

August 30, 2018  
Austin, Texas

Dear Sunset Commissioners:

I am testifying in opposition to the staff recommendation to abolish the Texas Board of Professional Geoscientists. My comments today are focused on the issue raised in the executive summary: "State Regulation of Geoscientists Provides No Measurable Public Benefit and Should Be Discontinued." Specifically, my comments relate to the regulation of geoscientists having no measurable public benefit.

It's difficult to prove a negative, but I do have my personal experience as a registered geoscientist, a recent manager of registered geoscientists and geoscientists in training at a state agency, and a professor and researcher. I've also been around long enough to see how the business of geoscience changed for the better after the passage of the Texas Geoscience Practice Act. I can assert without a doubt that the registration of geoscientists in Texas has improved the quality of work in the state, benefitting the public and the state's economy. There are a number of reasons for this improvement in quality:

1. **Having to seal a piece of work is sobering.** Every geoscientist that applies their seal knows that they are assuming liability for the work therein and that if the work therein is subpar, incorrect, or incompetent, they could lose their license, and losing your license is losing your livelihood. I treat the seal with this level of respect, as do my colleagues. As a consequence, I've seen the quality of work and responsibility for that work increase due to sealing. Greater responsibility leads to better science; better science benefits the public.
2. **Sealing gives registered geoscientists power to ensure that their work remains at the highest quality.** For example, if a technical report goes up the chain for review and management tweaks the conclusions, a geoscientist can refuse to seal the report because she can no longer support it. This situation is not a great place to be since it places your job at risk; however, putting your job at risk pales next to putting your livelihood at risk (see Reason 1). This is not a hypothetical—I have seen this happen. When it happened, the concerns of the geoscientist gave management pause, and the geoscientist's work was respected. That doesn't happen without registration. Protecting the integrity of geoscientists' work benefits the public.
3. **Registration results in better-trained graduates.** Geology students today not only take classes to earn their degree but also to prepare themselves to pass the geoscientist exam. A professor has relayed to me that geology students now chose more difficult electives in anticipation of taking the geoscience exam. Better-educated geoscience graduates benefit the public.
4. **Sealing ensures that young geoscientists receive the mentoring they need to become licensed geoscientists.** Mentoring occurred before registration in Texas, but it's much more serious with registration. This seriousness comes from the mentor having to seal the work of the mentee (see Reason 1). With registration, it

is not just the mentee's job to ensure that they've done a good job, but also the mentor's job because the mentor has to seal—and therefore guarantee—the work. A well-trained next generation of geoscientists benefits the public.

5. **Registration ensures that geoscientists continue to receive training.** With how busy we all are these days, it's difficult to make time to learn. Continuing education requirements that come with registration ensure that geoscientists stay at the top of their game. Furthermore, annual ethics training mandates geoscientists to learn about ethics in the practice of their profession, training that wasn't required (and therefore wasn't done) before registration. Continuing education on science and ethics ensure that the public benefits from better-trained geoscientists.

My career has been focused on groundwater resources, where much of the work today requires registration and sealing. Water, not oil, is the grease that keeps the Texas Economic Miracle rolling forward, and professional geoscientists play a critical role in greasing the economic wheel. Geoscientists locate and design wells for industry, power, cities, towns, and homeowners. Registration gives consumers greater confidence that who they hire knows what they are doing and the ability to hold that person accountable for their services. Registration benefits the public financially (mistakes by unqualified professionals are costly) while protecting human health and safety.

Thank you for the opportunity to testify and provide these comments. I also appreciate the Sunset staff for their willingness to read and consider my comments. If you have any further questions, please contact me at robertemace [at] gmail.com.

Your friend in water,

A handwritten signature in black ink, consisting of a large, sweeping loop followed by a smaller, more defined loop, ending in a short horizontal stroke.

Robert E. Mace, Ph.D., P.G. #469