HGS Environmental & Engineering Virtual Meeting

Virtual Meeting via Zoom 12:00-1:00 p.m. NOTE TIME CHANGE

HGS Members \$10 Non-Members \$25 Students \$5

https://www.hgs.org/civicrm/event/info?id=2249

Registered Attendees: A confirmation email will be sent upon registration with meeting links.

Event contact: Matthew Cowan - mrcowan1@hal-pc.org

## **Gabriel Collins**

Baker Botts Fellow in Energy & Environmental Regulatory Affairs at Rice University's Baker Institute

## Oilfield Water Infrstructure Connectivity: The Case for a "Hydrovascular" Network in the Permian Basin

The current phase of oilfield water infrastructure buildout in the Permian generally emphasizes each operator or midstream provider building its own water transportation and disposal systems. Accordingly, the overall market is balkanized and inefficient compared to the performance a more interconnected system could achieve. A hydrovascular grid in the Permian Basin could lower oil & gas production costs, conserve scarce freshwater by promoting greater recycling and reuse of produced water, help mitigate seismicity risks, and facilitate movement of produced water at large scale for use outside the oilfield. The paper realistically assesses the barriers to such integration. It concludes by offering a set of practical ideas to overcome these challenges and help transform oilfield water into a resource for West Texas and Southeast New Mexico.

## **Biographical Sketch**



Gabriel Collins is the Baker Botts Fellow in Energy & Environmental Regulatory Affairs at Rice University's Baker Institute. Collins' research portfolio is global. His work currently focuses on legal, environmental and economic issues relating to water — including the food-water-energy nexus — as well as unconventional oil and gas development, and the intersection

between global commodity markets and a range of environmental, legal and national security issues. His analysis draws from a broad swath of geospatial and other data streams, and often incorporates insights from sources in Chinese, Russian and Spanish.

Collins received his BA from Princeton University and a JD from the University of Michigan Law School. He is licensed to practice law in Texas.