

feedback

Subdivided We Stand

After reading James T. Jones, PS, PE's response in the January 2015 issue I was reminded that I had intended to write my own response to "Subdivided We Stand" from the September 2014. The situation in the article is a lot like what has happened in Western New York. Most people including most surveyors either don't know or have forgotten that Western New York was surveyed into townships and ranges with each township being further subdivided into town lots before being sold as part of the Phelps and Gorham Purchase, Morris Reserve or Holland Land Company Purchase. In rural areas town lot lines and entire town lots may be called out as property boundaries, but in more developed areas after many years of being subdivided into smaller and smaller parcels the town lot lines have all but been forgotten. The old town lots are no longer a factor in determining the boundaries of the smaller lots because the smaller parcels are no longer tied to the town lot lines. So, to agree with the Ericksons, if a parcel is not tied to a town lot (section) line the section line has nothing to do with the parcel's location.

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Confusion and Conflict in Boundary Law: A Recent Case along the Coast

Editor's note: The following, by Dr. Joseph Kerski, appeared on the Spatial Reserves blog: <http://bit.ly/1JEGYHG>. Joseph has written twice for the magazine and is the Education manager for Esri:

An article in *The American Surveyor* by Michael J. Pallamary highlights a recent case where the author states that the US Supreme Court has recently introduced confusion and conflict in boundary law. The intention of the law, it was hoped, would settle a decades-old dispute over the location of California's offshore boundary, a line common with the United States' boundary in that part of the world.

The conflict stemmed from 1946 when the federal government sued California for leasing land for oil drilling offshore from Long Beach. The federal government stated that the submerged lands belonged to the federal government and not the state. The location of the state boundary is apparently three geographical miles distant from its coastline.

Any geographer or GIS analyst must see the "red flags" fly when they read "coastline" as the basis for any boundary, realizing that coastlines change, sea levels change, the definition of the coastline itself means different things to different people, and, remember the good ol' coastline paradox? Scale matters! The author, a 50 year professional surveyor who knows what he is talking about, gets right to the point: The notion of "absolute certainty" in the recent law and prior laws "appears to be derived from the misunderstood notion of significant figures and little to no understanding of geodesy." He goes on to state that one organization in California still uses nautical miles and most other agencies use geographical miles, and points out the differences between low water, ordinary low water, mean low water, lower low water, mean high water, and well, you get the idea. He also states that the coordinate values in the law are expressed as both NAD 83 and WGS 84 UTM, when it is well known that these are not the same, and moreover, they are in an "endless state of flux."

Why does all this matter? The locations of boundaries are of critical concern to our 21st Century world. In terms of coastal boundaries, yes, energy extraction remains important as it was during the 1940s, but think of additional issues: Measuring and assessing property and boundaries of all sorts along coasts, zoning, natural resource protection, shipping, defense and security, responsibilities for emergency management, and a whole host of other coastal and national concerns.

I couldn't help but sigh and scratch my head upon reading the complexities

detailed in this article. It provides a good update to our discussion in our book about the intricacies of boundaries, about the importance of datums, about precision and accuracy, and about knowing what you are doing when you are working in the field of geotechnologies. In talking with the author, I understand that a petition has been filed, asking that the legislation be redone. That is good news, but I wonder in how many other cases around the world are boundary related laws passed without consulting the surveying and geodesy community. Maybe I don't want to know the answer! So, until we get our ideal world, I think it is important for all of us in the geospatial community to keep promoting why what you are doing is important to our 21st Century world. It is my hope that your work will be visible so that you will be called upon from time to time by decision makers at all levels to advise them on legislation that affects us all.



Note: If you follow the bitly you'll see that Kerski posted this pic in his article. And he used the following as the caption: Contour tracing the Line of Mean High Water of the Pacific Ocean, from the American Surveyor. I highly recommend regular reading of the American Surveyor, in addition to reading the Spatial Reserves blog!



Thank you for the article by Michael J. Pallamary, PS, *The U.S. Supreme Court Introduces Confusion and Conflict in Boundary Law*. The story of this ruling should be embarrassing to everyone involved and more so to any who describe themselves as "professional."

We are advised to cast a jaundiced eye to trial court opinions because of possible local bias, legal misinterpretation &c., and to look to cases that have been reviewed, i.e., appellate or supreme court decisions. Here we are unfortunate enough to witness a total blunder by the highest court. But the court is not alone. Lawyers who reach that level of experience should recognize when the court needs advice by those qualified to give it. Those arguing the case bear responsibility for not engaging experts who are actually versed in the subject matter. All so-called experts in the case have explicitly disqualified themselves as either incompetent or dishonest by not persuading their clients to understand the FACTS of how geodetic positions and boundaries are determined.

This is a clear case of what was said about computer programming/operating: "Garbage in—Garbage out!"

How many decades and bazillions of dollars will be expended to first white wash and then clean up this fiasco?

*J. Anthony Cavell, PS, CFedS
Via the Internet*

Response to "The Fire Alarm"

Enclosed is my response to the open letter response written by David H. Wildmer:

I am sixty year old land surveyor licensed in Maryland, Pennsylvania and Florida. I have 38 years of experience as a land surveyor working in seven different states. I have 10 year's experience working in sectionalized states and the rest working in metes and bounds states. The work included research of land records and state specific laws for the particular municipality where I was working. I can tell you without any uncertainty that the laws and regulations for each municipality vary and that it requires time and experience working in those municipalities to become familiar with their specific laws. I have even seen variations among county municipalities in the same state. To make a blanket statement that the state specific exam questions are "90% the same" is obviously a statement made by someone that has not taken the exam in multiple states. I have sat for the state specific examination in seven different states, and I can tell you that very few of

the questions were even similar. I think it ludicrous to presume that because you are licensed in one state it makes you an expert in any other state. The fact of the matter is, it requires years of working in a particular municipality to become familiar with the statutes and case law concerning the establishment of boundaries. And even then, you must keep abreast of new cases and changing statutes that are continually evolving. There is nothing simple about making an accurate boundary determination. To believe so is foolhardy. Boundary determinations are a combination of experience and knowledge of the statutes and case law that can only be acquired through time and tutoring from an experienced licensed land surveyor.

There is a desperate attempt to bring new (young) blood into the surveying profession to stop the dwindling numbers and revive the profession. It seems that some believe this can be accomplished by minimizing the standards and requirements to become a licensed land surveyor. What the people in the land surveying profession fail to realize, is that until the salaries of the field level positions are increased to a living wage, no one will be interested in becoming or continuing as a land surveyor. I have watched many individuals who were working as land surveyors leave the profession because they could not support themselves or their families. I have watched licensed land surveyors working from their homes drive the price of land surveying down by working for wages, making it impossible for land surveying businesses working from an office and paying their employees benefits to compete, further driving down the wages of all land surveyors. Lowering the standards and requirements to become a licensed land surveyor will only perpetuate what has already been happening for the last fifty years. The surveying profession is dying because many of the individuals practicing in the profession are not following the "standards and statutes" established by the municipality where they practice. They are willing to work for substantially lower fees because they have no overhead and no benefits and they are willing to cut corners to get the work. I have observed these very same licensed land surveyors, which have practiced their entire career in

one municipality, completely unaware of the rules, statutes and case law established in their municipality. They do not follow the statutes, regulations or case law because it is not cost effective for them. I have seen these very same individuals make erroneous property determinations because they did not have the time to complete the survey according to the current statutes, regulations and standards of practice. I have had potential clients tell me my prices were outrageous because they knew of someone willing to work for one third the price. You cannot effectively combat what has been in place as an accepted practice for over fifty years, unless you do something to affectively change what is now in place. I have no answers how to address the current situation. I have no answer why a realtor or a contractor is permitted to dictate the price of a survey and why any surveyor would allow this. I guess it is because of the most basic instinct, one of survival, and the fear of failure. Allowing individuals that are fresh out of college with only four years of experience to become licensed land surveyors will only perpetuate a system that has been in place for over fifty years. Land surveyors are their own worst enemy, and until the profession is cleaned up, it will continue the status quo.

I truly believe that eventually the surveying profession will no longer exist, and the practice of land surveying will be absorbed into the engineering profession. The surveyor's inability to act and conduct themselves as professionals will be their demise. I am reminded of a story I once heard about George Washington. He performed a boundary survey for a client and sent the bill for \$2,500.00. The client was outraged at the price and demanded an itemized statement justifying the cost of the survey. Washington sent his client a revised bill that was itemized as follows: Stakes and pins \$200.00; Knowing where to put them \$2,300.00.

Jay Wooldridge

Got some feedback?

Contact us via www.amerisurv.com, or send a letter to: The American Surveyor, P.O. Box 4162, Frederick, MD 21705-4162. We reserve the right to edit letters for clarity and length. ■