One of the largest pieces of legislation I have worked on was the Keystone XL Pipeline Approval Act, S.1., introduced in the Senate on 6 Jan. 2013. This bill would allow for the expansion of the Keystone Pipeline, transporting crude oil from Alberta, Canada, to Midwest and Texas refineries. The proposed pipeline could transport up to 830,000 barrels of oil per day. This is not the first pipeline to cross the U.S.-Canada border, but it has far and away garnered the most attention.

A quick aside—The Keystone XL bill was given the number S.1 in the Senate and H.R.3 in the House of Representatives. In both houses, the first 10 bills of a Congress are reserved for the majority party to use for legislation of high priority. In the House, bill numbers 11 through 20 are reserved for the minority party to use for their important pieces of legislation. These rules can be amended for each Congress. So, it is evident the Keystone XL legislation was high priority for the leadership in each chamber.

Very briefly, the opposing views of this legislation are as follows: Proponents say this pipeline would be a jobs creator, would contribute to the economy, reduce American dependence on foreign oil, and enhance trade relations with Canada. Additionally, oil distribution by pipeline is safer with regard to potential environmental and human health impacts, when compared to rail or truck, and it is more economical. Opponents to the pipeline have concerns of pipeline leaks and the subsequent environmental impacts, citing the leak adjacent to the Kalamazoo River in 2010 as a prime example. The pipeline route would cross the Ogallala Aquifer, an important source for drinking water and for 30% of groundwater used for agriculture in the U.S. Also called into question are the number of long-term jobs created and how much of the oil would be used domestically. Environmental groups argue this pipeline would create a conduit for increased mining of tar sands, which is a resource-intensive mining process requiring a lot of fuel and water and results in increased carbon emissions.

The Keystone XL Pipeline expansion was first proposed in 2008. Since then there have been extensive environmental impact assessments completed by the EPA, determinations of “national interest” and international permitting by the State Department, rulings in Nebraska concerning the proposed route over the Sand Hills region, debate as to whether Congress has the power to ensure that the pipeline gets built, and votes in both chambers in the 112th and 113th Congresses. The more recent actions were the passage of this bill in the House, passage in the Senate by a 62 to 36 vote on 29 Jan., and veto by President Obama on 24 Feb. 2015.

What follows covers the amendment process, in which I was most involved. A total of 247 amendments were added to this bill. Forty-three were voted on and only four passed and were added to the final version of the bill. This whole process took three weeks of floor time, and by the end of it, this new 114th Congress took more votes than the whole of the 113th. My role during this process was to assist in tallying and reviewing all the submitted amendments. For each amendment, I helped draft vote recommendations for Senator Kirsten Gillibrand (D-NY), so she was prepared to make educated decisions. I really enjoyed this process, which did require reviewing all 247 amendments. Many of the proposed amendments did not seem to relate to the pipeline, but Senate rules did not require amendments to be “germane” or directly pertaining to the original bill’s language. For example, Senator Stabenow (D-MI) introduced a bill preventing cuts to the U.S. Postal Service. Another amendment introduced by Senator Moran (R-KS) would remove the threatened status of the lesser prairie chicken, a bird native to Midwestern prairies. While this seems fairly far flung for pipeline legislation, removing this status would lift the consideration of these threatened birds during EPA Environmental Impact Statements, potentially making it easier for allowable future natural resource mining and transportation.

My boss, Senator Gillibrand, introduced three amendments to this bill, and I want to briefly explain two of them. The first would amend the Safe Drinking Water Act as it relates to the regulation of underground injection activities. Under the Energy Policy Act of 2005 the definition of “underground injection” excludes the injection of fluids used for oil and gas hydraulic fracturing and the injection of natural gas for underground storage. What this effectively does is create a regulatory loophole for these activities so they do not have to comply with the Safe Drinking Water Act. This amendment would strike these exemptions. This was her only amendment that was voted on, and it failed by 35 to 63 (60 votes were needed for passage). The second amendment, cosponsored with Senator Menendez (D-NJ), would remove the liability cap for oil companies for offshore and onshore oil spills. Under the Oil Pollution Act of 1990, after an oil spill, responsible parties are required to pay up to US$75 million for an offshore spill and US$350 million for an onshore one. After this is met, the Oil Liability Trust Fund pays the remaining cost. (These only apply if the party was not accused of gross negligence, willful misconduct, or violation of Federal safety or regulation.) This amendment would hold companies fully responsible for spills if they are found negligent.

So, as of now the Keystone XL Pipeline expansion is on hold. Some may think that was a lot of time spent with little result; however, there were interesting outcomes. There were a number of
votes related to climate change, which forced Senators to make public their stance on the issue. Senators agreed that climate change is real, but are split 50-50 as to whether humans significantly contribute to it. There were a number of amendments designed to decrease the protection of public lands by placing more control with the states and opening them up for more economic opportunities, such as grazing and natural resource mining and production. Finally, I think this process was the necessary first step in a larger discussion of U.S. energy policy. Many of the issues related to energy efficiency, production, and security were put forth in amendments and will hopefully set the stage for further legislation.

The manuscript is submitted for publication by Susanna W. Blair, 2014–2015 GSA-USGS Congressional Science Fellow, with the understanding that the U.S. government is authorized to reproduce and distribute reprints for governmental use. The one-year fellowship is supported by GSA and the U.S. Geological Survey, Department of the Interior, under Assistance Award No. G13AP00095. The views and conclusions contained in this document are those of the author and should not be interpreted as necessarily representing the official policies, either expressed or implied, of the U.S. government. Blair works in the office of Senator Kirsten Gillibrand (D-NY) and can be contacted by e-mail at Susanna_Blair@gillibrand.senate.gov.

GSA Position Statements

GSA Council approved revisions to the GSA Climate Change position statement at its April 2015 meeting. Full versions of all position statements are available online at www.geosociety.org/positions. GSA members are encouraged to use the statements as geoscience communication tools when interacting with policy makers, students, colleagues, and the general public.

Climate Change Position Statement Summary

Decades of scientific research have shown that climate can change from both natural and anthropogenic causes. The Geological Society of America (GSA) concurs with assessments by the National Academies of Science (2005), the National Research Council (2011), the Intergovernmental Panel on Climate Change (IPCC, 2013) and the U.S. Global Change Research Program (Melillo et al., 2014) that global climate has warmed in response to increasing concentrations of carbon dioxide (CO₂) and other greenhouse gases. The concentrations of greenhouse gases in the atmosphere are now higher than they have been for many thousands of years. Human activities (mainly greenhouse gas emissions) are the dominant cause of the rapid warming since the middle 1900s (IPCC, 2013). If the upward trend in greenhouse gas concentrations continues, the projected global climate change by the end of the twenty-first century will result in significant impacts on humans and other species. The tangible effects of climate change are already occurring. Addressing the challenges posed by climate change will require a combination of adaptation to the changes that are likely to occur and global reductions of CO₂ emissions from anthropogenic sources.


Geology – GSA Bulletin – Geosphere – Lithosphere

Special Papers – Memoirs – Field Guides – Reviews in Engineering Geology