



Summer 2018

Coos Bay 541-267-2872 Forest Grove 503-357-5717 Dallas 503-623-9000 Junction City 541-520-2447

50 Years and Strong!



Joyce and Ron Stuntzner

Ron and Joyce Stuntzner founded a Coos Bay office providing forestry, engineering and surveying services in 1968, just four years after receiving their Baccalaureate degrees from Oregon State University in 1964; Ron in Forest Engineering and Joyce in Home Economics Education. While Joyce entered the teaching profession, Ron became a professional logging engineer in both Oregon and Washington in 1968. In 1977 Ron became an Oregon Professional Land Surveyor then added a Certified Water Rights Examiner certificate and a Registered Professional Forester in California to his growing list of credentials. Until 1971, the office was a branch office of Timberland Services, Inc. of Albany, started by Dave Schmidt. Ron purchased the Coos Bay office from Dave and it later became Stuntzner Engineering & Forestry. Timberland Services later merged with David Evans & Associates (DEA). Ken Wightman, the first forest engineer Ron and Dave hired became the CEO and Board Chairman of DEA. Through the years, Stuntzner Engineering and Forestry purchased several related business owned by sole proprietors wanting to retire. Today, we have offices in Coos Bay, Junction City, Dallas (OR) and Forest Grove.

Recognizing the need for multiple disciplines to effectively serve the diverse demands of timber and land ownership clients (large and small) in Oregon, Washington, and Alaska, Ron and Joyce decided to bring in highly-skilled professionals in the critical fields of forestry, engineering, land surveying and planning, effectively creating a multi-faceted professional team of experts to handle those needs. As the next team of Stuntzner leaders is now developing, we have expanded the geographic area for which professional licensing and expertise is available. We encourage diligence, professional growth, cross-training and innovation among staff.

Eventually Joyce left teaching to be a full-time partner with Ron in the company they founded. She masterfully helmed the office administration, keeping everything and everyone organized, both internally and externally. Joyce retired in 2015 from active administrative duties. Support from “behind the scene” no doubt continues.

Throughout the years, Stuntzner has maintained a reputation as a superior company within the industry. With Ron’s foresight and Joyce’s skillful management of resources, their vision of creating a successful engineering and forestry company has been rewarded with a company that continues to excel after more than four decades of service.

The company is moving along in its transitioning to new leadership and ownership in the Stuntzner tradition. Our mission is to continue to provide services to our long term clients by consistently reaching client’s goals, being responsive, employing the best resources and using the most efficient technologies.

Willamette Valley Vineyards Reservoir

The Willamette Valley Vineyards Reservoir is located approximately 1.6 miles northeast of Gaston, Oregon and is west of the intersection of SW Vandehey & SW Spring Hill Road. The reservoir stores 6.2 acre-feet of water for the purpose of irrigation, aesthetics, fire prevention, recreation and wildlife. The footprint of the reservoir at normal pool is approximately 0.9 acres. The earthen dam is trapezoidal in shape with three sides as earthen embankment and the one side as a cut into a rolling hill. The dam embankment is approximately 13' tall, 650' long, and 16' wide. The reservoir is lined with plastic and is filled by collecting runoff from precipitation. A 0.7 acre plastic-lined 'rain collection area' adjacent to the reservoir collects precipitation and conveys it by gravity to the reservoir.

Construction of the reservoir commenced in early September and was completed mid-October, 2017 by Parker Pacific Development, LLC under the company's excavation division. Approximately 19,000 cubic yards of earthwork was required to construct the earthen embankment, core trench, and emergency overflow spillway. Wetland Solutions Northwest, LLC. completed wetland delineation, reporting, permitting, and mitigation design. GEO Consultants Northwest, Inc. completed geological review and analysis of soils prior to and during construction.



Willamette Valley Vineyards Reservoir

Permitting required to construct the reservoir includes a Washington County Grading Permit and Land Use Compatibility Statement, a Department of Environmental Quality 1200-C permit, and a U.S. Army corps of Engineers wetland fill permit. This reservoir did not require review by Dam Safety because it stores less than 9.2 acre-feet of water. This reservoir is unique since it did not require any Oregon Water Resource Department water right permits because all collected and stored water is on an impervious surface (plastic).

Stuntzner staff members and their role with this project are as follows:

Bill Flatz & Nick Blundon: Land Use Planning, Permitting, Engineering, and Construction Administration

Corey Woodruff, John Hoshall, & Jeffrey Kee: Surveying and Construction Staking

Carol Taylor & Amanda King: Administrative Assistance

Nick Blundon, PE, Stuntzner Engineering, Forest Grove

Bearing Trees

This column is a continuation of our previous article “Surveying Portions of Sections” in the Autumn 2016 issue. Following is a hypothetical situation in which one of the section corners has NOT been recovered and must be found.

Let’s say the northwest corner of the Jansen Property is an original section corner set by the General Land Office (GLO) in 1891, which was a cedar post with four bearing trees: an oak, two Douglas firs and an alder. A quick reconnaissance finds that the area was logged in the 1930s and all that is left are some burnt and rotten stumps- no sign of a post. The hunt is on and those bearing trees are our last remaining tie to the corner’s original location.

Many of the section corners and 1/4 corners originally established by the GLO surveys in Oregon were monumented with wood posts or stones, along with a number of bearing trees. Some of these posts are now over 160 years old and finding any remnant of them in Western Oregon’s climate is extremely rare. Stones can be recovered, but they are difficult to locate without some assistance from accessories.

Bearing Trees are defined by the BLM (Bureau of Land Management) as “A marked tree used as a corner accessory; its distance and direction from the corner being recorded. Bearing trees are identified by prescribed marks cut into their trunks; the species and size of the trees are also recorded.” Since as early as 1785, they have been used to witness the location of PLSS corners. These trees were selected for their durability (although sometimes the original surveyors didn’t have a choice and had to settle for something as lowly as a vine maple or elderberry) and were marked by varying means of scribing marks in the face. These marks are typically scribed in the wood of a chopped face in the tree, with the intent that at least a portion of the marks would survive after the tree is fell. After scribing, most coniferous species will seal over the face and preserve the marks inside, allowing them to be found years later.

To narrow our search area, we measure from the northeast corner of the Jansen property (the North 1/4 corner), which is a perpetuation of the original that was remonumented in 1986. Using the GLO’s original data, we calculate an approximate search point for the section corner.

Fortunately, after searching for some time, we find two Douglas fir stumps with a relationship that fits closely to the GLO record. They are about 50 feet from where we anticipated based on our search point. The first one is in poor condition and is falling apart. It looks like it may have had a face at one time, but it’s difficult to tell. We dig through the remnants of bark and wood at the base of the stump looking for any traces of markings, axe work or pitch that would have developed to seal any old cutting. We recover a nice piece of old wood containing scribing that has fallen off. The other Douglas fir stump is too decayed to find any remaining evidence. Upon further investigation we find remnants of an old oak stump that fits well with the location of the original oak bearing tree. The alder was also searched for but was not found. Using the two fir stumps, which were in the best condition and had the best angular relationship, we are able to determine where the corner was by using the intersection of the record GLO distances. A careful excavation at the point determines that no sign of the cedar post remains. The corner is remonumented based on the fir stumps and new bearing trees are marked perpetuating the original position.

Without recovering these original bearing trees, the odds of reestablishing this corner in the original location are pretty slim. When a corner is lost and a mathematical solution must be used to reestablish it, it will most likely NOT be in the same location.

Searching for evidence of original GLO corners is one of the most rewarding (and frustrating!) parts of the land surveying profession. It is more of an art than science and requires experience to avoid destroying the evidence before it’s found.

It is not only that original GLO bearing trees are important. More recently established bearing trees also provide a means to reestablish monuments, such as 1/16 corners, that have been destroyed. This not only allows the corner to typically be reset with less effort (and cost), but also ensures that corner remains in its original position.

If you’re logging and plan to cut a bearing tree, always leave the stump high so the face containing the marks remains. The stump can be further preserved by nailing a piece of metal roofing on top. If you have a 1/4 corner or section corner that is at risk, consider placing a call to your County Surveyor. Often that’s all that’s required to have them visit the site and perpetuate the corner with some new accessories. Take care of these trees and they’ll be there when needed.

Corey Woodruff, PLS, Stutzner Engineering, Forest Grove

Log Market Report

The trend in log prices prior to 2015 in this region has been for higher prices during the winter months and lower prices during the summer months. The log market now has seen about 24 months of steady log price increases regardless of the season. This has been driven by the domestic log market chasing the record high prices for lumber and panels as well as renewed tariffs on Canadian lumber in 2017. Intermittent low log inventories and log shortages also contributed to increasing log prices. The industry is also experiencing shortages of workers. It can be difficult to find available loggers and truckers. Some loggers and truckers have equipment sitting that would be working if they could find workers. Some land owners would be harvesting more if they could get more contractors working. Even though there is plenty of timber available to harvest, the limiting factor at this time is the capacity to get the timber from the stump to the mill, and the lack of available labor for mills to add second shifts like they have done historically when lumber demand is strong. With all of these new dynamics to supply, it will be interesting to see how local log markets play out over the next few years. 5-year forecasts indicate a gradual increase in Douglas-fir log prices through 2020, then relatively flat pricing beyond. There are a lot of factors that can change that projection; however, it does indicate that the core supply and demand factors trend towards strong domestic log prices into the near future.

Western red cedar markets have been strong in Oregon; however, most is being shipped to Washington mills to the north. Prices have ranged between \$1,000 and \$1,300 per Mbf depending upon how close to Washington your delivery point is. Prices as high as \$1,400 at times have been reported for the Washington mills during this same period of time. This price difference has allowed Washington mills to compete in the cedar markets in Southern Oregon.

Alder log prices in the region have been increasing as well. Over the last year, prices are up about 25-35%. Alder lumber prices have been good; however, log supply is limited with some mills wanting to add shifts but can't get enough logs. Like cedar markets, there is more competition for hardwood logs in Washington, and therefore prices trend stronger the further north you are in Oregon. Log supply issues have caused Washington mill buyers to compete in Oregon, even looking at barging logs from Coos Bay to supply a mill in Port Angeles, Washington.

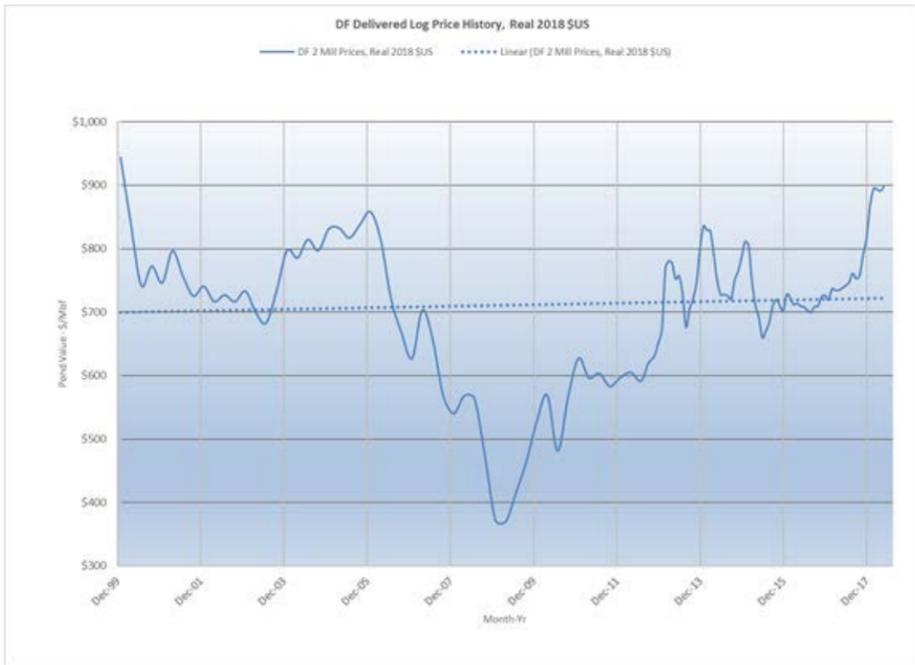
The *Log Lines* May issue reports a Douglas fir 2M from Southern Oregon/Willamette Valley at \$897/mbf compared to \$722/mbf a year ago. They show a 2M hemlock for the same period at \$681/mbf, up from \$551/mbf a year ago. They report a red cedar log price at \$1,473, up from \$973 a year ago and a 2M red alder is up \$68 from a year ago at \$793/mbf. China log exports from Coos Bay are currently at \$650-\$680/mbf for 8"+DF and whitewood.

Weyerhaeuser is exporting logs to Japan from Coos Bay. There are two China log export companies again operating in Coos Bay. The Longview export market is actively buying Japan Douglas-fir logs and China whitewood logs. The China log export market has not been able to respond to the Douglas-fir domestic log prices, but has been competitive in the whitewood markets. The prices for Douglas-fir Japanese export logs are good and generally competitive with the domestic markets, especially near Longview where domestic prices have not been as strong as further south in Oregon.

Figure 1 is a graph of graph of Douglas-fir 2 mill log prices between 2000 and 2018. Inflationary impacts have been factored out using a Consumer Price Index adjustment to convert historical prices to a 2018 dollar equivalent. As can be seen in this graph, prices at the beginning of the period were just coming off the 1990's spotted owl influenced prices. Typical fluctuations in the markets can be seen through most of the last 18 years with the exception of the 2008 recession period where prices dropped dramatically. You can see that current log prices are above normal high points by around \$50/MBF.

Random Lengths reports from a year ago from June 8, 2018, their Framing Lumber Composite up \$184 at \$582 (+46%), Green DF 2x4's up \$203 at \$600 (+51%) and K-D Coast Hem-fir up \$270 at \$660 (+69%). They report the Structural Panel Composite is up \$172 at \$573 (+43%) and ½" western sheathing up \$167 at \$570 (+41%) for the same period.

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Housing permits for April, 2018 were at a seasonally adjusted annual rate of 1,287,000, up 10.5% from April, 2017. *Source: US Dept. of Housing and Urban Development*

The National Association of Home Builders Association (NAHB) and Wells Fargo produces a Housing Market Index (HMI), which measures builder perceptions in current home sales, expectations for the next six months and rating of prospective buyer traffic. The May HMI is 70. An HMI of less than 50 means more builders feel sales conditions are poor than good. The HMI has been above 50 for the last 47 months.

Domestic	South \$/MBF	North \$/MBF
DF SM		
DF Camp Run	\$900-975	\$850-\$900
DF 2M 12"-19"	\$900-975	\$825-\$900
DF 2M 20"+	\$870-925	\$800-\$850
DF 6"-7"	\$900-975	\$700-\$900
Conifer Pulp	\$40/ton	\$40-\$50/ton
Whitewood 6"+Camp Run	\$675-\$750	\$625-\$675
Red Cedar	\$1,000	\$1,100-\$1,300

Export-DF	Coos Bay \$/MBF	Longview \$/MBF
9-11" Japan Sort	\$970	\$970
12"+ Japan Sort	\$980	\$1,000
China/Korea Sorts 8"+	\$650	\$680-\$780
Export-Whitewood	Coos Bay	Longview
China/Korea 8"+	\$650	\$650-\$715
Other Species		
Cedar 8"+	\$800	
Pine 8"+	\$540	

Other Species	South-\$/MBF	North-\$/MBF
Pine 6		
Incense Cedar 12"+ long log	\$825	
Incense 6-11" long log	\$775	
P.O Cedar long log	\$600-\$650	
Alder sawlog 6"-7"	\$475-\$525	\$500-\$650
Alder sawlog 8"-9"	\$575-\$625	\$675-\$800
Alder sawlog 10"-11"	\$675	\$775-\$850
Alder sawlog 12"+	\$725	\$825-\$900
Mixed Hwd. Pulp	\$42/ton	\$40/ton
Alder Pulp	\$42/ton	\$32-\$40/ton
Tan Oak	\$36/ton	
Maple 10"+	\$425	\$475-\$525
Alder 6"+ C/R	\$90/ton	

Waterfront Properties Require More Scrutiny

When conducting legal work associated with waterbodies, one should be more vigilant. The legal status of the water can have significant impact on ownership, boundary locations and rights.

Navigable waters are determined to allow use by the general public. Waters that have not been determined to be navigable can sometimes be controlled by private adjacent land owners.

In Oregon, a lake shore that has been meandered (fractionalized public land survey sections) is assumed to be navigable. This means the public could have access along the water body below the ordinary high water (OHW) mark. The OHW mark is typically where the vegetation ends. There are over 70 navigable lakes in Oregon.

Generally, any water body, including streams, that are subject to tidal influence, at the time of statehood (1849) are considered navigable by the State and Federal governments. Some rivers are subject to the Tidelands Act which said that adjacent owners own to the ordinary low water line including the Willamette, Coquille, Coos and Umpqua Rivers.

Water has been known to move land, both quickly and imperceptibly. If it happens slowly as in accretion, an adjacent owner may slowly increase the amount of land they own. If it happens in a very fast, perceptible action it is generally determined to not affect boundaries.

In *Hardy vs. the State Land Board* the Oregon Court of Appeals in 2015, struck down an attempt by Oregon to assert navigability in a section of the Rogue River. Since the river had moved significantly to the West since 1849 a half a dozen homes were now sitting where the Rogue River had been at the time of statehood.

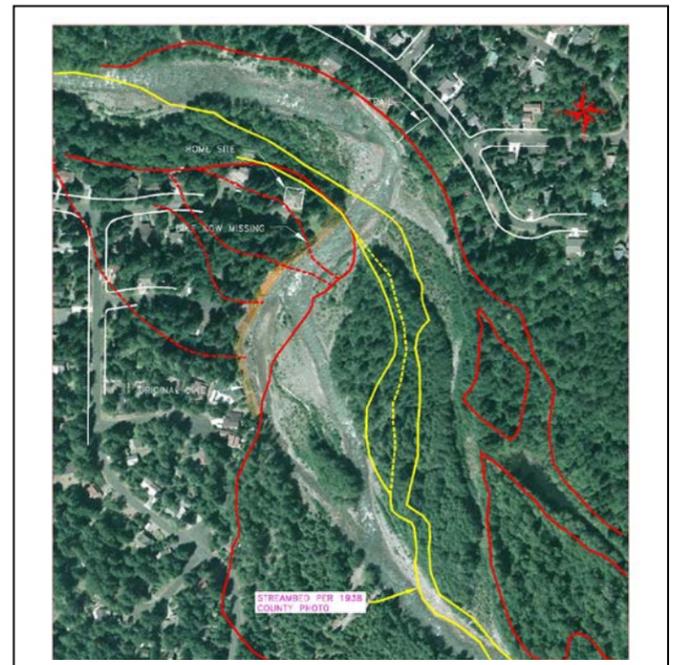
So if you are considering work or ownership along a water body in Oregon, it might be smart to dive deeper into the historical legal definitions and descriptions.

Rivers deemed navigable by Oregon.

<http://www.oregon.gov/dsl/WW/Documents/RiverList.pdf>

Lakes deemed navigable by Oregon.

<http://www.oregon.gov/dsl/WW/Documents/LakeList.pdf>



Sandy River Channels from 1938-2008



Oregon Water Resources Department Backed Up Again

Staff at the Oregon Water Resources Department (OWRD) has indicated that their work load has significantly increased. Recent drought declarations in Klamath and Grant counties have created a significant increase in temporary and drought applications for water.

The Forest Grove office of Stuntzner Engineering & Forestry LLC, recently inquired about a permit amendment submitted in September of 2017. It currently has no OWRD case worker assigned to it and we were informed that it could be 2 to 3 months before it gets a person to look it over.

Reimbursement Authority (RA) is one process in place that OWRD uses to process applications more quickly. The RA program can be utilized to process final Claims, Transfers, Permit Amendments and Groundwater Registration Modifications.

Reimbursement Authority begins with an application and a fee for \$125.00. The state then reviews the application or Claim of Beneficial Use to determine the complexity and decides how much it will cost to process it. Then the applicant gets another contract with the stated amount to do the review (usually less than \$1000.00), signs it and sends along a check for the requested amount. This can reduce processing times from years to months for final Claims and reduce processing times for other applications from 9-12 months to 5 or 6.

There is a rule in Statute to allow for RA for new water right applications. Unfortunately, the state has not developed the rules to implement it.

Current changes in weather patterns and the lack of resources at OWRD will probably continue to reduce processing times in Salem for legal water users.

If you have ever thought about building a reservoir or pond on your land, now is the time to get in your application, it doesn't look like it is going to get any easier or faster.

*Jeffrey Kee, PLS, CWRE, CECSL
Stuntzner Engineering & Forestry, Forest Grove*





PO Box 118
Coos Bay, OR 97420

Staff News at Stuntzner

Marc Van Camp is a new Civil Engineer at the Coos Bay office. Marc is a licensed Professional Civil Engineer in California with a BS in Civil Engineering from Oregon State University. Marc was born and raised in the Sacramento area and has worked in water resources most of his professional career. His initial interest in water resources was sparked by summers spent contour/gravity irrigating pasture in Modoc County, CA. He found the efficient application of water to the land using only a shovel, sod, and a series of ditches both challenging and rewarding. In his free time, he likes to spend time in the outdoors with his wife and 2 chukar-hunting dogs. Marc looks forward to expanding his experience in other facets of civil engineering as well as learning about the forestry and surveying services Stuntzner provides. He is taking his Land Surveyor in Training exam this summer.

Angela Mosieur, a draftsman and Engineer in Training in the Coos Bay office, was born and raised in the Portland Oregon area. She now calls the South Coast home. Angela graduated OSU with a Bachelor's degree in Forestry Engineering. She is a certified Engineer in Training and is working towards her Professional Engineers license in Civil Engineering. Her background work experience, is Forestry Research and Construction Management. In her off time, Angela enjoys the great outdoors and the beach, along with hunting, fishing and camping with her family and dogs.

We moved!!! The *Forest Grove* branch of Stuntzner Engineering & Forestry, LLC moved to a new location last summer. When you plan to visit us, please go to **2318-B Pacific Avenue** in Forest Grove. Our contact numbers and email addresses will remain the same. We look forward to your visit!

Have a safe and enjoyable summer!