The Soft Underbelly of the Sustainable Groundwater Management Act

By Steven L. Hoch / Oct 09, 2017

Introduction

Winston Churchill once used the phrase the “soft underbelly of Europe” to attempt to coax the Allies into invading Europe to force Germany to split its resources. The Sustainable Groundwater Management Act (SGMA) also has a “soft underbelly” that seems to have escaped many commentators. We are, after all, talking about groundwater rights and thus we have to be mindful of the oft-quoted saying by Mark Twain, “Whiskey is for drinking, water is for fighting.” Unfortunately, SGMA is constructed in a way that offers individuals or entities an opportunity for mischief to hold other water rights holders hostage, which could derail dealing appropriately with groundwater extractions. This “soft underbelly” deals with water quality, which is often ignored in a water rights fight. The concept of water quality and water rights being twins is, at first blush, viewed in the same way as Arnold Schwarzenegger and Danny DeVito were in the movie Twins. Alas, with water this is no laughing matter. Indeed they are twins, and in dealing with SGMA their DNA should not be separated.

SGMA was a long time coming. Was it not for the drought, it is likely that water rights would continue to be settled through the long and arduous process of groundwater adjudication. While providing for another pathway to deal with sustainability of groundwater resources, the California State Legislature and Governor Brown created SGMA which has lofty goals to deal with the currently delineated 431 groundwater basins of the State which underlie about 40 percent of the surface area of the State.

Of those, 24 basins are subdivided into a total of 108 sub-basins, giving a total of 515 distinct groundwater systems. Only 22 basins are adjudicated. The State Water Resources Control Board (SWRCB), the agency in charge here, sets forth a very ambitious goal for SGMA: “the Sustainable Groundwater Management Act (SGMA) established a framework for sustainable, local groundwater management. SGMA requires groundwater-dependent regions to halt overdraft and bring basins into balanced levels of pumping and recharge.” This is to be accomplished by the creation of a Groundwater Sustainability Agency (GSA) that has the power to carry out the dictates of SGMA.

SGMA—Broken Down into Its Critical Parts

What is management? There are a lot of definitions, including “to wield (a weapon, tool, etc.),” which in this case is very clear. If there can’t be local management, the state will come in and manage it for you. That is a big hammer, and it certainly has gotten a lot of localities’ attention which obviously was its purpose. Interestingly another definition of manage is “to handle or train (a horse) in the exercises of the manège (the art of training and riding horses/the action, movements, or paces of a trained horse),” which oddly feeds right into the old phrase “you can lead a horse to water but you can’t make it drink.” Given that there is no basin or sub-basin in the state that is not contaminated, naturally or otherwise, with levels of contaminants of concern (and others yet to reach that level) the issue of water quality cannot be ignored.

Dictionary definitions aside, SGMA contains its own critical definitions. Sustainable groundwater management is defined as “the management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results.” It also defines what undesirable results would be that are problematic and need management that includes “significant and unreasonable degraded water quality, including the migration of contaminant plumes that impair water supplies.”

What is a plume? Essentially it is a body of groundwater containing contaminants, emanating and migrating from a point source. But such plumes can be very large and many are amorphous, that is, just big blobs.

What is migration of contaminant plumes? According to the EPA: Subsurface contaminant movement depends on both the site environmental, physical, chemical, and biological characteristics and the contaminant chemical properties. Migration pathway, mobility, and persistence are chemical dependent and are also affected by site environment factors, including pH, concentration of other chemicals, oxidation-reduction potential, groundwater geochemistry, organic matter content, and the presence of microorganisms. Mobility is the potential for a contaminant to migrate from a source, and persistence is a measure of how long a contaminant will remain in the environment.

To simplify, it is the movement of contamination which can be determined by looking at a wide variety of chemical and physical parameters. In other words, to know about this movement, at the very least you have to know:

- What are the contaminants you should be looking for?
- Where are they?
- What will make them move?
- When will they move?
- Why will they move?
- Where are they going?
- What will they be like when they get there?
These are questions whose answers are not the same for every basin or sub-basin and could differ for various parts of the basin or sub-basin.

Typical Steps of Water Rights Battles

In the usual water rights battles, which will be fought out in SGMA, the following is often done:

1. Someone has to develop conceptual model of the basin/sub-basin and then everyone else has to buy in to it. (In adjudications it’s the Court that has to be the decision maker when everyone disagrees and in no adjudication is there ever 100% agreement).
2. Aquifer testing will have to be done or if there is data already available will have to be reviewed, re-reviewed and batted to and fro.
3. A determination of who are the water rights holders, how much each claims to own, and whether or not their claims are valid. This includes of course who uses what, how much and when, but that is not only a factual fight, the somewhat byzantine rules of water rights that exist in California are another source of dispute as to how the rules apply, to who and why.
4. There will need to be a determination of what is the safe yield of the basin/sub-basin. Safe yield is the amount of water that can be withdrawn from an aquifer without significant ecological impacts. Based on this calculation water withdrawals can be balanced with return flows to the aquifer, which can include wastewater returns, after appropriate treatment, and collecting and infiltrating treated stormwater, artificial recharge.

The Surprise

The surprise here is that SGMA mandates you need to avoid contamination movement and to do that you need to know where the yucky stuff is, what it is, who put it there, how much is there, and what happens to it if you MANAGE the basin. As we will see shortly, if you do move it, you are giving someone a chance to stop you in your tracks to get a sustainability plan moving and as we will also see, the agency you are trying to get together may be considered a polluter.

You may ask just who is going to make a “stink” over this because aren’t we all trying to do the right thing? Well, the list could be long and the motivations varied—some legitimate and some not. The types of persons/entities could include:

1. A polluter who does not want its plume to be impacted or remediate affected by pumping or the cessation of pumping or even recharge in a given area.
2. Water rights holders who believe that certain sustainable actions negatively impact their rights.
3. Citizens who believe that the sustainable actions will cause their drinking water will contain toxic chemicals or that there will be some impact on lakes, streams, etc.
4. Water providers who have and need to rely on specific areas and volumes of groundwater.
5. State or Federal agencies and NGO’s who believe that the sustainable actions may impact, for example, various species of plants or animals or other possible natural resource damage.
6. And of course, your local gadfly.

This is not just speculative. These people exist, and these types of actions do occur.

So how do these folks get to legally do all this? Unfortunately the opportunity to take such courses of action lies in SGMA itself and in other laws, particularly federal law.

Enter the Comprehensive Environmental Response, Compensation, and Liability Act

By far the biggest problem is the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) commonly known as Superfund (and its state equivalent, the Hazardous Substance Account Act). These laws do not make for good water management and use.

The law is broad as it sites to potentially responsible parties (PRPs—CERCLA speak for “polluter) who are operators of the facility. While not defined in the statute, an operator has been defined by the Courts as someone who has control over the environmental operation and can affect its functioning.

CERCLA comes into play with the release or threatened release of hazardous substances from a facility which is defined as any site or area where a hazardous substance is located. Section 101(9) of CERCLA. It specifically includes: Any “building, structure, installation, equipment, pipe or pipeline, well, pit, pond, lagoon, impoundment, ditch, landfill, storage container.” Good groundwater management may use or regulate the type of “things” as set forth in the definition. So the GSA or some of its members have facilities, or at least are responsible for running them.

The second cog in the CERCLA set of gears is the issue of “release.” CERCLA § 101(22) defines “release” as any “spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment.” The courts have construed CERCLA’s definition of “release” broadly.

Here is the kicker: if you “manage” as required by SGMA, you have control over the environmental operation and can affect its functioning. So if you move a plume or threaten to move it, you may be staring down a barrel of a lawsuit.

Al Gore to the Rescue

But all is not lost and we can thank then Senator Al Gore who sought to change CERCLA by inserting into the bill to essentially diminish liability of a PRP.
While he failed to have it written into the legislation, the Courts have picked up his attempted insertion and made them part of the lexicon of CERCLA to apportion liability among the parties to an action. They are referred to as the “Gore Factors.”

These factors are:

1. Parties’ ability to demonstrate that their contribution to a release of a hazardous waste can be distinguished;
2. Amount of hazardous waste involved;
3. Degree of toxicity of the hazardous waste involved;
4. Degree of involvement by the parties in the generation, transportation, treatment, storage or disposal of the hazardous waste;
5. The degree of care exercised by the parties with respect to the hazardous waste involved taking into account the characteristics of the hazardous waste;
6. The degree of the parties’ cooperation with federal, state and local officials to prevent any harm to public health or the environment.

Other factors that Courts consider include:

1. Relative fault of the parties;
2. Use of the property during time of ownership;
3. The parties’ state of mind;
4. Knowledge of or acquiescence to the contaminating activity;
5. Benefit from remediation.

**The Issue with the Factors is Fluid**

Unfortunately, each of these factors is weighed by the Court differently from matter to matter. The standards by which the weighing are done does give considerable deference to the Court hearing the matter as opposed to some higher court that may be reviewing the decision. So your first chance to get it right is the critical one. The biggest chip to play is that you are doing what the state legislature requires you to do, that you didn’t put the contamination there and moving it is a result of trying to have a sustainable basin.

The tables should be turned on a contaminator and all guns should be fired at that person/entity to maximize their inherent responsibility. More troublesome, and less clear as to a course of action, is someone who is not the contaminator but is using CERCLA as a negotiating tool to bend a plan to their advantage or to stop a plan altogether. There is no good card to play here unfortunately and the opponent’s legal grounds are likely solid. This is the problem with SGMA and CERCLA. It is really in need of a fix.

**Conclusion**

You have to accept the fact that there may be someone who will use SGMA’s soft underbelly to undermine sustainability, maybe for good reason, maybe for not-so-good a reason.

So it comes down to this because if you are trying to create a sustainable basin, your choice is really very simple and Yogi Berra said it correctly many years ago,

“When you come to the fork in the road, take it.”

Given that, the choice is either to move forward or quit before you start. That makes the choice clear.