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PANELISTS
Charles Cuvelier, Chief Law Enforcement, Security and Emergency Services, National Park Service
Christopher Wilson, Director of the Mexico Institute, Wilson Center
Steven Young, Former Co-chair of the Border Indicators Task Force for the U.S.-Mexico Border 2012 Border Environmental Program, Environmental Protection Agency

The U.S-Mexico border is a topic of intense debate and has been a central policy issue of the Trump administration. This panel discussed the myriad of issues relevant to border policy: security, economics, human rights, and conservation. Further, the panel examined the intersection of S&T with these issues, and highlighted how science diplomacy may be further leveraged to advance bilateral discourse between the U.S. and Mexico.

Charles Cuvelier began his presentation by quoting the naturalist John Muir: “When we try to pick out anything by itself, we find it hitched to everything else in the Universe.” He went on to explain how this idea applies to the interconnectedness of the issues surrounding the border region between the U.S. and Mexico. The border is a site of migration of humans, animals, and plants. Migration can be a source of great benefit to both nations but simultaneously represents threats that are linked to the travel of people and cargo. Because migration over the U.S.-Mexico border is correlated to the economic conditions on both sides of the border, many speculate that as the U.S. economy continues to improve after the 2008 recession, illegal immigration to the United States will increase.

Though recently hotly debated in the U.S. presidential election, border walls are fairly common: over 70 countries have some form of them. In the U.S., border fencing, walls, and border agents have all increased since the 1980s. Mr. Cuvelier explored the dangers of unauthorized border crossing (e.g. over 2,000 illegal immigrants have died between 1999 and 2012 alone), and the potential for S&T to better inform the solution (be it a wall or other solutions) to unauthorized migration and crime. Further, science diplomacy can help to connect researchers across the border to ensure that border security and enforcement data collected by the U.S. and Mexico is shared to maximize data-use.

Steven Young focused on the numerous environmental issues important for the border region and how S&T can be used to monitor and address them. In 1983, the U.S. and Mexico announced the La Paz Agreement pledging bilateral cooperation on border issues that was signed by Presidents Ronald Reagan and Miguel de la Madrid. Mr. Young made the case of how that same spirit and history of cooperation is still important today to address the commonly shared problems of waste as well as air and water quality and quantity. As a multi-decade science diplomacy success story, he described how paving key roads to reduce dust particles in the air has measurably improved air quality, as has retrofitting of diesel engines used in the border region.

Christopher Wilson focused on the costs and benefits of increased border security and the role for science and technology in increasing security along the border. He explained how border security can be increased – which occurred in the wake of the September 11, 2001 terrorist attacks – but how there are also consequences. For example, more thorough screening at border checkpoints can lead to increased congestion and pollution due to idling engines and billions of dollars lost. There are programs that lead to a more efficient system such as the Trusted Traveler Program for frequent border crossers, but there is also a role for technology. To detect threats, various scanners and sensors can be deployed such as radiation scanners, sensors, scales to weigh trucks to catch illegal cargo, and x-ray scanners. For people crossing the border, technology has led to improved identification equipment, such as RFID chips and biometrics. License plate readers are used to monitor vehicles, and finally, pre-inspection programs are being used to mitigate congestion.

SESSION KEY POINTS
• There is a role for S&T in securing the border region, protecting the environment, and improving the lives of people on both sides of the border.
• Science diplomacy has a role to play in bringing together scientists on both sides of the border to understand and assess border security and enforcement issues.
• Bilateral cooperation is essential to address the commonly shared problems of waste, air pollution, and water quality and quantity.