

CLIMATE INTERVENTION LAW
PROFESSOR TRACY HESTER
FALL 2019

INSTRUCTIONS

This final examination is a take-home exam subject to the following requirements:

1. You will have **eight (8)** hours to complete the examination after you check it out online. If you check out the examination at a time less than eight hours before the final deadline, you must turn in your exam **before** the deadline lapses (i.e., you can't take the full eight hours). You are responsible for knowing the Law Center's rules regarding when take-home exams can be picked up and uploaded.

As always, provide only your exam number (not your name) on your exam. LL.M. students should type "LL.M." next to the exam number on their exams. Foreign LL.M students will have an extra two hours (i.e., ten (10) total hours) to complete the exam. Non-law graduate students from other schools should also mark "Non-Law" next to their exam number as well.

2. You may pick up your examination at the start of final exams period, i.e. **December 2 at 9:00 am**. The deadline to submit all final examinations is **December 9 at 5:00 pm**. We cannot accept any examinations submitted after that date.
3. This examination consists of three (3) essay questions. Each essay has a limit on the length of your answer. Rather than page limits, you will have a **2,500-word limit** (approximately 10 double-spaced pages) for **each** essay (i.e., your total exam answer should not exceed 7,500 words, or 30 double-spaced pages). Please remember that I don't require you to use all ten pages, and that a clear and concise five-page answer will get a higher grade than an unfocused answer that fills ten pages. You presumably know the materials, so only recite definitions, quotes, background information or cases to the extent necessary to provide a cogent answer. Each question will weigh equally in your final grade, so please be sure to answer each of them fully.
4. This examination is **limited open book**. You can use your own notes and any materials distributed in class or posted to the class website. Do not use third-party commercial materials, outlines, other texts or online resources. You can access and use cases or direct primary materials (e.g., treaties) if they were specifically discussed in class or directly referenced in the website. The answers to these questions, however, should not require extra materials.
5. You do not have to use the Electronic Blue Book for your typed answers. You are allowed to use spell checkers or other grammar software (subject to the source restrictions described above).
6. This final examination is subject to the University and the Law Center honor codes. Once you have received this examination, do not discuss it with any other student until after the full examination period closes (i.e., end of day on December 12).

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FINAL EXAMINATION

Question 1

After graduating, you have started your career by forming a new law firm dedicating to protecting the rights of persons injured by environmental contamination and pollution. As your law firm's reputation grows, an unexpected new type of client begins to appear in your office: sophisticated corporate plaintiffs seeking recovery for their environmental damages. While these cases usually involve spills or polluted properties, one prospective client has brought a particularly intriguing problem to you.

Jim Queen owns and operates the vast Queen ranch along the Gulf coastline of Southeast Texas. His family has owned and run the ranch for over 100 years, and its farming and ranching activities have generated a vast fortune for the Queen clan. The ranch covers nearly 1 million acres, and it has supported lucrative agricultural crops, cattle and sheep herding, some oil and gas development and tourism. Some of that tourism includes wildlife enthusiasts who flock to the ranch every spring to observe nearby endangered whooping cranes and other migratory birds. All of these activities rely on stable and consistent surface water and groundwater supplies.

This rich family history, according to Mr. Queen, is under siege. A historic drought during the past two years in South Texas has caused a total loss of the Queen Ranch's crops, and he has had to sell most of his cattle and sheep herds. While the Ranch's mineral estate remains potentially profitable, he cannot lease or develop those deposits without a reliable source of water needed for hydraulic fracturing operations. Because the Ranch is slowly becoming an arid desert scrubscapes, tourism has started to decrease markedly. While Mr. Queen has sought other water supplies, the Great Texas Drought has made alternative water supplies very expensive or impossible to obtain.

Mr. Queen is a very intelligent fellow with a master's degree in agricultural ecology. He has read that the Great Texas Drought is part of a larger weather pattern that has caused hotter and drier conditions throughout the American Southwest region. He has also learned that some climatologists believe that the Texas drought has resulted in part from accelerating climate change due to historical and current emissions of anthropogenic greenhouse gases.

Mr. Queen wants to "take control" of the problem by undertaking some limited forms of climate intervention himself. In particular, he wants to release small amounts of sulfur dioxide aerosols into the lower stratosphere over his property during heatwaves in the summer. These plumes would quickly dissipate and drift over adjacent properties (including into Mexico and over the Gulf of Mexico), but in the meantime they would screen solar radiation and provide a temporary respite from potentially dangerous high temperatures. In a similar fashion, he would hire a contractor to undertake limited marine cloud brightening along the shoreline closest to his ranch. This effort would require a small fleet of solar-powered boats that would spray marine waters from the Gulf into low-lying clouds and increase their albedo, thereby lowering local temperatures and potentially increasing rainfall.

He has asked you to describe what permits he might need, what potential liabilities he might face, and which legal strategies could best minimize his risk. He is open to approaching state or federal agencies for advice or assistance, but he is also happy to proceed on his own. Rather than a fancy (and expensive) memorandum or brief, he just wants you to give him a clear and concise letter that outlines his risks and prospects which he can then provide to his family members. Be sure to identify any facts or additional information that you would need from Mr. Queen (or other sources) to help provide a realistic assessment of his potential options.