IRWA
ORANGE COUNTY
CHAPTER 67

International Right of Way Association Chapter 67 Orange County, California




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BUNDLE of WRITES

September 2017

President's Message

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As the summer season comes to an end (amidst the scorching record heat!) I hope that we've all emerged relaxed, refreshed and excited to help increase attendance at our monthly luncheon meetings for the 2017-2018 term. Our first meeting will be held at the Holiday Inn – OC Airport on September 12th featuring a speaker from the Western State Petroleum Association who will be presenting on the cap and trade policy. Plan on attending to hear how California intends to use cap and trade to pay for High Speed Rail. Chapter 67 now has the ability to conveniently register and submit advanced payment electronically. Click here for luncheon tickets.

Did you know that we have an IRWA association wide Mentorship Program? Fellow members, I encourage you all to get involved and to make a difference. The role of mentor within our organization is a special opportunity to give back and to provide invaluable support, encouragement, resources, information, and inspiration to Right of Way protégés beginning their journey in the right-of-way profession by volunteering and advancing in association leadership. Detailed information and applications are available on the IRWA Website.

Additionally, opportunities to serve on Chapter 67 committee chairs are available. Please reach out to any Board Member to find out how to increase your participation by dedicating your valuable time and talents.

Education Update:

Chapter 67 is sponsoring Course 701: Property/Asset Management: Leasing which will be held in Irvine on October 23-24 and is approved by the California Board of Real Estate Appraisers for 15 units of continuing education. Participants will learn the fundamentals and practical aspects of leasing. Registration information is available at the end of this newsletter as well as here: http://www.irwa67.org/events/course-701-property-management-leasing/.

Looking forward to seeing everyone on the 12th!

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Valuation - TBD

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Editor's Corner

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Welcome back readers for the September edition of our newsletter.

If you would like to contribute content to the newsletter, have questions or any ideas to improve the content please contact me at gbecerra@opcservices.com or (949) 872 3237

UPCOMING EVENTS:

September 12th Luncheon

Topic: How California intends to use cap and trade to pay for High Speed Rail
Speakers: Western State Petroleum Association
Click here to purchase luncheon tickets online.

Engineering Plan Development & Application Course 901

Date: October 5, 2017
Location: Victorville, CA (click here for details)

Property Descriptions Course 902

Date: October 6, 2017
Location: Victorville, CA (click here for details)

Property/Asset Management: Leasing Course 701

Date: October 23-24, 2017
Location: Las Lomas Community Park, Irvine
Sponsored by: Chapter 67. Registration form below (click here for details)

Meet Your Board Members

ARTEMIS MANOS - President

Artemis commenced her professional career under the Sempra Energy umbrella 21 years ago working as a paralegal for the Company's legal department. She began her duties in the Right of Way profession 13 years ago when she began working for the Land & Right of Way department. Artemis is a participating member of Orange County, Chapter 67 International Right of Way Association having served as Secretary, Treasurer and currently holds the position of Chapter President. Artemis completed her undergraduate studies at California State University Long Beach, obtaining a Bachelor of Arts in Political Science and completed her graduate studies at Brandman University – Chapman University System, earning her Master of Business Administration with an emphasis in Organizational Leadership.

ALYSON SUH - Vice President / President Elect

Alyson is a Director and member of Woodruff, Spradlin & Smart's eminent domain practice group. She joined Woodruff, Spradlin & Smart in 2007. Her practice focuses on advising and representing public agencies in the project planning and property acquisition phases of major public projects. She has advised clients on infrastructure improvements for railroad, roadway, freeway, bridges and underground utility projects. Alyson has previously served as Secretary and Treasurer of Orange County, Chapter 67 and currently holds the position of President-Elect. Alyson completed her undergraduate degree at California State Polytechnic University, Pomona in 1997 and obtained her law degree from Pepperdine University in 2002. She lives in Orange with her husband John and 4 "furbabies".

MEREDITH McDONALD - Treasurer

Meredith began her career in real estate, working as an Assistant Mall Manager for a regional mall. She spent the next few years working as a property manager for office, retail and industrial properties throughout Orange County. This seemed a good transition to appraisals. She started working with Kiley Company as an appraiser in 2003. She became a member of Chapter 67 in 2009 and took on the responsibility of Membership Chair, which she chaired for the next five years. After a small hiatus from the organization, she happily returned to be the Nominations and Elections Chair. Meredith will be our Treasurer this coming term. She lives in Lake Forest with her husband.

AMANDA FITCH - Secretary

Amanda began her career with HDR Engineering in 2011 as an Administrative Assistant. After assisting the Right of Way department for some time, she applied for a position as a Right of Way Agent and began her official ROW career in 2012. In 2015, Amanda was offered an opportunity as a Network Real Estate Manager for the telecommunications company, Mobilitie, headquartered in Newport Beach. She currently enjoys the role of managing a team responsible for permitting new Small Cell technology throughout Southern California, Nevada and Arizona. Amanda has been a member of the Orange County, Chapter 67 for 5 years and is serving her second term as the Chapter's Secretary. Amanda studied Communication and received her Bachelor's degree from the University of California, Santa Barbara, where she also participated in a yearlong study abroad program in Lancaster, England. Amanda currently resides in Costa Mesa with her husband, bulldog and baby on the way.

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Approaches to Pore Space Rights

California Carbon Capture and Storage Review Panel
TECHNICAL ADVISORY COMMITTEE REPORT

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DISCLAIMER

Members of the Technical Advisory Committee for the California Carbon Capture and Storage Review Panel prepared this report. As such, it does not necessarily represent the views of the California Carbon Capture and Storage Review Panel, the Energy Commission, its employees, the California Air Resources Board, the California Public Utilities Commission, or the State of California. The Energy Commission, the State of California, its employees, contractors and subcontractors make no warrant, express or implied, and assume no legal liability for the information in this report; nor does any party represent that the uses of this information will not infringe upon privately owned rights. This report has not been approved or disapproved by the California Carbon Capture and Storage Review Panel or the Energy Commission nor has the Panel or Commission passed upon the accuracy or adequacy of the information in this report.

Carbon sequestration cannot occur absent the right to inject and store carbon dioxide (CO2) in subsurface pore spaces(1). Three general approaches for addressing this issue have evolved over the past few years. This issue paper briefly describes these approaches and identifies positives and negatives of each. These positives and negatives are not listed in any particular order.

Complete Private Property Approach

This approach recognizes that the right to use the pore space for the injection and sequestration of CO2 is a property right that must be obtained(2). If there is a single property owner, that owner owns the right to use the subsurface pore space, but if the mineral rights have been severed, then the owner of the mineral estate has the dominant right to use pore space as necessary to produce valuable minerals(3). Consequently, the surface estate owner's use of pore space cannot interfere with the mineral estate, and injecting gases into unacquired pore space could constitute a trespass against both the surface and the mineral estate(4).

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1) See generally Jerry R. Fish and Thomas R. Wood, Geologic Carbon Sequestration: Property Rights and Regulation, 54 ROCKY MT. MIN. L. INST. 3-1 (2008).
2) See CAL. CIV. CODE § 829 ("The owner of land in fee has the right to the surface and to everything permanently situated beneath or above it.").
3)The terms "surface estate" and "mineral estate" are commonly used in the context of severed property rights. However, these terms are misnomers, because the owner of the "surface estate" owns everything, including rights to use the subsurface, except for and subservient to the right to produce valuable minerals. In addition, the owner of the "mineral estate" has certain rights to use the surface in connection with the production of valuable minerals.
4) See Cassinos v. Union Oil Co., 18 Cal. Rptr. 2d 574 (Cal. App. 1993). Trespass could also result if injected gas causes brine to migrate into the pore space of another property that did not previously contain brine. For example, if displaced brine interfered with oil or gas production or fresh water aquifers, a cause of action for trespass could exist under Cassinos. See also footnote 6 below and accompanying text.

Because it can be difficult to establish that a mineral estate has been exhausted (i.e., there are no more minerals that can be produced), under this approach a carbon sequestration project may need to obtain rights to use the pore space from the owners of both the surface estate and the mineral estate(5).

This could be accomplished in a few different ways. First, a carbon sequestration project could obtain the necessary rights by means of negotiated agreements with the property owners, including any lessees of the mineral estate and any royalty owners. Second, if it had the power of eminent domain, a carbon sequestration project could condemn the rights. Third, if the requisite statutory authority existed, the state could unitize the rights within the targeted geologic structure.

a) Positives:

i) Consistent with public perception of property rights. The principle that ownership of property includes the right to control the use of that property is a fundamental concept in this country. Because this approach builds off this fundamental concept by requiring that the right to inject and sequester CO2 underground be obtained from property owners, this approach does not require charting a new path for property rights. This makes acceptance and implementation less controversial.

ii) Payment to property owners may lessen opposition to carbon sequestration and may help encourage development. Development of the subsurface has economic benefits, such as revenues from produced oil or rent from stored natural gas. Property owners understand and expect that they will be compensated when someone else wants to use their land. This has been common practice throughout California's history (e.g., from the mid-nineteenth century gold rush and the early twentieth century oil and gas boom to today's oil and gas production, natural gas storage, and wind farms). Because obtaining the requisite property rights—whether that be through negotiated agreements, unitization, or condemnation—will result in dollars in property owners' pockets, property owners may be more inclined to support this approach to carbon sequestration. Further, to the extent that such compensation is tied to actual sequestration (e.g., an amount per ton of injected CO2) rather than a one-time lump sum, a constituency of property owners will form that will want to see carbon sequestration happen.

iii) IOGCC Model Statute. Oil and gas regulators from across the country have recommended that carbon sequestration by treated like natural gas storage, and several states, such as Wyoming, Montana, and North Dakota, have enacted legislation following this recommendation. The legislatures in such states have directed that pore space belongs to the surface estate and provided mechanisms to unitize pore space within geologic structures. Consequently, property owners will be compensated for carbon sequestration that may occur beneath their property. In light of this, California property owners would likely be hostile to an alternative approach under which they may not receive any compensation.

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5) If sequestration was to occur as part of a normal enhanced oil recovery project, property rights would not be required from the owner of the surface estate. However, if sequestration "credit" was to obtained, the operator of the enhanced oil recovery project would likely need to obtain property rights from the surface owner for post-injection monitoring. Furthermore, any regulations governing sequestration "credit" could well require that the operator obtain pore space rights from the owner of the surface estate to protect the sequestered carbon dioxide.

iv) Consistent with developing market for sequestration property rights. Money is already being expended to acquire the right to inject and sequester CO2 in pore space in other states, just as has been done for natural gas storage in California. This developing market relies on the traditional conception of property rights (i.e., that property cannot be used without acquiring the right to do so from the property owner). Changing the law mid-stream would frustrate these earlier investments in carbon sequestration rights and potentially delay the implementation of actual carbon sequestration projects by these early movers.

v) Ability to deal with holdouts through unitization. The risk of holdouts is present whenever large parcels of land with fragmented ownership must be assembled for a development project. For public projects, this problem is often addressed by the government's power of eminent domain. Secondary recovery, which typically involves injecting water to produce otherwise unrecoverable oil and gas, implicates this same risk of holdouts, because it almost always requires coordinating activities across properties owned by different parties. Many states have addressed this problem by creating a statutory process through which multiple properties can be brought together and operated as a single unit(6). Through such statutory unitization processes, a state agency allocates production to the various property owners within the unit on an equitable basis. If property owners elect not to participate, they cannot claim that the subsurface waterflooding constitutes a trespass(7).

Wyoming, Montana, and North Dakota have addressed the risk of holdouts by applying the unitization concept to carbon sequestration. For example, under SB 498 in Montana, once a carbon sequestration project controls subsurface storage rights to 60% of the storage capacity in a proposed storage area, it can apply to unitize the storage area.

Unitization also has advantages over condemnation. The fair market value of condemned property is determined by what is taken rather than what is created(8). Thus, property owners do not share in the upside of the project. In contrast, holders of unitized oil and gas leases continue to share in the upside. Similarly, carbon sequestration proceeds could be allocated to the owners of the storage rights within a unitized storage area, such that they have a stake in the financial upside of the project but are not liable for damages. This could make them more amenable to such a process, especially in light of the fact that their individual subsurface storage rights may be worth little in a condemnation proceeding.

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(6) Statutory or compulsory unitization is distinct from contractual or voluntary unitization, which relies upon unitization clauses that are often found within oil and gas leases. California's limited compulsory unitization statute is found at CAL. PUB. RES. CODE §§ 3630 et seq. Contractual unitization requires that the various leases contain compatible unitization clauses. Furthermore, contractual unitization only works if all of the lessees are willing to unitize; if not, contractual unitization is ineffective.

(7) See, e.g., Baumgartner v. Gulf Oil Corp., 168 N.W.2d 510, 516 (Neb 1969) (holding that "where a secondary recovery project has been authorized by the [Nebraska Oil and Gas Conservation C]ommission the operator is not liable for willful trespass to owners who refused to join the project when the injected recovery substance moves across lease lines," because public policy seeks to avoid the waste of natural resources that would occur absent secondary recovery). As such, unitization could be useful for addressing issues related to brine displacement in saline formations as well. See footnote 4 above. See also Alameda County Water District v. Niles Sand & Gravel Co., 112 Cal. Rptr. 846 (Cal. Ct. App. 1974) (holding that interference with gravel mining caused by migration of fresh water injected underground through a state-authorized aquifer storage and recovery project was not compensable).

(8) See Pacific Gas & Elec. Co. v. Zuckerman, 234 Cal. Rptr. 630, 637 (Cal. Ct. App. 1987).

b) Negatives:

i) Transaction costs. Obtaining property rights from private property owners, whether it be through negotiated agreements, unitization, or condemnation, will undoubtedly result in transaction costs, especially for commercial scale sequestration projects, which may require 100 to 200 square miles of pore space rights(9). To the extent that geologic structures suitable for carbon sequestration are owned by multiple parties, which is almost certainly the case given the large size of these structures, transaction costs will increase. This inefficiency that could impede the implementation of carbon sequestration, especially in situations where ownership is highly fragmented, if unitization is not an option. However, because developers are currently acquiring sequestration rights in some states, notwithstanding fragmented ownership, the inefficiencies may not be significant.

ii) Potential for holdouts. Building upon the transaction costs associated with negotiated agreements, unless there is a way to address the risk of holdouts, the actual development of carbon sequestration project could be delayed or be more capital intensive. Unitization and eminent domain could both serve as mechanisms to deal with this risk, but both create additional problems. For example, the time saved by not having to buy out holdouts through a negotiated agreement could be consumed by litigation related to the unitization or condemnation. Further, unless these mechanisms allow carbon sequestration projects to use pore space pending an allocation/compensation decision (e.g., a quick take provision), the timeline for actual implementation could still be quite long(10).

iii) Increased operating costs. The need to compensate property owners for the use of pore space will increase the operational cost structure for carbon sequestration projects. This could mean that some percentage of potential carbon sequestration projects will not be economically viable. But the same could be said of wind or solar projects (i.e., if access to land were free more projects would be viable).

iv) Continued uncertainty regarding ownership of pore space. Ownership of pore space is not typically set out in the deeds that split property into surface and mineral estates. Consequently, there is often uncertainty as to who has the right to use the pore spaces absent the presence of oil or gas. Those states that have addressed the pore space property right issue have created interpretive presumptions prior conveyances of property. For example, there is a rebuttable presumption under Wyoming's HB 89 that pore space is owned by the surface owner. This presumption, however, is not conclusive, which means that courts may still need to determine who owns the pore space for a particular property. Obtaining such determinations could delay the implementation of carbon sequestration projects.

c) Legislation Needed: This approach would require legislation that allocates ownership of pore space, defines ownership of injected CO2, and allows for unitization and/or eminent domain to acquire pore space, including pore space owned by state and local governments.

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(9) An optimal site for carbon sequestration would have a geologic structure that limits lateral expansion of the CO2 plume and has multiple injection zones, which would decrease the size of the area for which pore space property rights are needed.

(10) Under CAL. CODE CIV. PRO. § 1255.410, a "quick take" in California requires at least 60 days, and if opposed the condemnor must demonstrate that "there is an overriding need" to possess the property now, "a substantial hardship" will occur if the quick take is denied, and that substantial hardship outweighs any hardship on the condemnee.

Limited Private Property Approach

This approach tweaks the traditional concept of underground property rights from the oil and gas context. Instead of an absolute right to pore space, this approach is based on the idea that subsurface property rights are "contingent upon interference with reasonable and foreseeable use" of the property(11). Consequently, so long as the sequestration of CO2 would not interfere with such uses, a carbon sequestration project would not need to obtain the right to use pore space from property owners.

This approach is most prominently reflected in the CCS Reg Project's recently published model legislation. Under this model legislation, a carbon sequestration project could apply for a "pore space permit," which would convey the exclusive privilege to access and use identified pore space for carbon sequestration. Prior to issuing a pore space permit, the state environmental protection agency would conduct a proceeding in which holders of a "non-speculative economic interest" (i.e., the ability to economically recover actual mineral resources or engage in other current or imminent subsurface activities that have substantial economic value) could participate. Anyone that did not participate in this proceeding would waive any and all subsurface property rights that might be affected by the proposed carbon sequestration project. If the injection and sequestration of CO2 would cause actual and substantial damages to such an interest, then either (i) the project would be modified to avoid the damages, (ii) the carbon sequestration project would have to negotiate an agreement with the holder of the interest, or (iii) the state environmental protection agency could authorize condemnation of the interest.

In summary, under this approach, unless a landowner could show current or imminent mineral or other subsurface activities with substantial economic value, the landowner would have no subsurface property rights and a carbon sequestration project could proceed simply by obtaining a pore space permit(12). If such subsurface property rights were demonstrated to exist, then the carbon sequestration project would address these rights through means similar to those described under the Complete Private Property Approach (e.g., negotiated agreements or condemnation).

a) Positives:

i) Pore space permit not required. Under the CCS Reg Project's model legislation, there is no requirement that a pore space permit be obtained. Consequently, developers who have already acquired carbon sequestration property rights would not be required to utilize this process.

ii) Property rights adjudicated once and for all in a unified process. By addressing property rights in an adjudicative proceeding prior to injection, carbon sequestration projects would have greater certainty regarding risk of legal liability. Further, by utilizing a unified process, carbon sequestration projects would avoid piecemeal litigation.

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(11) Chance v. BP Chemicals, Inc., 670 N.E.2d 985, 993 (Ohio 1996) (holding that migrating hazardous waste did not constitute a trespass).

(12) The Kentucky legislature considered a bill with a similar approach this year. HB 491 would have declared geologic strata beneath 5,500 feet that does not contain either "recoverable or marketable" minerals or water that can be used for a beneficial purpose to be property of the state.

iii) Application to saline formations. Most property owners probably would not have current or imminent subsurface activities of substantial economic value in geological structures containing only saline formations. Because this approach eliminates private pore space property rights for this category of property owners, this approach could be advantageous for encouraging carbon sequestration in saline formations.

b) Negatives:

i) Inconsistent with public perception of property rights. Because this approach would be perceived as taking the pore space rights of many property owners (e.g., those without current or imminent subsurface activities that have substantial economic value), enacting this approach may encounter strong public opposition. This inconsistency with the public perception of property rights may also prompt litigation that could delay implementation of projects utilizing this process.

ii) Perceived lack of fairness. One of the sticks in property owners' bundle of rights is the right to explore for valuable minerals. However, under this approach, owners whose property had not been explored, and thus did not have a non-speculative economic interest, would "waive" their pore space rights. This could readily be perceived as unfair, especially (1) as landowners often have neither the financial wherewithal nor the technical expertise themselves to explore for valuable minerals, (2) if other properties had been explored and valuable minerals had been found, and (3) in light of technological advances that make previously unrecoverable minerals recoverable (e.g., horizontal drilling and fracturing now allow recovery from gas shales). Such property owners may view this as a process to avoid paying for their property rights and oppose its implementation.

iii) Inconsistent with developing market for sequestration property rights. It is unclear whether already obtained carbon sequestration property rights would be considered a non-speculative economic interest in the adjudicatory process. If not, existing sequestration easements and leases obtained by early movers could be worthless, which could delay actual implementation of sequestration projects (e.g., rendering existing investment in carbon sequestration worthless could heighten the perceived risks of carbon sequestration investments, thereby making it more difficult to attract investors) and anger those property owners that thought they would be receiving remuneration for granting carbon sequestration rights.

iv) Expertise of adjudicatory entity. Subsurface property rights can be very complex. The adjudicatory entity would require not only the expertise to resolve these issues, but also the reputational wherewithal to support the legitimacy of its decisions in the public's eye. It may well be difficult for a state environmental protection agency, as under the CCS Reg's model legislation, to build such expertise for subsurface property right adjudications.

v) Application to mineral rights. Although surface owners may very well have no realistic expectation to use geological structures suitable for carbon sequestration, mineral estate owners undeniably have an expectation that they may explore the subsurface. The Limited Private Property Approach, however, only recognizes that right if there is the ability to economically recover actual mineral resources in the very near future. This creates a number of problems. First, the scope of what economically recoverable mineral resources changes with the price of the resource. More oil is economically recoverable when the price is at $80/barrel than at $40/barrel. Consequently, mineral rights would morph into a property right, the existence of which depends upon market conditions at a particular point in time. Second, knowledge

regarding the existence of mineral resources is limited. A mineral estate owner may know that valuable minerals exist beneath a property but does not yet know whether they are economically recoverable. Similarly, an area's geology may suggest that valuable minerals exist underneath the surface, but until the subsurface is explored, no one knows whether that is really true. Third, as described above, what is recoverable can change in the future due to technological advances. Consequently, mineral owners' rights may be eliminated under this approach because the property has not yet been explored or the minerals are not economically recoverable under current market conditions or with current technology(13). Mineral owners would almost certainly oppose this approach for these reasons.

In addition, this approach does not apply neatly to carbon sequestration that might occur in depleted oil and gas reservoirs. The mineral estate owners in that situation may still have non-speculative economic interests (e.g., secondary recovery could be used to produce additional oil). Consequently, the carbon sequestration project would have to utilize the same Complete Private Property Approach's tools (e.g., negotiated agreements and condemnation). This approach then may not do anything to substantially advance implementation of projects in these reservoirs, which may be the low-hanging fruit for carbon sequestration.

c) Legislation Needed: This approach would require legislation that establishes the process by which property rights are adjudicated, defines a "fair" threshold at which a property right to pore space is recognized (e.g., "non-speculative economic interest" in the CCS Reg's model legislation), and allows for eminent domain of recognized pore space rights, including pore space containing minerals and pore space owned by state and local governments.

Public Resource Approach

Case law suggests that aquifer storage and recovery ("ASR") law could serve as a third approach at least for carbon sequestration in saline formations. In Alameda County Water District v. Niles Sand & Gravel Co. a gravel operator alleged that the flooding of his gravel pits that resulted from an ASR program constituted a taking because it interfered with subsurface rights and the business operations(14). Recognizing that the regulation of the state's water resources was a constitutional exercise of the state's police power, the California Court of Appeals held that the water district's activities were a legitimate exercise of the police power and that the adverse effect on the gravel operator's use of its property was not compensable(15). This line of reasoning is somewhat analogous to the rationale of preventing the waste of natural resources that underlies trespass cases involving secondary recovery in oil and gas fields(16). To the extent that California under its police power can use saline formations and the geologic structures in which they occur for public purposes, legislation potentially could be enacted that authorizes the use of saline formations for carbon sequestration without infringing upon private subsurface property rights.

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(13) It is also unclear what would happen if valuable minerals were discovered in the course of the sequestration project. Would these be the property of the state? The carbon sequestration project? The prior mineral estate owner?
(14) 112 Cal. Rptr. 846 (Cal. Ct. App. 1974).
(15) Id. at 855. See also Board of County Commissioners v. Park County Sportsmen's Ranch, LLP, 45 P.3d 693, 707 (Colo. 2002) ("[B]y reason of Colorado's constitution, statutes, and case precedent, neither surface water, nor ground water, nor the use rights thereto, nor the water-bearing capacity of natural formations belong to a landowner as a stick in the property rights bundle.") (emphasis added)).
(16) See, e.g., Railroad Com. of Texas v. Manziel, 361 S.W.2d 560 (Tex. 1962) (holding that migrating water from secondary recovery operations authorized by Railroad Commission order in non-unitized field did not constitute a trespass on adjacent mineral estate because this would discourage secondary recovery). See also footnote 6 above.

a) Positives:

i) Does not require acquisition of pore space rights. Acquiring pore space rights, whether it be under the Complete Private Property Approach or the Limited Private Property Approach will take both time and money. In contrast, the Public Resource Approach eliminates the need to spend time and money acquiring pore space rights.

b) Negatives:

i) Uncertainty regarding utilizing police power to effect carbon sequestration in saline formations. Western states, including California, have long recognized the value of fresh water and the need to protect it. This recognition underlies ASR jurisprudence. Similarly, there is plenty of legal support for statutory unitization and governmental authorization of secondary recovery operations in order to prevent the waste of oil and gas. In contrast, carbon sequestration is a new concept. Consequently, regardless of how laudable promoting carbon sequestration may be from a public policy perspective, there would be unavoidable legal uncertainty regarding the state's use of saline formations for carbon sequestration. The courts would have to resolve this issue, which could delay implementation of carbon sequestration projects.

ii) Application limited to saline formations. Although saline formations may have the largest carbon sequestration capacity, some see depleted oil and gas reservoirs as the low-hanging fruit that could most readily be used for carbon sequestration. However, this approach is not applicable to such reservoirs, because injecting CO2 would allow for the recovery of previously unrecoverable minerals. By being limited to saline formation, this approach may not help spur early carbon sequestration projects.

iii) Could require creation of public sequestration entity. Reliance on the state's police power may necessitate that a public entity do the sequestration, just as a water district was conducting the ASR operation in Alameda County Water District(17). One must consider how quickly a public entity could actually implement a carbon sequestration project in an era of uncertain public finances. Further, the potential for liability will accompany any public entity that is actually conducting injection and sequestration operations.

iv) Eliminates private sequestration rights in saline formations. This approach, like the Limited Private Property Approach, could be perceived as taking the pore space rights of many property owners and could encounter public opposition for this reason. Further, this approach could wipe out investments that private parties may have made in obtaining sequestration rights in saline formations, which could delay implementation of carbon sequestration projects.

c) Legislation Needed: This approach would require legislation that recognizes saline formations as public resources and authorizes a public agency to either conduct sequestration operations or permit private entities to conduct sequestration operations on the public's behalf.

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Mr. Martin can be reached at eric.martin@stoel.com.

(17) However, courts have upheld private entities' use of unappropriated pore space in the oil and gas context when that use is authorized by a public entity. See, e.g., Railroad Com. of Texas v. Manziel, 361 S.W.2d 560 (Tex. 1962).

19210 S. Vermont Avenue, Building A, Suite 100
Gardena, CA 90248
Phone: (310) 538-0233
www.irwaonline.org

Course 701: Property/Asset Management: Leasing 10.23-24.2017 Irvine, CA

Course 701: Property Management Leasing

Course Description:
In this course, participants will learn the fundamentals and practical aspects of leasing through exercises, case studies and sample documents. Participants will gain a clear understanding of the reasoning and rationale behind leasing decisions. This course emphasizes the practical aspects of leasing, specifically focusing upon two leasing situations: acquisition leases (when the agency is the lessee) and revenue leases (when the agency is the lessor). Special consideration is given to the complex problems which can arise when the lessee will construct substantial improvements.

Topics:

- Preface and introduction of asset and property management
- Leasing program overview
- Building “the team”
- Decision making
- Leasing negotiation and documentation
- Leasehold administration

Course Level:
Intermediate

Course Tuition Includes:
Participant Manual

Who Should Take This Course:
This course is intended for right of way professionals and individuals who manage properties for lease.

Course is approved by the California Bureau of Real Estate Appraisers for 15 units of continuing education credit
Approval number: 14CP382501018

Last Name First Name

Title

Company Name

Address

City, State, Zip/Postal Code

(_____)_____-_____ □ Yes □ No
Phone Member

Member ID Number

Email Address

If payment includes the fees for registrants other than yourself, check here: ☐
(Please submit names of other registrants on a separate paper along with this form)
Will you also be attending? □ Yes □ No

	Registration Deadlines	Member Tuition	Non-Member Tuition	Total Tuition Amount
On and Before:	**Oct. 12, 2017**	$415.00	$520.00	_____
On and After:	**Oct. 13, 2017**	$440.00	$545.00	_____

Total Member Registrants: _____

Total Non-Member Registrants: _____

PRINT NAME AS IT APPEARS ON CARD: _____ **3-DIGIT CVV:____**

AMEX ☐ **MC** ☐ **VISA** ☐ **Card #:** _____ **EXP:**_____

SIGNATURE: _____ **Date:**_____ **Amount to be Charged:** _____

Course 701: Property/Asset Management: Leasing 10.23-24.2017 Irvine, CA

Sponsor: IRWA Chapter 67
Date: October 23-24, 2017
Time: 2 days – 8 AM to 5 PM Daily
City: Irvine, CA

Class Location:
Las Lomas Community Park
10 Federation Way
Irvine, CA 92603
Participant Capacity: 25
Contact: Rudy Romo
Phone: (949) 724-6845

Four Ways to Register:
Online: www.irwaonline.org
Fax: (310) 538-1471
Phone: (310) 538-0233, x138
Contact Course Coordinator

Accommodations:
Holiday Inn Santa Ana - Orange County Airport
2726 S. Grand Ave
Santa Ana, CA 92705
Phone: (714) 481-6300
Contact hotel directly for rates and reservations

Course Coordinator:
James Vanden Akker, ARWP
Overland, Pacific & Cutler, Inc.
1 Jenner, Suite 200
Irvine, CA 92618
Phone: (949) 951-5263
Fax: (949) 951-6651
Email: jvandenakker@opcservices.com

Course Instructor:
Georgia S. Snodgrass, SR/WA, R/W-NAC, R/W-AMC, is a popular Instructor for the CLS-Professional Development Institute (Contract Land Staff) as well as for the IRWA. She obtained her Bachelor of Science Degree in Business Education from Eastern Kentucky University, Richmond, Kentucky and obtained her Master of Science Degree in School Business Administration from Pepperdine University, Malibu, CA. Prior to joining Contract Land Staff, she was a Real Estate Representative III for the San Antonio River Authority with responsibility for acquisition and project management oversight on behalf of the River Authority, plus additional oversight responsibilities for the asset management program. Prior to the River Authority, Ms. Snodgrass was the chief negotiator for the San Diego Unified School District and was responsible for their asset management program for 32 years. She is past Chair of both Regions 1 and 2 and Past Chair of the International Membership Committee. She has been approved since 2007 to teach the 700 Series of IRWA Asset Management Courses as well as IRWA Communications Courses 205 and 213. In addition, she is a Certified Course Coordinator for her chapter.

Cancellation Policy: All classes scheduled by IRWA are subject to cancellation. All class registrants must contact the Course Coordinator prior to making travel arrangements, keeping in mind that the class may be cancelled at any time (for reasons including, but not limited to, insufficient registration, Instructor emergencies or other issues beyond the control of the chapter and/or IRWA). Fully liquidated damages for any losses incurred by a class registrant are limited solely to a refund of the registrant's prepaid class tuition. IRWA and its chapters assume no other registrant liability resulting from class cancellation.

Tuition Refund Policy: Written notification of intent to cancel registration must be received via email by both the Course Coordinator and IRWA Headquarters Education Staff (education@irwaonline.org) prior to the class start date in order to be eligible for a tuition refund. A full tuition refund will be issued if notice is received 15 days or more prior to the class start date; a 75% refund will be issued if notice is received less than 15 days prior to the class start date, and no refund will be issued for notice received on or after the class start date.