years without a lobbyist and actually had a full lobbyist for a couple of years who did not do anything at the capitol. Mike Greer indicated that he gets all the alerts for surveying-related bills at his office. At least one bill that affected surveyors was caught by a surveyor, and the board prefers to hold off on a lobbyist's contract at the expense of PLSC funds for the time being.

**Motion:** Patrick Green moves that the PLSC Board choose not to fund a lobbyist for monitoring the 2011 legislative session. Therefore, by letter or in person the PLSC will inform the CCPS Board that they may fund a lobbyist at their expense, and the PLSC will execute the contract. Doug Berling seconds; Discussion: Tom has been blamed when the board made the decision. Tom does not make the decisions of the board, he backs the board's decisions. Di mentioned that Roger is not in attendance and this is an issue he may not agree on. Mike Greer suggests that we do an email vote so all of the board members can participate. It was decided to vote right now and it can be brought up later if the vote turned out to be split. The motion is on the table. Vote: Unanimous approval.

Michael Bouchard shared that the Southern Chapter did not realize that the apprenticeship program is gone. Mike requests a report on how that happened. We need to bring it to people's attention. He knows that we gave the legislative committee liberty to make decisions. But it is unclear what happened and how it happened. The membership needs to know that the PLSC is supporting them and is not against them. The PLSC Board approved a 20 year path for apprenticeship, and the legislative committee did not approve removing the apprenticeship route. Dave DiFulvio said we do need to be careful of proposing legislation because it can

be changed into something that we did not want to begin with. The PLSC Board requests that Roger (and Warren Ward?) prepare an article that can be published in Side Shots to explain what happened so our members know what happened and why it happened.

**Membership Committee, Mike Bouchard, Chair**

Recently-licensed 2010 PLS's and LSI's list is to be prepared by Tom Adams and to add in the NSPS membership. Di will prepare the post cards and will be seeking a volunteer to help out. Di has added the opportunity to the online membership application, so pass the word. The online membership application will go live on December 15.

**Ethics and Fair Practices, Patrick Green, Chair**

The Web Site needs to be updated with the revised document and it needs to be included in the rosters in 2011.

**Liaison Committee, Gary Gable, Chair (absent)**

Gary attended the QBS meeting this morning and will email a report later. The dues for 2011 are now due.

**Special Committees**

**Trig Star**

Jan Sterling's student won first place in the TrigStar competition in 2010 and we need to present this award at our conference.

Warren said it is important to get TrigStar going and needs to be a priority.

**GIS In The Rockies (Mike Greer)**

The committee is trying to move the location back to Denver and change up the format so it can be moved back to Denver. They made a small profit this year, so we should get a check eventually. We will contact Brian as ask him if he would consider acting as a liaison for the PLSC board or run for the board.

**Next Meeting Date and Location: Phone in.**

Topic will be awards, annual meeting, agenda for the annual meeting, legislative; try to keep it to an hour. Joe Stice, discuss face to face meeting. Wednesday, February 16, 11AM - 12:30 PM.

**Adjourn: 9:05 PM**



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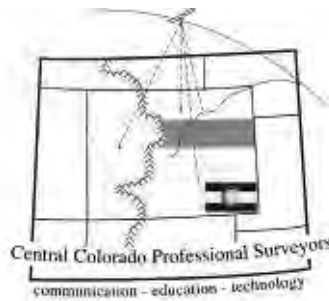
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## 2011 Colorado Refresher Course

The Central Colorado Professional Surveyors, Professional Land Surveyors of Colorado, and Metropolitan State College of Denver are offering a comprehensive Land Surveying Refresher Course for 2011. This course offers a review and self-study plan for those taking the National Council of Examiners for Engineering and Surveying (NCEES) **Fundamentals of Surveying (FS)** and **Principles and Practice of Surveying (PS)** examinations. The course is designed to aid candidates in developing and expanding exam-taking proficiencies.

### Refresher Course Schedule

#### Fundamentals of Surveying

<u>Session</u>	<u>Date</u>	<u>Topic</u>	
1	Wed., Jan. 5	Purpose and Overview of NCEES	Alan Blair
2	Wed., Jan. 12	Basic Calculations/Use of Calculator	Gaby Neunzert
	Wed., Jan. 19	Horizontal Curves	Gaby Neunzert
	Wed., Jan. 26	Vertical Curves	Gaby Neunzert
4	Wed., Jan. 26	Field Data Acquisition and Reduction	Gaby Neunzert
5	Wed., Feb. 2	GIS, State Plane, Geodetic Survey Comp.	Dr. Jan Van Sickle,
6	Wed., Feb. 9	Boundary Law I	Ed T. Bristow, Esq.
7	Wed., Feb. 16	U.S. Public Land Surveys	Randy Bloom

#### Principles of Practice and Colorado Specific

8	Wed., Feb. 23	Boundary Law II	Ed T. Bristow, Esq.
9	Wed., Mar. 2	Colorado Survey Law I	Roger Nelson, Todd Beers
10	Wed., Mar. 9	Colorado Survey Law II	Todd Beers, Roger Nelson
11	Wed., Mar. 16	Professional Practices	Todd Beers, Alan Blair
12	<b>Sat., Mar. 19</b>	Mock PS and FS Examinations	Gaby Neunzert, Randy Bloom

### Times

The Wednesday evening classes will be 3 hours in length, starting promptly at 6:00 PM. The Saturday, March 19 session will consist of a mock FS and PS/Colorado NCEES examination. The exam will start at 8:00 AM and end at 12:00 Noon.

### Registration, Fee, Location

The fee for the entire course is \$300, or \$50 per 3-hour block taken individually. Online Registration will begin December 6.

Classes will be held in Room 1554 (Ken Caryl Room) of the Jefferson County Courts and Administration Building (The Taj Mahal), 100 Jefferson County Parkway, Golden, CO. Use the parking lot and main door on the east side of the Admin and Courts building. Signage will lead you to Room 1554.

# Western Federation of Professional Surveyors Board of Directors Meeting Report

October 2, 2010 in Reno, Nevada

By David C. DiFulvio, PLS, Colorado Delegate

PLSC Delegates Dave DiFulvio and J.B. Guyton both attended this Board meeting. Guests in attendance included Steve Parrish, retired BLM Surveyor, former WFPS officer, and frequent surveying instructor /speaker at seminars and conferences.

Please refer to the WFPS web site, [www.wfps.org](http://www.wfps.org), for a listing of current officers and delegates, and their contact information.

A portion of the meeting was spent discussing very recently received reports from the **ACSM Restructure Committee and the NSPS Strategic Planning Committee**, regarding the situation with NSPS and their vote to initiate the process of separating from ACSM. The WFPS Board received these reports less than two days prior to the meeting and was provided time at the meeting to read and review the reports prior to discussing them.

By the time this report is published in Side Shots, these reports will have been made public and, hopefully, you have had time to read them. Both committees had fairly narrow and specific charges, with the NSPS committee focused on the financial and membership impacts of the effect of withdrawal from ACSM, if that were to happen. The ACSM Restructure committee was tasked with studying and recommending a new structure for ACSM that addresses a number of "key challenges" that were set forth in what has become known as the Oser Report, by Scott Oser. The challenges include: Lack of awareness; Lack of perceived value; Perception of ACSM and the MO's as an outdated group that is behind the times; Negative stereotype of the term "surveyors"; and, high levels of competition internally (amongst

MO's and NSPS state and local chapters) and externally (other industry associations).

Dick Smith, Montana WFPS Delegate and past Chair of WFPS, participated in the ACSM Structure Committee meetings, as a Liaison to WFPS. Dick provided a briefing of the Committee's results to the WFPS Board. After reviewing both reports, and hearing the briefing from Dick Smith, the WFPS Board discussed the issues and voted to take a position on this issue. During the discussion, each delegate provided feedback from their respective state societies. The general consensus from WFPS states is that they did not have sufficient information to form an opinion and take a position prior to the WFPS meeting. Please keep in mind that none of the state societies had received the reports prior to the WFPS meeting.

In light of the timing of our meetings with respect to our member state's ability to review, discuss, and formulate an opinion on this issue, the WFPS Board felt compelled by NSPS to take a position at this meeting.

The wording of the WFPS position that passed by motion, was: "that WFPS supports ACSM and NSPS, over the next 6 months, focusing on a restructure plan of ACSM to avoid an NSPS withdrawal". A motion was also passed to "recommend that NSPS / ACSM conduct a follow-up SurveyMonkey with more focused questions".

Delegates were encouraged to distribute these new reports to their Boards and engage in discussion so as to provide meaningful input into this very important issue. WFPS intends to continue to provide this type of meaningful input on this

issue throughout the next year.

## Selected highlights from **WFPS member states' reports:**

**Alaska:** The ASPLS 2011 Conference will be in Feb. in Anchorage.... their 2013 Conference will be a major event commemorating the Alaska/Canada Boundary, with a series of events that will culminate with a Centennial Celebration of the setting of the last International Boundary monument of the United States.... The up-dating of the Standards of Practice Manual is ongoing .... Their legislative priorities for their 2011-2012 legislative session will be a statute for protecting signed and sealed documents from being altered and copied without authorization, and a statute change lifting the eight year experience and education limit required of an applicant for becoming licensed.

**Arizona:** APLS is experiencing the effects of reduced membership and volunteer participation, along with the related negative financial effects, primarily attributed to the severe recession which is continuing in Arizona. Their board was not financially able to contribute to the Four Corners Monument Display, however it was noted that their Chapters stepped up and contributed the needed funds.

**California:** In my last report, it was noted that CLSA was asked to participate in an Amicus Curiae in the appellate decision of a major case between UDC v. CH2M Hill in regards to indemnity, and a hold harmless clause in a contract. The case involved a decision for payment of fees to defend and hold harmless even though there was no determination of negligence. A much welcomed involvement by ACEC was successful in getting

their legislature to pass SB 972, which effectively ties defense costs in these types of cases to negligence. The bill was signed into law by their Governor. As a result, CH2M Hill will not have to pay the 3rd party defense costs in the case, as they were not negligent (it should be noted that this case applied the interpretation of the duty to "defend" from a CA Supreme Court Decision in the Crawford v. Weather Shield Manufacturing case, which had nothing to do with professional services, and will likely eventually be picked up and applied across the country) .... Their 2011 Conference will be a joint conference with NALS in Las Vegas on March 5 – 9.

**Colorado:** JB Guyton presented a report summarizing the activities and matters of PLSC, including the notice of the passing of Doyle Abrahamson.

**Hawaii:** Their 2011 Conference is February 3 & 4 in Waikiki.... HLSA is holding their annual dinner meeting on Oct. 2 on the Big Island near Waimea, which is a new outreach approach to reach more surveyors across the state.... Kevin Kea, Hawaii delegate, requested the WFPS Board to review and support a proposed definition of "Professional Land Surveyor", which Hawaii has never had before – the WFPS Board voted to support Hawaii's creation of a Definition of a Land Surveyor.

**Idaho:** The ISPLS conference will be a joint conference in 2011 with WestFed and Washington, March 2 – 5 in Spokane, ID.... ISPLS has been discussing their state QBS rules affecting engineers and land surveyors – their consensus is that when public money is involved, any agency requesting work from a Professional firm should go through the QBS process for selecting a firm to complete their work.... ISPLS gave out \$6150 in scholarships this year.

**Montana:** Their 2010 conference was very successful in all respects.... Their 2011 conference will be February 23 – 25 in Billings.... \$3250 was allocated for

Trig Star awards/scholarships, additionally, \$9150 will be awarded as Tiny Tillotson and Roy Bandy scholarships to students at Flathead Community College and Montana State University.... MARLS is considering joining the efforts of the title companies organization in pursuing legislation that would alleviate the Blazer v. Wall, Supreme Court decision that negated easements previously created on Certificates of Survey.... They voted to support the NSPS withdraw from ACSM.... Over the next 2 years, MARLS supports a renewed national organization.... The MARLS Board voted to support realtors who are petitioning for a constitutional amendment to prohibit a real estate transfer tax.

**Nevada:** Their 2011 Conference will also be held with CLSA in March 5 - 9, in Las Vegas.... Great Basin College in Elko, is developing a Mining Survey Curriculum.... 9 high schools in Nevada participated in Trig Star this year.

**New Mexico:** Their Engineering and Surveying Practice Act will be before the Sunset Committee Hearings at the Legislature on Sept. 28th & 30th, with nothing drastic in the works for changes.... Their 2011 Conference will be April 1st and 2nd.... There have been rumors of the Engineer's thinking about splitting away from their current Board, but nothing in writing at this point.... The NMPS Board agreed unanimously that they did not support the NSPS decision to leave ACSM.... Through personal and chapter donations, they were able to come up with the additional \$4,000 required to complete the Four Corners Monuments.

**Oregon:** PLSO's 2011 Annual Conference will be January 19 – 21, in Salem.... Their ever popular TwiST program is cancelled this year due to scheduling and insufficient enrollment – they intend on holding it again next year.... The instructor for the Chemeketa Community College Surveying Program has resigned and the program will be closed.... Their OSBEELS is continuing their efforts to develop a Standards of Practice for Land Surveying, establishing minimum levels

of competency for Land Surveyors.... As in other WFPS states, the state of the economy is poor at best, and it was noted that the desperate situation seems to be causing unethical and otherwise sub-standard business practices among surveyors. (sound familiar?)

**Utah:** UCLS is keeping a low profile this year on legislative issues as to pursue a different approach to getting legislative issues before their legislature, and are also looking to go in a different direction with their lobbyist.... Their 2011 Conference will be Feb. 10th & 11th in St. George.... A concern was also noted regarding how the bad economy has taken a downward spiral with no end in sight, causing qualified new surveyors leaving the profession in droves, very cut throat in pricing to the point of losing money just to get a project – this concern was expressed by most WFPS states.

**Washington:** In an effort to expand their ever popular TwiST program, it was recommended, that WestFed become the regional center for this program – the WFPS Board voted to explore the feasibility and mechanics of doing that and tasked the education committee to bring forward an implementation plan for at our next meeting.... there was a lot of interest in a report of a case where a surveyor prepared a plat for a client, who was "negotiating" additional fees for extra work during the time when the plat was approved and ready to be recorded, with the client supposedly to meet the surveyor with a check for the additional services at the clerk and recorder's office so the mylars could be signed by the surveyor and recorded. The client never showed, the surveyor took back the mylars, was accused of stealing the mylars, attorney's became involved, and the argument proceeded regarding payment. A month later, the surveyor discovered that the plat had been recorded without his signature – apparently the client had a scanned version (un-signed) printed out on mylar and, after repeated tries, found a different clerk to record it, using an affidavit saying that it was a copy of the original, clearly mis-

using the electronic signature provisions of their WAC. Please contact either of the LSAW delegates for more information if interested.

**Wyoming:** The next two PLSW annual meetings will be held February 3 in Cheyenne, and February 2nd in Sheridan, both in conjunction with the Wyoming Engineering Society Annual Conventions.... Their Fall Technical Session will be Nov. 4th, in Casper.... The SE Chapter is working on setting up a Corner Record depository that will be accessed online for the entire state

of Wyoming.

### **Other items of interest:**

- The 2011 WFPS Conference will be held in association with the Washington and Idaho societies in Spokane, Washington on March 2 - 5, 2011. The outstanding effort by Colorado's Warren Ward and all those involved in making the Four Corners Monument Project a reality was recognized and appreciated by the WFPS Board.

- Our Alaska Delegate, Richard Heieren, was named as the incoming Chair of the Greater Fairbanks Chamber of Commerce. The WFPS Education Committee was tasked with exploring the creation of a special western state NCEES exam.

- Our next meeting normally is scheduled in January, however it was decided to hold that meeting on March 5th in conjunction with the WFPS Conference in Spokane.

End of Report

## **WCLS Surveyor Appreciation Award Letter To Leroy H. Stiles, PLS**

Dear Lee:

On behalf of the Western Colorado Land Surveyors, I want to award you our November 2010 Surveyor Appreciation Award.

You are a licensed Professional Land Surveyor in Colorado, Connecticut, and Rhode Island, having received your license in Colorado in 1986 and having successfully run your own business for several years prior to being elected as Mesa County Surveyor.

You were elected as the Mesa County Surveyor in 2002, serving for 8 years until you were term limited in 2010 and are now finishing your final few months until the newly elected Mesa County Surveyor takes office in January 2011.

You brought an exceptional level of professionalism to the office of Mesa County Surveyor, working closely with the Mesa County Commissioners and the offices of the Mesa County Attorney, Clerk and Recorder, Assessor, Treasurer, Data Information Systems, and Graphical Information Systems, giving advice and resolving various boundary issue questions throughout Mesa County.

You provided assistance, hard to find archival resources, and professional interpretative advice to the local surveying community in helping them resolve various boundary issues.

You have mentored the newer surveyors in our community with advice and guidance in improving their professionalism.

You have been influential with the Colorado State Board of Licensure for Architects, Professional Engineers and Professional Land Surveyors in developing the rules regarding Improvement Locations Certificates.

You are a member of the Colorado Association of County Surveyors.

You have been a steadfast member and supporter of the Western Colorado Land Surveyors serving as a perennial Board Member over the years.

Please accept our heartfelt thanks for the effort and dedication you have given to our community and good luck in your endeavors as you leave the office of Mesa County Surveyor.

Sincerely,  
Thomas W. Sylvester, PE & PLS,  
President, Western Colorado Land Surveyors

# Sometimes it Happens

## A Tale of a Colorado Land Surveyor

By: Dean F. Glorso, PLS 16109

In the last couple of months I've been happy to have a slight backlog of land survey work. This week I had the opportunity to survey in some of the greatest surroundings anywhere. A cattle rancher at the edge of the San Louis Valley asked me to come down to survey one of his stock ponds. He wanted to document alterations, the water courts ordered him to make for the surface area of the pond. The work being a 4 or 5 hour drive from my home in Brighton, Colorado, I hit the road just before 5 AM.

With the winter sun not rising until after 7 AM, I had a couple hours of mountain driving in the dark of night. As Colorado drivers know, the morning and evening hours are when deer crossing the highway are a big hazard. I had been reminded of that fact early in my trip, with a narrow miss. Lucky the deer stopped in its tracks when I laid on my horn. After passing by with its nose only inches from my passenger side mirror, I paid closer attention to my speed and the roadway in front of me. A few more miles down the road I witnessed a driver with a smashed front end stopped, talking to a police officer. His accident was obviously the result of a deer crossing the highway in front of him. Sometimes it happens, I thought.

Later I saw a recently killed calf in the middle of the highway, and still later I was delayed by a rolled over semi-truck blocking almost both lanes of the narrow roadway. As I drove slowly by the greasy side of the long 18 wheeler, I estimated the winds to be about 40 mile per hour. Sometimes it happens; the truck was probably deadheading empty and the gust of wind caught the driver by surprise, tipping his truck completely over.

With the unexpected delays, I was surprised to complete the 230

mile trip and meet my client at the ranch house at pretty much my expected arrival time. Larry and Ken, the contractors were in the kitchen finishing coffee with my client, Gregg, who offered to brew a fresh pot of coffee for me before I went out to assess the day's work. At first I declined, but remembered my Thermos was just about empty, and a hot cup of coffee would be a nice thing to warm up to after working near the foot of the cold, windy mountain range.

Gregg started the coffee while I went to get my Thermos. As I handed him the empty bottle, I offered to get started by setting up the GPS base station. He said he'd drive out later and just put the Thermos of coffee on the seat of my truck for me to enjoy later. We both anticipated a short work day, as I had surveyed his ranch previously. We met up again, walked around the stock pond together and he pointed out key elements that needed to be shown on the survey. Then gave me the history of his water rights dispute and pointed out the creek access verses the natural spring access of water filling the pond.

The wind was still howling as I finished surveying the pond perimeter then decided to hike several hundred yards and locate some fence lines, a section corner and ranch roads, in order to give my drawing a better point of reference. I was walking near the area Gregg previously pointed out as being the spring fed water source. Most of the ground was slightly frozen and wind-swept with some minor snow cover. Having some 40 years experience surveying in the elements, I always knew how to dress for Colorado winters. One minute you can be freezing your butt off in conditions like this, and the next minute you can be basking in the bright wonderful Colorado sunshine.

I was dressed in my usual layers of clothing, with top layers tucked into alternate bottom layers to block the wind from creeping in. My long underwear is a polyester type so when working up a sweat, the under garment allows moisture to pass away from the skin, to the next layer. This method of dress keeps the skin warm and dry when the temperature changes radically, as is often the case in the Colorado Mountains. For the outer-most layer, I wore The North Face wind-breaker that I've used in these conditions for some 20 years, zipped up tight with the Velcro sleeves latched tight in conjunction with the Velcro on my gloved hands. On my feet I wore waterproof Asolo Fugitive boots with two pair of socks, the polyester ones under and wool socks over to keep my feet warm and dry in most every Colorado condition.

My GPS system is old by electronic-gear standards with cables running from my 25 pound backpack to a 2 meter tall carbon-fiber antenna pole with a dinner plate size GPS antenna-dish carried in my left hand. Also attached to the pole is a TDS-Ranger electronic data collection device that some refer to as a Pocket-PC (personal computer). A two foot long whip antenna protrudes from the top of the back-pack in order to receive radio signals from the base station which sits on a control point next to my parked pick-up truck, some distance away.

Walking along with head down against the stiff wind, I only looked up occasionally to keep a bearing on the distant fence line that I desired to survey. At a point when I took my eye off the ground to check my walking-line to the fence, my right foot went down through ice into a deep void. Still gripping the carbon fiber pole in my left hand, it too fell with my body to the ever

deepening right side. As I went down to the right, black liquid-mud splashed my face and the right side of my body was underwater, in mud up to my arm pit. As the pole crashed over to the right, the GPS antenna dish slammed down on high ground to the right of the void. Still gripping the pole in my left hand, I flung my left elbow over the now horizontal pole and rested my left armpit on it. The pole was the only support I had to keep me from completely going under the dark colored goo. The smell was awful!

My first thought was that I just fell into a "man size" range box. Any surveyor, who has cleaned black mud out of a fist-size range box, in order to read the survey monument cap under 6 or 8 inches of smelly mud, knows the smell I'm talking about. It is often the smell you might encounter on a cattle ranch around a stock pond. But wait a minute; I am on a cattle ranch! As Forest Gump said in his movie after stepping in dog Do-Do, "Sometimes --IT happens"!

Dazed, wet and smelly, I crawled from the hole, dragging the equipment and cables behind me. As I stood, I first checked to see if my ankles were still in working order; they were. Startled, cold and smelling disgusting, I made my way in the wind to my truck only some 200 yards away. It was about that time that I took a glance at the TDS data collector still attached to the carbon fiber pole. It had so much black goo caked on to it, at first I thought I must be looking at the back side of the device. The keyboard of the collector looked like an open box of neatly packed chocolates. I avoided touching it, not because I was on a diet, but because I didn't want to press any of the wet looking "chocolate" further into the key pad. The collector must have been fully submerged in the black liquid goo, while the GPS antenna dish and cable was completely broken from the fall against the rocks on the far side of the hole. My only thought was for the data stored in the collector. I was plenty cold and wet but found that the caked-on "chocolate" seemed to insulate me somewhat from the

strong 40 mile per hour wind.

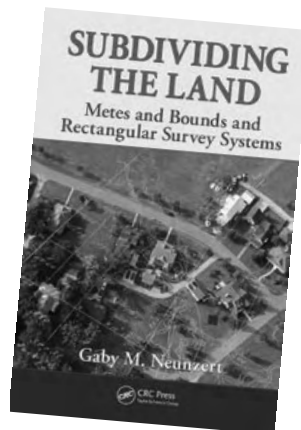
Once back to the truck, I wiped down my legs and arms with my gloved hands to remove the biggest chunks of black-wet goo, and shook the large chunks of slime from my still-gloved hands. Once I removed the wet crappy gloves I grabbed a bottle of drinking water and gently rinsed off the data collector the best I could. The screen was still turned on, so the data must be intact, I hoped.

I spent the next few minutes trying to remember if I had a change of clothing somewhere in the truck. Finally I remembered my motorcycle rain gear behind the driver's seat. Next, I removed The North Face windbreaker to pleasantly find that it kept most of my upper body layers free from the dark "chocolate". The denim jeans were another story, my lower body was wet through and through. The dry motorcycle rain suit was my only option, for even thinking about finishing the job that day.

Although the heater in my truck would have felt good, I did not get in as the smelly cow dung would

not be nice to have blended into the fabric seats for months to come. Quickly evaluating my options, I remembered a block of wood I had behind the passenger seat. It worked perfectly for me to stand on after I removed my black, muck-caked boots in the lightly snow-blown surroundings. Once standing on the wood platform, I was able to remove my jeans without further damage to my almost clean, but very wet wool socks.

Finally out of the wet, dung-drenched clothing, I stood on the wood pedestal in only my fast drying polyester long johns. The dry, cold, stiff wind would dehydrate them in no time, I thought. As I waited to be air dried by nature, I picked up the Thermos of hot coffee Gregg had left for me and drank cup after cup to ward off hypothermia. As I stood there counting my blessings for having the right gear, and being close to the truck when "- IT" happened, I remembered the Forest Gump-type logic of my father: "Some people can work hard all their lives and never get ahead. Other people can fall in '- IT' and come out smelling like a rose."



## ***Subdividing the Land: Metes and Bounds and Rectangular Survey Systems***

By Professor Gaby Neunzert

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## CCPS

CCPS has elected new officers for 2011. JJ Rihanek will be the president. Earl Henderson was elected to serve as Vice President. Norm Simonson and Aaron Willis will continue as Secretary and Treasurer respectively. The 2011 Directors are Chris Raml, Shawn Clarke, Jim Beatty, Dave Kuxhausen, Eldon Knoll, and Randy Zerr. Chris Raml was elected to a second two year term and Dave Kuxhausen will serve through 2011 in the seat vacated by Earl Henderson, the new VP. CCPS thanks outgoing officers Jim Holben, Warren Ruby and Rob Snodgrass for the dedicated service they have offered to the organization.

The next general membership meeting will be held at the Table Mountain Inn on Washington Street in Golden on January 27th with a 6:00 PM cash bar, 6:30 dinner, followed by a 7:00 general meeting. Warren Ruby will be on hand to present some interesting documents, plats, and historic maps of the City of Denver. All CCPS members are invited and encouraged to attend this first of a kind presentation.

There was only one scholarship application received as of December 1 for the scholarship presentation for the spring semester of 2011. The scholarship committee will have an easy time deciding who gets the award this semester.

The CCPS board of directors wishes all of you a happy, healthy, and successful new year.

Joe Conway  
CCPS President, 2010

## CSRN

As I am writing this, it will be my last official duty as president of the CSRN as my term has expired. It has been great working alongside all of you over the past several years. The CSRN has many opportunities ahead of it. I am confident in the leadership skills of the elected board and I look forward to seeing it continue to grow and thrive as

a chapter of the PLSC. The newly installed Board of Officers and Directors are: President – Brian Dennis; Vice President – Mat Barr; Secretary - Jan Sterling; Treasurer - Todd Beers; Directors - Pam Fromhertz; Dan Akin; Eric Carson; Larry deVries; and Jack Sparks.

Over the coming year the CSRN will continue to work with the geospatial community to educate, expand and enhance access to real time reference networks throughout the state. Projects being considered include performing an "evaluation" or "test" of each network within themselves and with each other. Such a task will provide numerous outreach efforts with other chapters, geospatial societies, colleges, manufacturers and equipment vendors. Plans to finalize the industry showcase portion of the website as well as continued support for the NGS CORS program are also underway.

Last year the CSRN began collecting annual membership dues from PLSC members, while dues for sustaining and non-PLSC members (i.e. geospatial community) continue to be waived. The result has been positive as the new board now has a base budget to begin working with. This will greatly aid in their education and outreach efforts.

If you have not already done so, please consider becoming a member of the CSRN in addition to your regular chapter; and as always feel free to provide feedback regarding your investment by contacting us through our website at [www.CSRN.us](http://www.CSRN.us).

Dan Smith  
09/10 President - CSRN

## NC-PLSC

The NC-PLSC just had our annual Christmas party in December. It was at Abbondanza Pizzeria in Longmont. Great pizza and wings.

Now we are starting a new year with optimistic attitudes and many plans. Among them: At least two 1-hour technical sessions in conjunction with our regular monthly meetings - one on Trimble Business

Center and one on Machine Control presented by Wagner Equipment. We are also planning to contact the Larimer County Planning Department to try to get a bunch of exemption plats that were never recorded scanned and recorded. These are plats submitted 30 or more years ago when only the County Commissioners' resolution and 8x11 pieces of the plat were recorded. The original full size plats are still in the file in Planning.

We welcome anyone who would like to attend our monthly meetings. They are the first Wednesday of each month from 6 to 8 PM. Call or email me for details at 970-420-5542 or [aperkins@perkinsls.com](mailto:aperkins@perkinsls.com).

Ron Perkins  
President Emeritus, NC-PLSC

The Northern Chapter continues to be educational, informative and interesting. We provide an open forum for questions, thoughts and ideas about our dynamic industry. At our monthly meetings, we discuss technology, the changes in legislation within our state and country wide, and deliberate the dynamic nature of our transforming industry. We welcome our members to discuss problems or situations that they are currently faced with. It is important that we support collaboration among members and encourage consultation from other professionals. At times, gaining another professional's opinion can be invaluable.

Over the past year, we have been inviting experts to present at our monthly meeting. Due to the small intimate nature of our assemblage, this provides an excellent forum to ask questions and produces a great learning environment for our branch. Our technical sessions have included the following topics: Civil 3D for Surveyors, LiDAR and many other great topics. We anticipate more great presentations this year and hope to encourage more members to come.

Kayce D. Wohlman, PLS  
President-elect, NC-PLSC

## NW 1/4 CLS

An eventful fall in the NW1/4 of the State, as the economy appears to be slowly showing signs of a rebound. But rebound is perhaps too strong a word; the recovery from the worse recession of our lifetime appears to be more like a slog. On the positive side, real estate volume and sales dollars are up for the year. However, the per unit sale is lower, buyers are much pickier and generally speaking, houses, condominiums and vacant land are selling at anywhere from 2002 to 2005 prices, depending on what it is. It is quite apparent at this point that we are in the middle of a seven to ten year event. It is everyone's hope that the bottom of the real estate market has been reached in the resort areas and that the sales volumes indicate the initial signs of a recovery.

So how does this relate to the surveyor? Many of these land transactions require a survey of some sort. What is perhaps most interesting is the varying requirements of the title companies to remove standard exceptions 1-4. Most of the title commitments now state either an Improvement Location Certificate or ALTA. As we all know, these are opposite ends of the survey spectrum. The title company liability theory behind me is they either want to know everything or as little as possible, and try to disclaim it. We should be getting the straight scoop from one of the local title company's manager this month (January) as our topic will be the changing requirements for surveys by title companies.

Lastly, we are having a heck of a snow year in this part of the state. Snowpack in the Upper Yampa Basin is upwards of 180% of average. None of us can remember a November and December such as we just experienced. We know the front range is high and dry, so if you are not using those snow shovels, send them over the mountains - some poor surveyor will need them to

dig, dig, dig for that ever elusive winter property corner!

Respectfully submitted,  
Brian T. Kelly, PLS  
Sec.-Treasurer, NW ?

## SCPLS

For our October membership meeting our guest speaker was Randy Bloom, BLM Chief Cadastral Surveyor for Colorado. Randy's presentation consisted of two subjects: How the BLM handles a particular survey situation differently due to the new Manual and a brief talk on Well Location Surveys.

The meeting was well attended with over 30 people present.

On December 3rd the Chapter held its annual Christmas Party at La Renaissance in Pueblo. Everyone attending enjoyed a wonderful meal and refreshments and had a great time swapping stories. After dinner we had a Chinese auction where an eclectic assortment of gifts was exchanged.

Mark Johannes  
President, SCPLS

## SWC/PLSC

The SW Chapter had its regularly scheduled meeting on October 13, 2010 at Christina's Bar and Grill at the Best Western Motel in Durango. Members in attendance were Larry Connolly, Ed Young, Dave Seiler, Josh Casselberry and Rob Trudeau. The minutes from the previous meeting were read and approved.

Ed and Dave gave a Treasurer's report- Received \$300 from PLSC for membership dues.

Ed, Larry and Dave met at Wells Fargo October 18 for signature change to bank account.

Rob T. gave a Legislative Report in Parker Newby's absence. Larry C. expanded with information regarding HB1085 passing and information regarding upcoming changes (board policy changing to rule, etc.).

BOD meeting report -open position discussion - Larry said it was a good experience. Dave S. was on board for a couple years around

2002. Looking for volunteers to serve on the board from the SW Chapter (Note: The PLSC SW Chapter has nominated Parker Newby for the upcoming election to the PLSC BOD).

Old Business - Updated member contact list via Diana Askew.

New Business - The PLSC SW Chapter will be holding a 2011 Four Corners Survey Seminar on June 10th and 11th. Possible speakers were discussed and included (Larry C-Colorado V N.M. Rules, Randy Bloom-New BLM manual).

Larry C informed the chapter that Jeff Redfern, PLS here in Durango has had recent health issues. The Chapter motioned, voted and approved making a monetary donation to help Jeff and his family cover the associated medical costs.

Next meeting Tuesday Jan 11 6pm Christina's. All are welcome.

Rob Trudeau, President  
PLSC SW Chapter

## WCLS

At our November 10, 2010 meeting, Rick Mason, Past President of WCLS, gave an excellent presentation concerning navigable rivers in Colorado. He incorporated several case law issues and there was a lively discussion by all present. As land surveyors, we are confronted with the question of how to handle river boundaries in Colorado. Navigable or non-navigable? Whose definition? Are there any clear cases? Who determines? Unfortunately, it still appears that the legal status of navigable rivers in Colorado is just as clear as the Colorado River living up to its name during spring runoff and after a major rain storm - murky at best.

We also voted to sponsor a \$1000.00 scholarship to be presented at our spring seminar. \$500 will be from our chapter and \$500 will be from PLSC in matching funds as committed by our four corners monument donation last fall.

Mesa County citizens elected their new Mesa County Surveyor in the November elections to take office in January 2011. Congratulations to

# CHAPTER NEWS

Mr. Pat Green, PLSC Board Member, on his election to the office. During our November meeting, there was serious discussion of the County's proposed 2011 budget for the Mesa County Surveyor. WCLS went to bat for Pat and worked with him to help bring some sanity back into the County's budget process.

Mr. Dennis Mouland will be our

main guest speaker at our May 6th, 2011 Spring Seminar. He will be discussing the 2009 BLM Manual of Instruction. More information will be shared with everyone later.

Mr. Leroy H. Stiles, P. L. S., the outgoing Mesa County Surveyor was presented with our Surveyor Appreciation Award. A much deserved award and thanks go to Lee for his

years of hard work and dedication to our Chapter, Mesa County, and our profession. A copy of the award letter is included in this issue of Side Shots.

Thomas W. Sylvester  
P.E. & P.L.S.  
President/WCLS

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