From: Sunset Advisory Commission
To: Brittany Calame
Subject: FW: Public Input Form for Agencies Under Review (Public/After Publication)
Date: Wednesday, August 15, 2018 10:32:58 AM

-----Original Message-----
From: sunset@sunset.texas.gov <sunset@sunset.texas.gov> On Behalf Of Texas Sunset Commission
Sent: Wednesday, August 15, 2018 10:29 AM
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: Perry

Last Name: Evans

Title: Professional Engineer & Professional Geoscientist

Organization you are affiliated with:

Email:

City: Lubbock

State: Texas

Your Comments About the Staff Report, Including Recommendations Supported or Opposed:
Outline

I. Public health and safety
Professional geoscientists, like their engineering counterparts, prescribe to a code of ethics with protecting the public health and safety at the forefront. Having a professional license, whether it be in professional engineering or professional geoscience, does not mean you will always get a good engineer or a good geoscientist or have a successful project. It just identifies that an individual has a minimum level of competency to hold themselves out to the public as a licensed professional. The argument that 78% of geoscientists were grandfathered in falls apart when you look back at the engineer's license history. Engineers were "grandfathered in" in Texas and were not required to take the fundamentals or professional practice engineering exams from the exams inception in 1962 to sometime in the early 1990s. The geoscience license allowed a comparatively short grandfathering period to accommodate those with the qualifying education and experience already practicing in the field. The percentage of individuals required to be licensed is also a weak argument. The report stated that about half the profession is not required to be licensed; comparatively about 20% of working engineers are licensed.

II. Engineering alone is insufficient to understand what is going on in the subsurface.
Ironically this month's issue (July/August 2018) of the American Society of Civil Engineers Geostrata magazine highlights five stories of geofailures that directly relate to the need for geoscientists input. With permission, a copy of the article "Poison Oak, Mistakes, and Lessons: Tales of Geofailure Investigations" is attached for your review and is self-explanatory.

In the same addition of Geostrata magazine mentioned above, the article entitled "Oroville Dam Spillway Incident", notes the importance geoscientists play in protecting the public health and safety: "Finally, recognizing early in the

design process that the spillway incident was due to multiple factors allowed the engineers, geologists, and scientists to design the many safeguards necessary to keep the public protected." As our infrastructure continues to age in Texas, and as the article highlights, I believe geoscientists will play an important role in the evaluation and renovation of similar projects in our state and having a licensed geoscientist involved in these efforts will be important to protect the public health and safety. With permission, a copy of this article is also attached for your consideration.

III. "no measurable impact on public protection": Environmental Issues

The release of various chemicals to the environment affects soil and groundwater throughout Texas. Many of these chemicals cause adverse health effects or cancer. Determining the degree to which chemical releases are to be cleaned up depends on the risk to the public health and safety. The risk-based process to determine the cleanup goal that is protective of the public health and safety is determined by interpreting field data and modeling subsurface processes. The movement and ultimate concentrations of released chemicals (fate and transport) is largely controlled by the soil, geology, and hydrogeology of the subsurface. Geoscientists are crucial to understanding and determining the subsurface physical, chemical, and hydrogeological properties that control these processes. These soil, geology, and hydrogeological processes ultimately control and determine the exposure pathways to the public to chemicals released into the environment.

These processes directly affect the impact on public protection and are best determined by licensed geoscientists.

IV. Groundwater: Environmental (public exposure pathways and clean-up goals)

The classification of the groundwater aquifers beneath or affected by a release is also a critical component in the risk-based determination of the cleanup goals for contaminated sites. Understanding of the hydrogeology of the subsurface and determining the long-term sustainable yield of the aquifer is critical to this classification process. Licensed geoscientists are best equipped for these groundwater classification services.

V. Groundwater: Water Supply

According to the Texas Water Development Board, groundwater provides about 60 percent of the water used in the state. As we move forward and Texas population continues to grow, and correspondingly water demands increase, licensed geoscientists will be needed. Strategies such as sustainable pumping rates, aquifer storage and recovery, managed aquifer recharge, and water reuse/recharge, and others will be crucial to Texas continued growth and remaining relevant in the future. I believe the licensed geoscientists will play an ever-increasing important role in characterizing and managing our State's groundwater supplies.

VI. Closing

The goal in licensing geoscientists to practice is to ensure the technical competency and ethical conduct of those practicing geoscience. For the reasons stated above, I believe the public is better protected if more practicing geoscientists were licensed under the current system, and strongly recommend that the licensing program be continued.

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I was unable to attach the reference articles. Please refer to ASCE Geostrata magazine, July/August 2018 issue; contact the editor Jim Withiam for an electronic copy jlwithiam@dappolonia.com or I will be glad to forward it.

Any Alternative or New Recommendations on This Agency: No.

My Comment Will Be Made Public: I agree