

From: [Sunset Advisory Commission](#)
To: [Brittany Calame](#)
Subject: FW: Public Input Form for Agencies Under Review (Public/After Publication)
Date: Thursday, August 16, 2018 5:03:11 PM

-----Original Message-----

From: sunset@sunset.texas.gov <sunset@sunset.texas.gov> On Behalf Of Texas Sunset Commission
Sent: Thursday, August 16, 2018 4:32 PM
To: Sunset Advisory Commission <Sunset@sunset.texas.gov>
Subject: Public Input Form for Agencies Under Review (Public/After Publication)

Agency: TEXAS BOARD PROFESSIONAL GEOSCIENTISTS TBPG

First Name: Rebecca

Last Name: Smyth

Title: professional organization

Organization you are affiliated with: Austin Geological Society

Email:

City: Austin

State: Texas

Your Comments About the Staff Report, Including Recommendations Supported or
Opposed:
Austin Geological Society

August 16, 2018
Texas Sunset Advisory Commission
P.O. Box 13066, Austin, TX 78711
Email: sunset@sunset.texas.govChairman

RE: Texas Sunset Advisory Commission Staff Report (the Staff Report) on the Texas Board of Professional Geoscientists (the Board)

Dear Mr. Chairman and Members of the Texas Board of Professional Geoscientists:

The Austin Geological Society (AGS) believes licensure of geoscience profession is essential to the health, safety, and welfare of Texas citizens.
We think the public is entitled to standards of geoscience practice that require oversight of geoscience professionals.

AGS's membership represents every branch of the Geosciences; many of the members are licensed Professional Geoscientists (PGs) in Texas, and in other states of the U.S.A.

We take issue with statements in the Staff Report on the Board, especially recommendations to abolish the Board

and end the requirement for geoscience licensure in Texas.

Statements paraphrased from the Staff Report followed by AGS comments are:

1. Almost no geoscientists deal directly with the public – our clients are mainly organizations. Therefore, licensing is not necessary for public protection.

This is ambiguous since there is no definition of “public” in the rules.

Geoscientists work with entities of all sizes, including individuals and residential and commercial real estate firms (e.g. property assessments for foundation stability and property transfer, as defined in ASTM Standard 1527-13 and other standards and laws); small communities (e.g. water supply and water quality issues); and large corporations (e.g. frack water supply issues for oil companies and provision of mineral commodities).

Examples of negative outcomes of work completed without input from PGs include for Austin, TX: instability of sound walls along Loop 1; long delay of Loop 1 modification after discovery of a cavern in the 5th St. tunnel; threat to houses on Cambria Drive from a large cavern system.

2. There has been no measurable impact of PG licensure on public protection.

While catastrophic events rarely go undetected from lack of geological oversight, (e.g. earthquakes or volcanic eruptions), many geological impacts are slow-moving. Examples of impacts that can and have been detected via long-term geology- or hydrogeology-based monitoring IF a PG is involved include: migration of groundwater contamination, early detection of a potential slope failure, sinkhole collapse). Individual PGs can provide many specific examples.

In addition, PGs have the primary responsibility for providing technical analysis and opinions on a wide range of issues. PGs are responsible for the evaluation of water well permit applications and amendments necessary to ensure the proposed well will be completed according to standards necessary to protect groundwater quality. PGs are responsible for evaluating and monitoring water quality in our State’s major and minor aquifers to ensure that no actions at land surface lead to groundwater contamination. The protection of water quality is a fundamental element of public protection:

recent events in Flint, Michigan clearly demonstrate this. Another example is the protection of an individual’s groundwater rights from encroachment by PGs working with approximately 100 groundwater conservation districts in Texas to develop and monitor well-spacing rules, determine the availability of groundwater, analyze groundwater depletion rates, and estimate groundwater usage. More specifically, PGs must be able to:

- interpret complex subsurface geology to depths of sometimes as much as 10,000 ft using driller’s logs, geophysical logs, geological maps, and other resources,
- build and interpret predictive, three-dimensional groundwater availability models,
- provide professional support during contested case hearings and other legal proceedings,
- identify subsurface sources of contamination, and
- provide professional technical counsel to the groundwater conservation districts.

The qualifications to accomplish these tasks have been established in Texas through the Board. To abolish requirements for these qualifications, including requirements for continuing education, would result in the performance of these activities by unlicensed, unqualified individuals with unspecified training and skill sets.

3. There has been no meaningful enforcement action taken by the Board.

This may be a result of the current Board’s focus on continuing education credits rather than geoscience practices. Ways in which improvements could be made include (a) hiring a geoscientist Executive Director (b) an educational campaign for members of the public (real estate people, drillers, groundwater districts, and builders) who do use geoscientists as to what to expect from them and what redress they have if not satisfied (c) educational campaign to ensure that geoscientists inform their clients of the Board’s existence and its functions and powers, and (d) revise the rules to more clearly define conflicts of interest, the public’s interests, and standards of practice.

There has been considerable concern among Texas PGs for some time about the lack of action of any kind by the TBPG.

4. No complaints have been brought by the public.

It is an aphorism that “it is impossible to prove anything from negative evidence.” Be that as it may, the following points are important:

a. The mere fact that a licensing program is in place discourages many potential “bad actors” from attempting to practice in Texas.

b. Most egregious cases of project failure in Texas are due, not to poor work on the part of a Geoscientist, but by the fact that no Geoscientist was engaged or, if engaged, was not permitted to spend enough money to do a good job. There have been cases of geoscientists refusing to sign off on their own work for this reason. We can judge the quality of good geological work done by PGs by the letters written by groundwater districts on behalf of TBPG. You can see the results of poor geologic work, or the absence of it, in the huge losses to the public purse occasioned by encountering a large cavern in a water tunnel in front of the Tom Miller Dam that caused a 9-month delay in construction, and the failure of the sound barriers along Mopac due to inadequate foundation design where shrink-swell clays of the Del Rio Formation were present.

5. The Board was not established to protect the public in the first place, but primarily “to legitimize the profession” and to protect geoscientists from engineers and untrained competitors.

We disagree with this inference. The bias in the Staff Report revealed by this statement is truly unfortunate. During the substantive deliberations that ultimately resulted in creation of the Board and corresponding licensing requirements, the primary focus was that geoscientists in Texas with bachelors, masters, and doctoral degrees in geoscience disciplines (often with 10 to as many as 40 or more years of experience) were required to have work products reviewed and sealed by Professional Engineers (PE) who often had much less professional experience than the geoscientist(s), and little to no formal geoscience training. That is to say, they did not know the import for public safety of what they were signing. The requirement for review of geoscience products included those produced for State regulatory agencies.

Hence, the Texas Legislature rightly decided that to require a PE’s approval of geosciences work products did not make sense, and was an inefficient and costly requirement for both public and private entities in Texas. On close reading, the Staff Report seems to question past decision-making of the Texas Legislature.

6. There are too many (50%) Texas geoscientists exempted from licensure requirements.

Texas is unique because it is the center of the world-wide petroleum industry, as well as being itself the largest producing state in the U.S.A.

There are therefore many more geoscientists in Texas than in any other state, and at least half of these are petroleum geologists. Most petroleum geologists do not need or want licensing because their work products are held in strict confidence for competitive reasons, and their clients are knowledgeable members of the industry. There is therefore no imbalance of information between buyer and seller. The number of geoscientists who do need licensure in Texas is of the same order as the total number of geoscientists in other States.

7. More direct oversight of geoscientists’ work is provided by other state agencies [e.g. Railroad Commission of Texas (RRC) Texas Water Development Board (TWDB), Texas Commission on Environmental Quality (TCEQ)], which renders ongoing state regulation of geoscientists unnecessary to protect the public.

This is a spurious observation. Texas State agencies review geoscience work, but rely on the fact that work has been completed by individuals or companies whom have met minimum standards of practice as defined by PG licensing requirements. The agencies do not have the budget or infrastructure to oversee all aspects of geoscience work conducted in Texas.

There are enacted laws, directives, and regulations requiring geoscience work be conducted by recognized and

qualified professionals, e.g. PEs or PGs. For

example: CFR 40 Section 312.10 defines an "environmental professional" as a licensed PE or PG and CFR 40 Section 312.21 further elaborates on the need to have all work done under the direct supervision of an "Environmental Professional" defined as a PE or PG.

The TCEQ Subchapter A rules have the term TXPG "Geoscientist" woven throughout Sections 213.1-213.14, Chapter 230, 230.1-230-11 on "Groundwater Availability Certification for Planning", and Chap 330 Municipal Solid Waste.

There is an obvious intent of the Legislature to recognize and require Texas PG, along with PE certification, as one of the accepted criteria for professionals responsible for "protecting human health, public welfare and the natural resources of Texas".

8. A large percentage ("78%") of CURRENT Texas PGs were grandfathered into registration. Since the exempted PGs did not take the National Association of State Boards of Geology (ASBOG) exam, there is no guarantee they are well-trained.

It is our understanding that institution of professional licensing without a provision for grandfathering is unconstitutional; therefore all provisional licensing bills have a grandfathering clause.

Geoscientists typically do not retire, they work until they die, even if at a reduced compensation rate. Hence, they are not burdening state or federal governments by drawing from multiple benefit packages. They are also adding to State GDP by producing valuable work. An estimate is that the State is receiving a benefit of approximately 24,000 years of experience for free.

However, the number of grandfathered PGs will decline sharply in the near future as many are advanced in age.

Many young professionals do not join organizations of any kind now (e.g. professional societies, Lions Club, Rotary, etc.). Getting professionally licensed is no exception. However, as they get older, they do join. One may expect PG numbers to stabilize in the near future.

9. "Just over half of the states regulate the practice of geoscience or geology, while all states regulate engineers and architects."

Our view is that over half of the states in the U.S.A. regulate geoscience practitioners, and others are in the process of establishing regulations. An important element that was ignored by the Staff Report is the license requirement for Texas geoscientists working in other states. If the recommendation to abolish the licensing program in Texas were to be adopted, there would be significant tax loss to the State of Texas because Texas PGs and associated companies would not be able to engage in professional work in other states.

In summary, if the Texas PG registration goes away, the legislature will eventually need to recreate the agency thereby adding economic burden to the public. We believe current criticism of the Board is largely due to ineffective leadership. The Executive Director should be a licensed P.G., and the focus of the Board should be on proactively taking action to ensure public safety and welfare.

On Behalf of the Austin Geological Society,

Will Boettner, AGS 2017-2018, President

Rebecca C. Smyth, AGS 2015-2016, President

Any Alternative or New Recommendations on This Agency: Ways in which improvements could be made include (a) hiring a geoscientist Executive Director (b) an educational campaign for members of the public (real estate people, drillers, groundwater districts, and builders) who do use geoscientists as to what to expect from them and what redress they have if not satisfied (c) educational campaign to ensure that geoscientists inform their clients of the Board's existence and its functions and powers, and

(d) revise the rules to more clearly define conflicts of interest, the public's interests, and standards of practice. There has been considerable concern among Texas PGs for some time about the lack of action of any kind by the TBPG.

My Comment Will Be Made Public: I agree

From: [Sunset Advisory Commission](#)
To: [Brittany Calame](#)
Subject: FW: Public Input Form for Agencies Under Review (Public/After Publication)
Date: Thursday, August 16, 2018 3:52:42 PM

-----Original Message-----

From: sunset@sunset.texas.gov <sunset@sunset.texas.gov> On Behalf Of Texas Sunset Commission
Sent: Thursday, August 16, 2018 3:47 PM
To: Sunset Advisory Commission <Sunset@sunset.texas.gov>
Subject: Public Input Form for Agencies Under Review (Public/After Publication)

Agency: TEXAS BOARD PROFESSIONAL GEOSCIENTISTS TBPG

First Name: Rebecca

Last Name: Smyth

Title: PG #68

Organization you are affiliated with: retired, part-time professional with UT Austin Bureau of Economic Geology (BEG) and part-time independent hydrogeologist

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State: Texas

Your Comments About the Staff Report, Including Recommendations Supported or Opposed:
Rebecca C. Smyth, PG #068

August 16, 2018

Texas Sunset Advisory Commission
P.O. Box 13066, Austin, TX 78711
Email: sunset@sunset.texas.gov

Mr. Chairman and Members of the Texas Sunset Advisory Commission,

The following statements reflect my personal opinions, and in no way represent views of the UT Austin Bureau of Economic Geology or other employers. I am strongly opposed to the Sunset Commission's move to abolish the Texas Board of Professional Geoscientists (TBPG).

After detailed review of the Sunset Commission's Staff Report on TBPG, it is clear the authors of the report do not understand geoscience work. I admit most geoscientists are not good at self-promotion, so we must take partial responsibility for lack of understanding of how our expertise – when utilized – greatly benefits the health, safety, and welfare of Texas citizens, as well as citizens of other states where Texas PGs work. However, there are many examples of such work on websites and in reports by State agencies, private foundations, environmental consulting firms, academic and trade journals; not to mention geoscience-related articles in newspapers and magazines.

I'm disappointed in TBPG review-staff for not informing themselves enough to understand how the practice of geoscientists greatly benefits the public.

The statement: "All examples of harm provided were hypothetical in nature and often involved something that licensure could not have prevented, such as flash floods and sinkholes" shows the geoscience-ignorance of report authors. For example, mapping – geological, topographical, and ecosystem/ecological - commonly performed by geoscientists – can identify flood-prone areas on which residential development should NOT take place.

It is surprising that Sunset Board staff do not understand why oil and gas geoscientists are exempted from licensure in Texas. Geoscientists of diverse subdisciplines should be applauded for reaching a compromise on which of us should and should not be licensed in Texas. Many of my colleagues are covering this topic in other submittals. Examples of collaboration include oil company hiring of PGs to evaluate water resources for frack-water supply, while also considering potential impacts to water resource.

Hopefully, Texas PGs will have the opportunity to provide succinct examples – via oral testimony – of how our work enhances public protection. A few general examples are (a) identification and protection of underground water (groundwater) resources, (b) delineation of flood-prone areas that should not be used for residential land development (recall flooding from Hurricane Harvey), and (c) monitoring for land subsidence in diverse settings.

The Staff report resorts to personally attacking PGs by both criticizing us for "lack of engagement" in pursuing State licensure prior to 1993, then implying we have been self-serving in our encouragement of younger professionals to seek PG-licensure. The report states the only reasons geoscientists wanted to be licensed were to, among other things, "have authority to place a seal on work submitted to other licensed professionals..." and to "...help financially benefit the profession".

These statements are petty.

The "Fiscal Implications" are simple. For example, the section does not consider the cost of RRC or TCEQ having to (a) perform the work of PGs, or

(b) take additional time to review reports due to not assuredly-completed by qualified-geoscientists. Funding for such agencies will likely need to be increased to allow for hiring additional FTEs, training, and equipment if the TBPG is abolished. Additional costs will be incurred by changing laws requiring work to be completed/overseen by PGs.

In summary, I view the Sunset Commissions report on the TBPG as short-sighted by recommending the agency be abolished. And, I hereby accept responsibility for seeking ways to improve a future version of the TBPG.

Respectfully, Rebecca C. Smyth, TXPG #068

Any Alternative or New Recommendations on This Agency: The future Director and selected board members should be professional geoscientists with at least 15-years of practical experience in the field. Expenditures of over \$500,000 to operate the agency should be questioned.

My Comment Will Be Made Public: I agree