

The Future of Deep Water Permitting

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It is great to be here, and I appreciate the invitation to participate. I am an attorney, and I do represent clients who are involved in filing some of the Notices of Intent that John D'Antonio mentioned. So, I need to make a disclaimer: I am not speaking on behalf of any client; I am just speaking as Michelle today, and again I appreciate the opportunity to be here.

Back in January and February of this year it was a perfect storm with all of the interest in deep water. The legislature was processing the deep water bill, then the issue landed in the newspaper (and I had the fortune or misfortune of being in the newspaper), and then things just exploded as people said, "Hey, what is going on here? I want to get in the game." As the momentum built, water blogs picked up the issues, and it just got crazier and crazier... until we ended up with notices of intent to drill and possibly appropriate millions of acre-feet of deep water. I think that during this crazy time, there was some confusion and some jumbling. Today I wanted to spend my time sorting out the issues and trying to clarify the different separate pieces involved in deep water projects.

And why do we care about the potential of deep water? For my clients who are water suppliers, they have a duty to look at potential sources of water. I always advocate for a diversified portfolio. In other words, if you are a community out in the Eastern Plains, you don't want to be solely reliant on Ogallala aquifer water, and yet what are your other options? If we have the potential of additional sources of water that possibly can be economically feasible, I think that water suppliers (and large water users) must consider whether this is a source that should be developed. That's why I'm such an advocate of deep water production, and so interested in desalination technology, and trying to figure out whether it is feasible...because if there is a chance in the world then we must explore it. We must. Not without considerations for the environment and safety and other water users and so forth. But we would be remiss to not at least consider it.

Again let's look at some of the different separate issues involved in deep water projects and see where there is feasibility and where there are questions. Let me give you a little context for my concerns. When I was in law school in

Vermont, I had a wonderful law professor who always cautioned us against a “mashed potatoes” approach. For example, when you are cooking dinner, if you have beautiful red beets from the farmers market and some nice organic potatoes, you have a few options for cooking them. One option is to throw everything in one a pot, boil it all up, and grind it with a potato masher. What do you get? Well, it looks like dog food. No matter how well it might taste, no matter its nutritional value, all you can say is “ick!” I think that is what happened earlier this year with the deep water hype that didn’t separate out the different issues. All the issues were mashed together, and we ended up with a public perception that deep water development was an icky looking prospect that smelled bad too, and we should all just walk away. I disagree. So, let’s try to separate out the issues.

So what are some of the issues? First and most critical we are talking about water. Water is so important to us, and I am so proud of us as New Mexicans because when I travel and talk to people in other states, they are not as water conscious as we are. For us, because water is so important, any time we are dealing with water, that fact is a separate issue in and of itself. However you feel about water, and whatever your concerns are about water, those same feelings and concerns are going to translate into deep water projects. We can’t resolve all of those issues here today—maybe never—but let’s do acknowledge them and move on.

Some of the other issues that we are going to talk about are ownership, jurisdictional, and regulatory issues. A second area for discussion is this whole question about drilling, producing, and getting the water from the ground to the surface, that is, drilling and production issues. A third area for discussion is treatment, desalination and related issues. For each of these areas of discussion, there are some unknowns. For example, what is really under the ground, how good it is, and how long it will last.

Let’s start quickly with issue number one. Who owns deep saline water? In New Mexico, technically the state owns the water. If you have a water right or a domestic well right, you have the state’s recognition that you may use water for a certain purpose in a certain place. You don’t actually own the water. You just hold a “usufructory right”—a right to use it. What about deep water? There is a live question that affects ownership. Could deep water be more like oil and

gas than water? If deep water is a “mineral,” as opposed to “water,” then its use follows the laws of mineral rights, not usufructory rights. This is a question that is percolating around. It has not been ruled on by courts. However, the legislature seems to think that deep water is “water,” and that the State Engineer has the ability to assert jurisdiction over deep water.

As John mentioned, many Notices of Intent have been filed. What, exactly, has been legally “noticed”? Are these NOIs noticing an intent to drill a well? If so, is there a time period in which you need to drill the well? Does the notice eventually expire? The new deep water statute is not crystal clear on these points, and everything happened so fast that we are still figuring out the answers. You saw the map showing where NOIs have been filed. There are places where different people have filed NOIs right next door to each other. How are we going to administer these situations? Will it be Texas-style oil and gas where he who gets there first can take as much as he can get? The flip side is that the guy who invests the significant monies required to get this water deserves a secure investment that cannot legally be disrupted by the neighbor who sat on his hands and did nothing. One possible solution for addressing neighboring claims is “pooling” the resource as we do with oil and gas—although pooling has also been a fertile ground for lawsuits, so this approach is not without risk. This brings up the question of conflict. “Deep water” by definition does not comingle with the upper aquifers, so let’s just focus only on deep water claimants. What if there are two different wells competing for the same aquifer water, and one of the wells starts to experience interference. Who resolves this dispute? Under the old deep water statute, these issues were resolved in court. When the State Engineer exercises jurisdiction over deep water—which he is now authorized to do—he gets to hear these fights. Lucky guy! So, on this issue of regulatory structure and the ownership of the water, there are a few loose ends but not insurmountable hurdles.

Issue number two is the perceived concern about drilling and production of deep water. We just saw a photo of a building in Dubai that is 2600 feet high. That’s a tall building! On the other hand, it’s not a particularly deep hole. We are drilling freshwater wells here in New Mexico at depths of 2500+ feet. We have very experienced hydrologists. We have experienced well drillers. There is significant knowledge based on oil and

gas drilling—and some of those wells are even deeper. Oil and gas wells, like deep water wells, must prevent commingling with the upper water aquifers. We know how to do this. We have a lot of experience here in New Mexico. Further, keep in mind that on the water side, deep water included, the State Engineer has well drilling regulations that must be complied with... and the State Engineer's office will be on site making sure. The truth is that drilling a deep water well is simply not a problem. We know how to do it. We have the equipment. We have been doing it for years but with a different target: freshwater or oil. The only change from what we already do is that now we are going after water that is of poor (i.e., potentially corrosive) quality—and we may not know how poor until you get there. Again, these are not insurmountable obstacles. These are cost obstacles. Use a stainless steel casing. Not hard. Just expensive.

Issue number three involves perceived concerns relating to water treatment. Again, not hard. John mentioned the desalination plant in El Paso. That's a close-to-home example of what people are doing all over the world. The question is not whether we can desalinate water. The question is the best way to do it. What kind of treatment is most feasible over the lifetime of the plant? What kind of treatment will best handle the water (and you may not know until you have a water sample)? The technology is out there. It might be expensive. Yes, byproducts need to be properly disposed of—and again, we have a regulated system here in New Mexico to handle disposal of produced water. Yes, the byproduct disposal cost will be passed down to the customers—just like they are for municipal wastewater treatment plants right now. Not hard. I think what may be harder is a quantification of the resource. If we are going to rely on this water for municipal uses, and if we are going to make the investment in developing this water, we want some certainty about how long it will last. Municipalities tend to think of in forty-year scopes: is the water going to be there for forty years?

My personal feeling is that what we need to consider deep water as part of our portfolio for conjunctive management. As we look to different sources of water in different periods of drought or different times of the year, it would be great to offer deep water as part of the management package. I'm not suggesting that deep water is a silver bullet. And I am not suggesting that we should suck the deep aquifers dry as fast as we can. I am suggesting that we consider deep water. Maybe not

everywhere. Maybe not every community. But for some, it may be the right fit for now, and I would hate to see deep water development disregarded because of confusion about what is—and is not—problematic. In summary, I think there is merit to deep water exploration and development and I do appreciate the State Engineer's attention to these issues.

Thank you very much.