



**Good Neighbor Environmental Board (GNEB)  
Meeting**

**Marriott Pier South  
800 Seacoast Drive  
Imperial Beach, California**

**February 9 – 10, 2017**

**MEETING SUMMARY**

**FEBRUARY 9, 2017**

**Welcome, Introductions and Overview of Agenda**

*Mark Joyce, Acting GNEB Designated Federal Officer (DFO), Associate Director, Federal Advisory Committee Management Division (FACMD), Office of Administration and Resources Management (OARM), U.S. Environmental Protection Agency (EPA); Paul Ganster, Chair, GNEB; and Honorable Serge Dedina, Mayor of Imperial Beach, California*

Mr. Mark Joyce, Acting GNEB DFO and Associate Director of FACMD, and Dr. Paul Ganster, GNEB Chair, welcomed the participants and thanked Mayor Serge Dedina for hosting the meeting in Imperial Beach, California. Mayor Dedina thanked the GNEB members for their work on the border, noting the importance of solving border problems in a cooperative manner with Mexico to improve border security and environmental protection. Imperial Beach, as a border town, works with Mexico to provide a safe and healthy environment for the humans and wildlife that inhabit the area. The area also has become a model for sustainable tourism and promotes a conservational landscape.

Dr. Ganster asked the Board members to introduce themselves and provided an overview of the agenda. A list of meeting participants is included as Appendix A; the meeting agenda is included as Appendix B. The official certification of the minutes by the Chair is included as Appendix C.

GNEB members were provided with the following materials: *GNEB 10th Report: Environmental Projection and Border Security on the U.S.-Mexico Border* ([www.epa.gov/sites/production/files/2015-06/documents/01gneb\\_10th\\_english.pdf](http://www.epa.gov/sites/production/files/2015-06/documents/01gneb_10th_english.pdf)); GNEB advice letter to the president dated December 2, 2009 ([www.epa.gov/sites/production/files/documents/2009\\_1202\\_advise\\_letter.pdf](http://www.epa.gov/sites/production/files/documents/2009_1202_advise_letter.pdf)); the Department of Homeland Security (DHS) response letter dated December 24, 2009; ([www.epa.gov/sites/production/files/documents/2009\\_1224\\_gordon\\_letter\\_gneb\\_chair.pdf](http://www.epa.gov/sites/production/files/documents/2009_1224_gordon_letter_gneb_chair.pdf)); and the Council on Environmental Quality's (CEQ) response letter dated April 21, 2010 ([www.epa.gov/sites/production/files/documents/2010\\_0421\\_gneb\\_ceq\\_response\\_letter\\_final.pdf](http://www.epa.gov/sites/production/files/documents/2010_0421_gneb_ceq_response_letter_final.pdf)).

**Federal Perspectives on Environmental Conditions Along the U.S-Mexico Border—Federally Managed Trust Resources**

***Overview of Federal Lands and Border Conditions: Land Management and Trust Responsibilities on the Southwest Border***

*Jon Andrew, Interagency Borderlands Coordinator, Department of the Interior (DOI)*

Mr. Jon Andrew, DOI, described DOI's mission to protect and manage the country's natural resources and cultural heritage. DOI encompasses a number of different bureaus with vast responsibilities,

including jurisdiction of 780 miles (40%) of the southwest border; bureaus relevant to border issues are the U.S. Fish and Wildlife Service (FWS), National Park Service, Bureau of Land Management (BLM), Bureau of Reclamation, Bureau of Indian Affairs and U.S. Geological Survey (USGS). A wide variety of substantial natural and cultural resources exist along the southwest border, and several acts (e.g., Migratory Bird Treaty Act, National Historic Preservation Act) give DOI jurisdiction over federal lands and migratory species. DOI's most significant trust responsibility is endangered species.

The southwest border area comprises 12 million acres within 50 miles of the border, including four wilderness areas and the tribal land of 10 tribal nations. Mr. Andrew described southwest borderlands and their natural resources from California to Texas that are under DOI jurisdiction, including the Tijuana Slough National Wildlife Refuge, San Diego National Wildlife Refuge, Imperial Sand Dunes Recreation Area, Cabeza Prieta National Wildlife Refuge, Organ Pipe Cactus National Monument, Coronado National Memorial, San Pedro Riparian National Conservation Area, Big Bend National Park, and Amistad National Recreation Area. DOI has made a significant investment to address border concerns and works with U.S. Customs and Border Protection (CBP) to decrease the environmental impacts of border security.

Dr. Keith Pezzoli, University of California, San Diego, commented that the Obama administration had elevated the issue of soil erosion. He asked whether this was a significant issue in DOI-managed lands on the southwest border. Mr. Andrew explained that some river erosion occurs, but it is not a major concern.

Dr. David Eaton, The University of Texas at Austin, asked whether BLM has developed prospective plans to enhance the environment and what DOI needs from GNEB to plan and integrate ecosystem improvements. Mr. Andrew responded that each DOI bureau has its own planning process that it is required to update periodically. GNEB could provide recommendations about these planning processes. The USGS Climate Science Centers also could benefit from broad GNEB recommendations.

Mr. Scott Storment, Green Hub Advisers, LLC, asked about the effects of ozone on DOI-managed lands. Mr. Andrew responded that several DOI bureaus have air quality offices that manage these issues. Big Bend National Park has air quality issues, but he has not heard about this specific issue in other areas.

In response to a question from Mr. Luis Olmedo, Comite Civico Del Valle, Inc., Mr. Andrew explained that Salton Sea water is under the jurisdiction of DOI, and water issues are of major concern. His presentation focused on border-adjacent areas, and most of the Salton Sea issues are away from the border.

***San Diego National Wildlife Refuge Complex***  
*Andy Yuen, Project Leader, FWS*

Mr. Andy Yuen, FWS, explained that the San Diego National Wildlife Refuge Complex—which includes the San Diego Bay National Wildlife Refuge, San Diego National Wildlife Refuge, Seal Beach National Wildlife Refuge, and Tijuana Slough National Wildlife Refuge—is a small part of the much larger National Wildlife Refuge System, a system of lands and associated trust resources throughout the United States and its territories. The San Diego National Wildlife Refuge Complex was established in 1974 as the result of a decision to develop some area land while conserving other land. All of the land in the complex is within the border zone.

The Tijuana Slough National Wildlife Refuge is located at the southern end of California in Imperial Beach and protects numerous endangered and threatened species. The Tijuana Slough National Wildlife Refuge is part of the larger Tijuana River National Estuarine Research Reserve, which fosters cooperation and communication. The Public Lands Liaison Agent Program is an important feature of the research

reserve's advisory council. The research reserve represents a cross-border binational effort that yields significant benefits. Approximately 75 percent of the Tijuana River Watershed lies in Mexico, and activities south of the border affect the estuary north of the border. The four primary issues that affect the estuary are sedimentation, trash and debris, antibiotic-resistant genes in sediment, and nutrients and eutrophication.

Recently, a long stretch of shoreline from the U.S.-Mexico border to Coronado, California, was closed because of significant amounts of untreated sewage flowing in from the Tijuana River. Mr. Yuen presented water quality data that, following the contamination event, highlighted the value of long-term monitoring and showed how raw sewage affects dissolved oxygen, salinity and water levels in the estuary, which in turn affect wildlife (e.g., fish kills, harmful algal blooms).

The San Diego Bay National Wildlife Refuge comprises two units. The South San Diego Bay Unit includes 2,300 acres of salt ponds converted to salt marsh; the Sweetwater Marsh Unit includes 341 acres of tidal salt marsh. The San Diego Bay National Wildlife Refuge is recognized as a Globally Important Bird Area by the American Bird Conservancy, and one challenge is mitigating the effects of contaminants on sea bird eggs (e.g., decreased eggshell thickness, increased post-hatch mortality). The refuge was established as part of a Multiple Species Conservation Program to protect sensitive species found in San Diego County. Recently, acquisition of the 1,905-acre Hidden Valley Tract, a key parcel of land, was made possible by funding from DHS and the San Diego Association of Governments (SANDAG).

Dr. Pezzoli asked whether the estuary is important to the fishing industry. Mr. Yuen responded that all of the estuaries have significant roles in supporting habitat for commercially important fish species, as they serve as nursery grounds. They also are important for recreational fishing.

Ms. Laura Abram, First Solar, Inc., asked whether the beach improvements that caused the contamination event had been reviewed prior to implementation. Mr. Yuen explained that an Environmental Impact Report had been completed, but the accompanying modeling had been incorrect. It was not a federal project, so a National Environmental Policy Act review was not necessary.

Ms. Beverly Mather-Marcus, U.S. Department of State, asked whether the river is the primary source of contamination or whether contamination from sources farther south moves up the coast. Mr. Yuen replied that the Tijuana River is the primary source, but sewage treatment plants in Mexico also can have an effect.

### ***Tijuana River National Estuarine Research Reserve***

*Jeff Payne, Director, Office for Coastal Management, National Oceanic and Atmospheric Administration (NOAA); and Becky Smyth, Office for Coastal Management, NOAA*

Mr. Jeff Payne, NOAA, explained that NOAA has a science-based mission, and NOAA data were important to GNEB's recent report on climate change. NOAA conducts business in partnership with state and federal agencies. His agency considers the Tijuana River National Estuarine Research Reserve to be an important effort. Ms. Becky Smyth, NOAA, explained that the research reserve is one such reserve in the larger National Estuarine Research Reserve System, which networks organizations and transfers information internally and externally.

The research reserve's ecosystem management provides benefits to border security activities, the ecosystem itself and the surrounding community. To the four primary issues that affect the estuary that Mr. Yuen mentioned in his presentation, Ms. Smyth would add flooding, sea level rise and climate change. Another important consideration is whether current plans will be protective in the future. Collaborating with NOAA allows the research reserve to leverage resources to establish projects that address science and socioeconomic concerns regarding flooding, sedimentation and climate change.

Including the socioeconomic aspects helps the community as well as border security because the personal safety of border patrol agents is better protected.

The Tijuana River National Estuarine Research Reserve has the ability to transfer user experiences and specifically has transferred methodologies that can be used in Alaska to address issues. The research reserve always considers how the different projects on which it works can be leveraged to reduce duplicative efforts.

Dr. Ganster noted the significant emphasis on cross-border collaboration in all of the presentations. It is important to collaboratively examine binational problems to develop binational solutions. Border security can be a positive contribution to this effort.

Mr. Jose Angel, California Regional Water Quality Control Board, asked about the level of coordination that occurs and any protocols in place regarding the sharing of monitoring data with responders.

Ms. Amber Craig, U.S. Border Patrol, responded that when Mexico needs to shut down a pump, it notifies the International Boundary and Water Commission (IBWC), which in turn notifies the United States.

Ms. Smyth added that the Southern California Coastal Ocean Observing System also makes data available, including real-time data. Agreements with Mexico have been established, so Mexico's data are being included, and the research reserve also works with the Scripps Research Institute.

## **Illegal Cross-Border Activity and the Environmental Impacts**

### ***Overview of Border Security Profile***

*James Nielsen, Supervisory Border Patrol Agent, U.S. Border Patrol, CBP, DHS*

Agent James Nielsen, U.S. Border Patrol, explained that the CBP includes three components, the Office of Field Operations, which operates at ports of entry; the U.S. Border Patrol, which protects and serves the areas between ports of entry; and Air and Marine Operations, which assists the first two components. The U.S. Border Patrol jurisdiction extends beyond the immediate border area and contains 20 sectors. The San Diego Sector is the smallest sector in the continental United States, but often it is the busiest, with a high amount of illegal immigration. The terrain of the eight stations in the sector—six of which are along the border—varies, which creates challenges. The mountainous areas contain no border security infrastructure. The sector now focuses on preventing terrorists and terror weapons from entering the United States. Agent Nielsen displayed photographs that highlight the differences in the border area between the 1990s and now; infrastructure (e.g., primary fencing, secondary fencing, surveillance towers, stadium lighting) has lessened the environmental footprint of border security because the number of off-shoot roads and amount of foot traffic have decreased. U.S. Border Patrol personnel undergo annual training to understand the environmental impacts of their work and cultivate environmental stewardship.

Agent Nielsen highlighted the tunneling activities of criminal elements. Three types of tunnels exist: rudimentary, interconnecting and sophisticated. The latter type of tunnels include ventilation, lighting and rail systems. Criminals also use ultra-light aircraft to circumvent border security. Often, these aircraft drop cargo in the United States and return to Mexico, so the U.S. Border Patrol works with Mexico to allow the Mexican authorities to apprehend the suspects on return to that country. Criminals use maritime routes for drug and human trafficking, and as U.S. border security has improved, the smugglers head farther north each year, up to San Francisco. To curtail these maritime threats, the U.S. Border Patrol works with the U.S. Coast Guard, Homeland Security Investigations, local law enforcement and lifeguards. The U.S. Border Patrol also has several specialty units, including canine, plain clothes, horse and tactical.

### ***Positive and Negative Environmental Impacts of Border Security***

*Paul Enriquez, Chief, Environmental Branch, Office of Facilities and Asset Management, CBP, DHS*

Mr. Paul Enriquez, CBP, explained that the Office of Facilities and Asset Management fits within CBP's Enterprise Services and provides support and human resource functions for CBP. To facilitate border security operations and achieve its mission, CBP deploys several resources that are referred to collectively as tactical infrastructure, such as primary and secondary fences, patrol and access roads, security lighting, and surveillance towers. The goal of the CBP environmental program is to avoid, reduce and mitigate impacts of the tactical infrastructure.

CBP environmental planning efforts are governed by federal statutes and regulations, executive orders, and state regulations. Common laws that affect CBP environmental planning include several that already have been mentioned in other presentations, such as the National Environmental Policy Act, Endangered Species Act, National Historic Preservation Act, and Migratory Bird Treaty Act. The U.S. Border Patrol and Air and Marine Operations define their requirements, and the Office of Facilities and Asset Management then evaluates and determines the appropriate level of environmental planning, consults and coordinates with stakeholders, and prepares documentation as part of its environmental planning process to meet these requirements. Most of the activities involve maintenance and repair of existing structures and have little environmental impact. CBP examines even minor processes and categorical exclusions with a robust system to ensure that environmental and cultural conditions are considered. Best management practices are implemented, and all contractors are trained to follow these practices. In 2016, approximately 225 actions were evaluated, resulting in approximately 220 categorical exclusions and five environmental assessments.

Mr. Enriquez highlighted the example of tactical infrastructure construction in Smugglers Gulch in the San Diego Sector. Perceived impacts of the construction included erosion of built slopes and the resulting sedimentation of a nearby stream and estuary, removal of natural habitat, and the spread of nonnative invasive species in the area. To mitigate environmental impacts, CBP developed a robust restoration program in cooperation with FWS, California State Parks, the County of San Diego, and other partners; the program included the restoration of native plants and removal of nonnative invasive species. The infrastructure has resulted in a significant reduction in cross-border violations and decreased estuary damage from cross-border traffic. The restoration efforts also have been successful based on 5-year measurements. Tactical infrastructure preventing illegal immigrant use of abandoned mine shafts has contributed to recovery of the lesser long-nosed bat.

CBP developed several environmental stewardship summary reports that compared the original planned installation of infrastructure against the final design and footprint. In most cases, the surveyed impacts were less than predicted as a result of careful implementation of the best management practices identified for each area. The completed reports as well as in-progress reports are available on the CBP website ([www.cbp.gov/about/environmental-cultural-stewardship/nepa-documents/esp-essr](http://www.cbp.gov/about/environmental-cultural-stewardship/nepa-documents/esp-essr)).

Dr. Ganster noted that it would be helpful to review the CBP's environmental stewardship reports as the Board is developing its report.

Mr. Olmedo asked why some environmental hazards (e.g., New River issues, gate and trash issues) continue despite CBP's focus on environmental protection. Mr. Enriquez explained that his office manages gate maintenance with the U.S. Border Patrol. CBP works with contractors to mitigate any impacts related to opening gates, and a system is in place to address environmental concerns. Ms. Sylvia Grijalva, U.S. Department of Transportation, added that the General Services Administration works at the ports of entry and has begun to address some of the New River issues.

Mr. Tom Davis, Yuma County Water Users' Association, asked whether the Office of Facilities and Asset Management manages the Yuma Sector. Mr. Enriquez indicated that it did.

***Successfully Balancing Management of Border Security Infrastructure and the Mission of the DOI***  
*Jon Andrew, Interagency Borderlands Coordinator, DOI*

Mr. Andrew explained that DOI has built a relationship and trust with DHS regarding the balance of border security and environmental protection. It is not a matter of choosing between the two but rather an issue of how to achieve both. Because of the vast southwest border area, it is difficult to protect border security without negative environmental impacts. Annual southwest border arrests have decreased from 1 million in 1983 to 400,000 currently. Approximately 40,000 to 50,000 arrests occur on DOI-managed lands each year. The problems of illegal immigration and smuggling resulted in a 2006 Memorandum of Understanding among DHS, DOI, and the U.S. Department of Agriculture (USDA) regarding cooperative national security and counterterrorism efforts on federal border lands. This memorandum provided a framework to restore lands affected by criminal activity.

In the past, planning for border security infrastructure was carried out under time constraints and additional pressures. Coordination has improved, and DOI now keeps pace with CBP construction efforts and environmental reviews. The U.S. Border Patrol's Public Lands Liaison Agent Program connects land managers to border security activities, and cooperation among FWS, BLM and the U.S. Border Patrol has increased. Towers have decreased illegal activities in the areas in which they are installed.

Mr. Andrew cited many examples of federal cooperation to enhance border security and environmental protection. U.S. Border Patrol agents help with the annual effort to increase Sonoran pronghorn recovery. The National Park Service conducts interpretative programs at the international border, and these tours immediately fill to capacity. Efforts are underway to remove abandoned vehicles in the Cabeza Prieta National Wildlife Refuge, install mobile rescue beacons in the Arizona desert, operate a modular forward operating base that decreases illegal traffic, provide equipment and vehicle storage for CBP, control erosion and provide patrol access by building a bridge in the San Bernardino National Wildlife Refuge, install "cat holes" in border fencing to allow small animal migration, and restore habitat in the Organ Pipe Cactus National Monument by removing unused roads. The latter effort resulted in the receipt of the Wilderness Stewardship Award.

Mr. Joyce asked about energy sources at the towers. Mr. Andrew responded that the tower is self-sustaining and provide solar power to the agents who live in these locations.

***Security Inspections at Commercial and Non-Commercial Ports of Entry***  
*John Armijo, Assistant Director, San Diego Office of Field Operations, CBP, DHS*

Agent John Armijo, CBP, presented a 5-minute video that highlighted statistics from U.S.-Mexico ports of entry in the San Diego Sector. The San Diego Office of Field Operations represents six of 329 ports of entry in the United States and leverages technology to ensure that the large volume of port traffic is moved in an efficient manner that balances the enforcement missions of the office. Ports of entry are an "all-threats" environment, and the office seizes illegal narcotics (e.g., fentanyl) and arrests undocumented immigrants. Radio-frequency identification (RFID) capability and trusted traveler programs allow the ports of entry to move traffic more efficiently. Since these approaches have been implemented, border crossing times have been significantly reduced for the majority of traffic. This type of management also can be applied to air and seaport environments.

In response to a question from Ms. Edna Mendoza, Arizona Department of Environmental Quality, Agent Armijo explained that fentanyl is a potent synthetic drug often mixed with cocaine and other controlled substances.

Ms. Mendoza asked whether an outreach program exists to make people aware of the RFID technology. Agent Armijo responded that CBP is marketing the program, and individuals can register for the technology at two of the ports of entry and at global enrollment centers.

Ms. Mendoza asked whether it would be possible to obtain the video with the statistics about the ports of entry to assist GNEB in writing its report. Dr. Teresa Pohlman, DHS, said that Ms. Jennifer Hass, DHS, would make the source statistics about the port of entries available to the GNEB members.

### ***Q&A and Discussion***

Ms. Smyth asked Mr. Enriquez whether his office has the ability to fund programs on the other side of the border that also protect the safety of U.S. agents (e.g., flood control programs). Mr. Enriquez responded that he had not explored this specifically, but appropriations are provided to his office with specific intent. It is difficult to transfer them to other U.S. agencies, so transferring them to a foreign government would be a particular challenge.

Mr. Stormont asked Mr. Enriquez about decreased emissions as a result of reduced idling times from the expedited entry programs. Mr. Enriquez explained that some data analysis regarding this has been performed, but he has not been involved. Ms. Grijalva added that a tool about emissions and border wait times is being developed. Data analysis has been performed for El Paso, Texas, and currently is being done for the Otay Mesa Port of Entry; the results will be made available. The Commission for Environmental Cooperation also has performed some analyses.

Dr. Eaton commented that although cooperation with Mexico was emphasized during the presentations, state and federal agencies discourage or disallow travel to Mexico. He wondered how the ability to cross the border (or lack thereof) affects the ability to provide assistance. He also noted the number of arrests mentioned in several presentations and wondered where the breaches were occurring. Israel has a border fence, and very few individuals are able to breach it. He wondered why the United States still has this problem.

### **Public Comments**

Mr. Joyce called for public comments. No oral or written comments were offered.

### **Working Lunch at the Tijuana River National Estuarine Research Reserve Visitors Center**

#### ***Overview of the Tijuana Slough National Wildlife Refuge and the Tijuana River National Estuarine Research Reserve***

*Brian Collins, Refuge Manager, Tijuana Slough National Wildlife Refuge, FWS*

Mr. Brian Collins, FWS, explained that his co-presenter, Dr. Jeff Crooks, NOAA, was unable to attend, and he would give both presentations. The County of San Diego is considered the “birdiest county in the country” based on the number of bird species. Birds comprise a very important, complex environment on this side of the border, serving as a microcosm of larger challenges (i.e., “the canary in the coal mine”). Mr. Collins displayed pictures of a number of different types of terns and highlighted their activities. Because terns face a number of environmental challenges and have high energy requirements, when their food sources are affected, their breeding is affected. Terns follow their prey and have specific environmental breeding requirements; their habits are driven by climate. In 2016, three-quarters of the

world's elegant tern population visited the refuge, which represents a success. Because terns are particularly sensitive to environmental contaminants and persistent toxicants, a significant investment has been made in sewage treatment to clean up the environment. The county also is home to a number of other ground-nesting bird species, such as the black skimmer and Western snowy plover.

A nonnative invasive species (Asian beetle) has entered the area and has devastated native flora in parts of the slough in a short amount of time.

The Tijuana Slough National Wildlife Refuge uses solar-powered satellites to track the migration of the elegant tern and is highly concerned with the conservation of endangered and threatened species. The National Estuarine Research Reserve System includes federal, state and nongovernmental partners that protect natural resources. The Tijuana River National Estuarine Research Reserve uses temporal information to steer wetland recovery in Southern California and also attempts to be as inclusive as possible and educate and perform outreach to the local community. The research reserve and refuge are thinking about possible futures to facilitate long-term management of the estuary.

A participant asked whether house cats present a challenge. Mr. Collins responded that they do, and a predator management program has been established to trap cats and return them to their owners or turn them over to animal control.

A participant commented that in addition to habitat enthusiasts, disadvantaged communities also are present in the area. He asked whether the refuge and research reserve have problems engaging with these communities. Mr. Collins responded that this has been a challenge, and the refuge recently received \$1 million to develop an urban refuge program to provide information about the natural resources to underserved populations. The program has been expanded to six other cities, but San Diego was the first to receive the award and develop a program. Refuge staff members have found that it is necessary to perform outreach to children by the third grade; by the time the children reach the sixth grade, they are not interested in the program. Outreach and education are a significant part of the National Estuarine Research Reserve System, and every reserve in the system must employ an educational/outreach coordinator to engage the community.

### **Discussion of the 18th Report to the President and Congress on Environment, Security and Prosperity in the U.S.-Mexico Border Region**

Mr. Joyce instructed the GNEB members to consider the structure, issues and timeline of the next report. It will be important to identify leads for each report section before the end of the meeting. The meeting to approve the report will be held in September 2017 rather than October 2017 so that the approval is within fiscal year 2017. Teleconferences to discuss the report will be scheduled in the interim, with at least one full Board teleconference scheduled prior to the approval meeting.

Statutory language in GNEB's charter requires the Board to produce an annual report about environmental issues on the southwest border. The current suggested topic—"Environment, Security and Prosperity in the U.S.-Mexico Border Region"—will need to be narrowed, and GNEB must identify a subset of issues related to the topic on which to focus. Many of these issues were addressed by the Board a decade ago in its *10th Report to the President and Congress: Environmental Projection and Border Security on the U.S.-Mexico Border* (10th Report).

Dr. Pohlman noted that border security is a sensitive issue. The Board members are not border security experts, but the experts presented to GNEB during the meeting, and GNEB members now have a good deal of information with which to work. It will be critical to integrate environmental security and protection with border security. It would be interesting to perform a gap analysis to examine the



recommendations made in the 10th Report and determine what has been accomplished and which actions worked and which did not. This would allow GNEB to modify or reiterate its previous recommendations.

In response to a question from Ms. Mendoza regarding the current administration transition, Mr. Joyce explained that EPA is proceeding with “business as usual” until the Agency is given other instructions. Dr. Pohlman agreed that all government agencies are taking this approach, and it is incumbent on the Board to produce the best report possible no matter the current situation. GNEB’s report is not a political report.

Ms. Lisa Larocque, City of Las Cruces (New Mexico), commented that, in addition to DHS, many agencies are integral to border security. These critical agencies are represented on GNEB. Dr. Eaton agreed, noting that if the Board can build its report on the successes that have occurred since the 10th Report, the current report will address the issues, identify best practices, embrace successful federal government activities in this area, and ultimately be helpful to federal agencies.

Mr. Angel explained that, in addition to gathering facts, the Board serves in an advisory capacity for decision makers. The report must address environmental impacts associated with border security activities and make useful recommendations.

In response to a comment from Ms. Abram regarding the possibility of a future border wall, Dr. Pohlman said that the report could not specifically address this issue because its status is unknown. The Board is not qualified to assess border security. Ms. Abram explained that she was not referring to border security issues but rather potential environmental impacts resulting from a border wall. The report could address the possibility with a general approach and discuss the environmental impacts from a variety of different infrastructures, including a wall. Mr. Andrew agreed that GNEB could provide information on how to avoid, minimize and mitigate environmental impacts from infrastructure.

Mr. Payne commented that the Board has an opportunity to highlight the successes in this area that have occurred during the past 5 years. GNEB could use a scenario-based approach (i.e., “If this, then that.”) in writing the report. If rapid changes occur on the border, there may be ways to illustrate possible environmental consequences that will need to be addressed. Ms. Grijalva agreed that best practices need to be highlighted, and the Board could explore lessons learned from the fence built under the Bush administration.

Ms. Mather-Marcus supported the idea of drawing on the 10th Report and performing a gap analysis. The best management practices approach is a good one. The report also can include information about what could happen depending on the future border wall situation. She thought that GNEB also should investigate how activities in Mexico affect the United States, as the Board’s 2016 report did. Dr. Ganster agreed that it is critical to obtain information from Mexico, noting that he had wanted to invite officials from Mexico, but it was a challenge because of the current transition. The U.S. Border Patrol has a good relation with its counterparts in Mexico.

Ms. Mendoza noted that the suggested topic addresses the environment, security and prosperity. Incorporating the environmental aspects (e.g., reduced emissions as a result of reduced wait times) will be important. Highlighting collaboration is beneficial as well, especially as the collaboration goes beyond federal agencies and includes state and local agencies.

Mr. Salvadore Salinas, USDA, reiterated that the Board’s current mission with this report is to address and report on issues regarding the environment and infrastructure. He thought that perhaps GNEB was overcomplicating what the report should be. Regarding security, DHS is challenged by private land

ownership in Texas; in terms of prosperity, *colonias*<sup>1</sup> are an issue in Texas, as are agricultural needs and rural development. Prosperity may not be a major topic of the report, but it can be woven throughout the various sections. Ms. Larocque suggested that the report could highlight that improving environmental conditions has economic benefits.

Dr. Pohlman reminded the members not to lose sight of tribes as stakeholders. Dr. Ganster stated that tribal issues will be integrated in the report and not lost.

Dr. Ganster presented background information on the 10th Report, explaining that the increased focus on the North American Free Trade Agreement and border enforcement during the 1990s was driven by Congress. After September 11, 2001, the view of the border shifted from an area of trade opportunities to a defensive zone. DHS was established in 2002 and combined many agencies with different cultures. The REAL ID Act of 2005 allows DHS to waive legal requirements (e.g., National Environmental Policy Act, Endangered Species Act, Clean Water Act) to facilitate construction of border infrastructure to deter undocumented immigration. Security concerns now take precedence for many federal agencies, resulting in major effects on environmental protection and land management agencies and activities.

Dr. Ganster displayed photographs that illustrate the rapid changes to the southwest border as a result of programs to construct border fencing, install stadium lighting, employ more personnel, and apply technology and remote sensing. Infrastructure and illegal activities leave an imprint on the environment, and management of endangered species is an environmental challenge. Further challenges occur when legitimate tribal border crossings are exploited by smugglers. The overall challenge is how to balance border security activities and environmental quality.

The 10th Report focused on a number of themes, including undocumented human crossings in rural stretches and hazardous materials (hazmat) shipments through urban crossings. The report identified four challenges related to undocumented human crossings: (1) Roads and trails destroy habitat and cause erosion. (2) Undocumented migrants and smugglers leave trash and solid waste. (3) Impenetrable fences may pose problems for wildlife and sensitive areas. (4) Limited opportunities for collaboration exist across security and land management agencies. The report also identified four challenges related to hazmat shipments: (1) Limited training exists for hazmat inspection and ports of entry work, and tracking and chemical storage data are lacking. (2) Emergency responders and their equipment lack the ability to easily cross the border. (3) Emergency response technology, equipment and personnel often are inadequate. (4) An overarching strategic plan to coordinate security and environment personnel at urban crossings is lacking. GNEB provided recommendations related to all of these challenges and identified successful projects and partnerships.

Dr. Francisco Zamora-Arroyo, Sonoran Institute, asked whether the national conference that the Board had recommended regarding the issue of impenetrable fences posing problems for wildlife had occurred. Dr. Pohlman responded that many conferences regarding tactical infrastructure have been held during the last decade, but she was unsure whether any conference focused specifically on the environmental impacts of the infrastructure. A GNEB member added that many papers have been presented about wildlife crossing and the best infrastructure and best management practices to facilitate this crossing. Mr. Andrew noted that, although significant work about wildlife crossing has been performed throughout the world, he was unaware of any effort to tie all of the information together. It might be helpful to coordinate a symposium that brings all of the global work together.

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<sup>1</sup> An unregulated settlement/residential area along the U.S.-Mexico border that may lack some of the most basic living necessities such as potable water and sewer systems, electricity, and safe and sanitary housing.

Ms. Mather-Marcus noted that, although it is important to remember that the three current joint inspection programs are pilot programs, the Board could examine the impacts of these pilots. EPA is performing air quality analysis, and these data could be integrated into such an examination. She also stated that it will be critical for GNEB to define “security” for the purpose of this report. Security is a broad topic and includes law enforcement, hazmat, agricultural inspections and the literal security of border communities, among other issues. The Board will need to define which aspects of security it will focus on in this report.

Mr. Salinas noted that one recommendation from the 10th Report was to foster cooperation among federal agencies and establish an interagency task force. This is critical and needs to be included in this report if it did not come to fruition. The report most emphasize increased cooperation, a reduction in duplicative efforts, and increased leveraging of assets.

Dr. Eaton encouraged the GNEB members to perform the gap analysis that night to have a foundation for the next day’s discussions. Any topics or issues that are not written/outlined before the meeting has concluded will not be incorporated into the report. Dr. Pohlman agreed to lead the gap analysis effort, but she explained that it was not a process that could be completed overnight because it must be done in a thorough, considered manner that includes consultation with other federal agencies. She volunteered to provide information within 1 week. The Board’s recommendations ultimately must effect change across the federal government in terms of environmental strategies. CEQ provides environmental “scorecards,” but it is not a cohesive group that discusses environmental issues across the federal government. Although regional groups exist, a focal group at the federal level is needed.

Mr. Joyce reiterated that, before the end of the meeting, the Board must determine which issues it would like to address, recognizing that the scope and scale may evolve during the writing of the report. Dr. Ganster suggested using the 10th Report as the core to begin work on the new report. GNEB can refer to the previous recommendations and determine what has been accomplished and identify any shortcomings. The report will provide the logic for current actions and advance ideas and options for protecting the environment while simultaneously protecting the mission of border security. Mr. Andrew agreed that the 10th Report serves well as a framework for writing the current report.

Ms. Abram noted that a clear and realistic timeline will be needed to complete the report. Dr. Ganster said that the text must be completed well before the September meeting. Dr. Eaton highlighted the five phases of report writing: outlining the report, writing the initial draft, adding additional documentation, finalizing the draft, and editing the finalized report.

Dr. Zamora-Arroyo cited the following sentences on page 19 of the 10th Report: “Effective barriers can decrease the number of undocumented crossings, thereby decreasing likely ecosystem damage. An effective fence or wall project also can reduce the footprint of border enforcement activities, allowing more habitats to remain in a natural state and reducing the need for off-road pursuit.” This does not describe wildlife crossing or specific environmental impacts. When the report was written, GNEB did not have the information that is available now. The Board must review this information and address infrastructure issues. It may be helpful for GNEB to focus on one issue in depth instead of covering several issues in less depth.

Dr. Payne stated that, given the compressed timeline, the Board will be compelled to develop a report similar to the 10th Report (i.e., without a good deal of extraneous information). He noted that GNEB’s last report was more than 100 pages long.

Dr. Pohlman stated that emergency response continues to be a challenge on the border. Mr. Storment called the members’ attention to the fact that the name of the Board includes the phrase “Good Neighbor.” The report must focus on how the United States can cooperate with Mexico to benefit both countries. As Dr. Pohlman mentioned, emergency response is a perfect example of how the countries must interact with

each other to be successful. The attitude should be “us” rather than “you and me.” Ms. Mendoza pointed out that, in addition to emergency response, trash continues to be an issue, and best management practices are needed. Dr. Ganster agreed that trash is a critical issue. Ms. Abrams added that infrastructure best practices is another important issue.

Ms. Lauren Baldwin, City of El Paso (Texas), liked the approach of strategically employing a mix of technology and personnel to meet border security and environmental needs and agreed that it would be best to begin with the 10th Report and determine progress that has been made and what research has been completed since then. Ms. Larocque added that the report could include the prosperity benefits from ecotourism and the vitality of ecosystem services. Dr. Payne agreed, noting that the trash issue affects ecotourism and ecosystem services. Dr. Eaton suggested that the role of border facilities and their connection to air and water quality be explored. Mr. Angel added that the trash issue is driven by wet weather events; therefore, water quality issues must inherently be addressed. Ms. Grijalva commented that emissions at the ports of entry are being studied, but completing the analysis is a difficult process. Although the data are not available currently, she can write a paragraph about data analysis efforts in this area. Dr. Ganster noted that data are being accumulated in various areas and could be gathered.

Mr. Storment explained that San Antonio, Texas, is about to be classified as a noncontainment area, which will have public health and economic affects, and the city is studying both of these effects. Additionally, border security cannot be addressed without tying the issue to border sister cities.

Dr. Ganster and Mr. Joyce reiterated that the Board will need to reach consensus on the issues of focus for the next report and identify section leaders before the end of the meeting. Ms. Pohlman summarized the seven issues that had been offered: emergency response, trash, water and air quality, ecotourism and ecosystem services and their relationship to prosperity, invasive species, infrastructure, and cross-border coordination and stakeholder participation.

Dr. Ganster recessed the meeting at 5:32 p.m. PST.

## **FEBRUARY 10, 2017**

### **Discussion of Next Meetings and Other Business**

Mr. Joyce reminded the GNEB members that the upcoming report will focus on the intersection of environmental protection and border security and how to achieve objectives in both areas. The report must contain rationale and justification for the recommendations as well as citations to original source materials. Although the report is provided to the President of the United States and Congress, the audience for the report is broad and includes federal, state, local and tribal agencies, as well as nongovernmental organizations and academia. Many entities find the Board’s reports useful. The goal is to develop a draft of the report early enough that it can be discussed during a full GNEB teleconference in mid-May. Dr. Ganster added that the Board members need to identify components of the report that can be accomplished realistically rather than idealistically.

Dr. Ganster presented the report outline that had been developed based on the prior day’s discussion:

- Section 1: Retrospective and Content
- Section 2: Exemplary Practices
- Section 3: Challenges
  - Ecosystem services strategies
  - Emergency response
  - Community understanding, will and information regarding the bigger picture

- Trash control and sediment management
- Invasive species
- Ports of entry and border wait times
- Incorporation of innovative technology
- Human health and border crossing
- Section 4: Recommendations

Ms. Hass suggested identifying an expert to discuss the U.S.-Mexico economic situation from a security perspective. Ms. Grijalva noted that several reports, including those from the Woodrow Wilson International Center for Scholars, discuss the topic. She wondered whether GNEB's report should discuss economics in general or directly in relation to border security (e.g., ecotourism). Dr. Ganster explained that SANDAG has data on border crossing wait times and the associated environmental and economic impacts; he can provide text for the report based on these data.

Dr. Zamora-Arroyo asked for clarification on the scope of the report. It will be important to examine the benefits and potential impacts of infrastructure; the report may not be well-received if the binational cooperation aspect is not included. The GNEB members agreed that a binational perspective is implicit in the report. Dr. Zamora-Arroyo added that conferences that have been held regarding border infrastructure should be incorporated into the report.

Ms. Mendoza commented that she knows individuals in Arizona who can help with the economic aspects; she also volunteered to work on the trash issue.

Mr. Angel suggested that the report highlight case studies rather than devoting a section to exemplary practices. Ms. Abram agreed, noting that exemplary practices should be woven through the report. She recommended that a section focus on infrastructure, which can include best management practices, benefits and impacts. Grid security is a key component of security and emergency preparedness, and solar energy plays a role in grid security. She volunteered to work on a section within the issue of emergency preparedness about the role solar energy plays in fostering a resilient grid and providing power and energy to remote communities.

Ms. Larocque noted that air pollution is a component of border-crossing efficiency, but this topic can be expanded on by including air pollution of *maquiladoras*<sup>2</sup> and providing security to border residents by ensuring that they have clean air. Dr. Ganster did not think that reliable data on factory pollution are available. Ms. Larocque said that she would be willing to determine whether any data from Texas exist. This topic could fit under the security of having good health, which is another interpretation of the term "security." Mr. Stormont agreed that the *maquiladoras* would not have data and added that infrastructure security is a neutral, not political, topic.

Dr. Pezzoli asked whether the Board was setting a precedent by focusing on a historical perspective. Mr. Joyce responded that a historical perspective has not been completed in a systematic manner. Dr. Pezzoli noted that value is added because this perspective makes it a special report. He referred to the presentation by Mr. Enriquez on the previous day that stated that of 225 actions, 220 were categorically exempt. He would like to understand the nature of these categorical exemptions. The challenge will be to determine direct and indirect impacts; for example, public health is an indirect consequence, and unintended economic consequences also may emerge. Additionally, transportation is an important issue to the 14 border sister cities. SANDAG is attempting to deal with the issue of multimodal transit planning to facilitate cross-border communication.

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<sup>2</sup> Manufacturing plants located in Mexico that assemble goods largely from imported components. The final products are exported to the U.S. market.

Mr. Davis said that it was important for the report to make clear immediately that border security is paramount. GNEB does not have knowledge of all border security technology available and needs to stay away from the minute details of such technology. Much about border security, including virtual security, has been learned in Iraq and Afghanistan. The Board should recommend that the best technology that leaves the smallest footprint on the environment be used but should leave the determination of what that technology may be to the experts. Ms. Abram added that the report must examine the environmental footprint of any technology or infrastructure that may be considered for use.

Mr. Angel thought that stormwater issues needed to be included in the trash control and sedimentation management section, including the topic of how wastewater affects border security. Individual states perform monitoring, but no formal monitoring network exists. *Maquiladoras* also affect air quality in terms of the traffic emissions from the number of people who work at them. Dr. Pohlman agreed that traffic and other activities leave an environmental footprint in addition to infrastructure, and the focus should not be on infrastructure alone. GNEB should explore environmental impacts from infrastructure, business processes and cross-border traffic.

Ms. Mather-Marcus liked the way that Mr. Angel had framed the report in terms of how border security affects the environment and how environmental issues in turn affect border security. She added that overarching federal emergency management agreements with Mexico are in place. She will provide the current standing agreements regarding border emergency response to Mr. Joyce so that he can forward them to the GNEB members.

Dr. Payne noted that a natural connection exists between ecosystem services and extreme weather events. Ms. Mendoza added that USGS has performed a good deal of work on ecosystem services. She also thought that two specific trash issues are wastewater/stormwater and foot traffic.

Ms. Larocque commented that common threads need to be incorporated into the challenges section. For example, how the environment can make security more challenging and how security can make maintaining the long-term services of the environment more difficult. It will be important for GNEB to advocate for cooperation among all federal agencies and for agencies to work at their full capacity. This is critical for the border.

Mr. Storment asked what the term “border security” means in the context of this report and for federal agencies. Dr. Pohlman responded that the DHS website ([www.dhs.gov/what-security-and-resilience](http://www.dhs.gov/what-security-and-resilience)) contains a statement that defines security as “as reducing the risk to critical infrastructure by physical means or defense cyber measures to intrusions, attacks, or the effects of natural or manmade disasters.” That is, keeping “bad people” out and protecting the U.S. population from “bad things.” The definition does not need to be complicated. Dr. Ganster explained that GNEB could develop its own definition that meets its needs for the report. Mr. Storment thought that security is broader than the DHS definition; border security is about a binational definition. Mr. Andrew added that the DHS definition includes any measures taken to achieve security (e.g., fences, towers, patrols). Air quality is included if border security activities or infrastructure create air quality issues. Mr. Angel agreed that environmental goals and border security cannot be secured without binational cooperation.

Dr. Eaton noted that the retrospective must include border security because it is a significant part of the 10th Report. Ms. Abram added that the retrospective will touch on many issues in addition to infrastructure. She thought that security and what it entails needs to be discussed in its own section of the report. Ms. Grijalva agreed. Dr. Pezzoli noted that the DHS definition of border security does not speak to food, water and energy security. The National Science Foundation recently elevated what it calls the “food-energy-water security trilemma” to a high-priority status. To what extent does border security allow the United States to share with Mexico a method to deal with food-energy-water system flows? This is

one approach to relate border security to homeland security. Ms. Grijalva agreed that this relates quite well. Mr. Davis noted that Yuma, Arizona, is a good example of being able to function effectively and securely. Products and labor are exchanged across the border at Yuma, and the local border is under complete control and secure.

Mr. Andrew liked the idea of including issues and opportunities raised by the food-water-energy nexus but was unsure how it could be related to the environmental impacts of border security. Dr. Ganster responded that the report could include a section discussing additional security challenges. Mr. Andrew suggested that opportunities be explored in this section in addition to challenges.

Ms. Mather-Marcus commented that it is necessary for the Board members to work with the same definition of security while writing their sections of the report. She volunteered to develop a definition for the term “security” that Mr. Joyce can circulate among the GNEB members for their input. A GNEB member noted that the 10th Report contains definitions of various types of security on page 9.

Mr. Joyce stated that the workgroups are responsible for organizing themselves and scheduling meetings. The workgroups must produce initial text in a timeframe that allows Ms. Kristen LeBaron, The Scientific Consulting Group, Inc., to collate the text and GNEB members to review it prior to the mid-May teleconference. Workgroups also should keep track of original source materials to be included in the reference list. Members also should begin to identify charts, graphs and photographs that will be included in the final report. Dr. Eaton thought that the workgroups should have their text completed by mid-March.

Mr. William Bresnick, DHS, commented that the Board has a charge in terms of developing the next report and redefining this charge could affect how the report is received. The food-energy-water triad could be the focus of GNEB’s next report. The report must focus on maximizing environmental protection in the context of border security actions.

### **Public Comments**

Mr. Joyce called for public comments. No oral or written comments were offered.

### **Continued Work on Development of the 18th Report**

The GNEB members discussed the structure of the report and corresponding assignments, which are highlighted in the action items below.

Ms. Larocque noted that economic values and community understanding should be highlighted in each challenge and opportunity section. Dr. Pezzoli agreed that the importance of community engagement in achieving solutions should be elevated within each section.

Mr. Wayne Belzer, International Boundary and Water Commission, agreed that infrastructure should be described in its own section, but he has a different perspective on what defines infrastructure. He thought that the proper handling of wastewater and drinking water along the border needed to be addressed in the report.

Mr. Salinas asked about the distance from the border that would be considered the border area. Dr. Ganster responded that the Board’s last report extended the definition of the border area to include watersheds; this report likely will have a more narrow focus. Mr. Joyce added that the definition has been variable in past reports, but the La Paz Agreement defines the border area as 100 kilometers (62 miles) on each side of the border. The North American Development Bank and Border Environment Cooperation Commission extend this definition to 300 kilometers (186 miles) on the Mexican side. Dr. Ganster noted that immigration and security services have different definitions as well. Mr. Belzer thought that only

areas that have an effect on border security should be included in the definition. Dr. Ganster instructed the GNEB members to use 100 kilometers as a guideline, but each workgroup could determine whether a different definition made more sense. Dr. Pezzoli commented that the distance could be contextualized by green infrastructure thinking in relation to watersheds.

Ms. Abram noted that technology can be integrated into all of the sections or included only as a part of the infrastructure section. GNEB also needs to define the term “infrastructure.” Dr. Ganster thought that the workgroups could fine-tune this definition as they begin writing. Ms. Larocque commented that cyber security technology could have a positive effect on the environment.

Dr. Pezzoli commented that the World Health Organization and World Organization for Animal Health developed a “One Health Framework” that examines human and animal connections. Ms. Mather-Marcus noted that DHS works with agriculture inspections and deals with human health in carrying out its mission.

Dr. Ganster stated that the recommendations would be developed by each workgroup during the writing of the report. A GNEB member noted the importance of having a DHS representative connecting the workgroups with experts to help them grasp the issues. The Board members also need pertinent contact information. Mr. Joyce explained that Ms. Hass will be responsible for coordinating expert consultation. He will send the current GNEB roster to the meeting participants so that they have the necessary contact information.

In response to a request from Dr. Eaton to obtain the PowerPoint presentations from the meeting, Mr. Joyce explained that he would set up a system to share materials that does not violate Federal Advisory Committee Act (FACA) rules. He explained that the official timeline would be developed during the next week, but the groups should aim to have their text to Ms. LeBaron for collating by the end of April. Dr. Ganster reported that, in terms of scheduling the mid-May teleconference, he would not be available after May 13 for 3 weeks.

Dr. Pezzoli noted that the Board’s last two reports contain helpful resources relating to infrastructure and ecosystem services.

A GNEB member suggested that the report highlight case studies (community impacts and understanding, economic benefits) within each challenge and opportunity section, including impacts on tribes and Mexico.

Dr. Ganster will send the report outline to the GNEB members, who will provide comments using track changes. Dr. Ganster will collate all of the comments and send the revised outline to the GNEB members. Mr. Joyce instructed the workgroups to consider the schedule and frequency of meeting via teleconference. FACMD can assist the workgroups in scheduling, sending invitations and providing call-in numbers for their teleconferences.

Dr. Payne explained that the Board transmits the report to CEQ, which by the time of transmittal may not exist in the form that it has in the past. GNEB must ensure that the report is targeted to the right individuals so that the appropriate federal agencies can act on the recommendations. Mr. Joyce agreed that the situation may evolve during the next several months, and GNEB may need to get reacquainted with CEQ.

Ms. Mather-Marcus asked how the report is transmitted to Congress. Mr. Joyce responded that the process has evolved over time. EPA’s Office of Congressional and Intergovernmental Relations forwards the report to the speaker of the House and the president of the Senate. GNEB members may send the



report to their representatives as citizens but may not represent the Board in doing so. Some members of Congress consider the direct forwarding of reports by FACA committees to be lobbying. Therefore, the Board cannot directly send the report to Congress, and GNEB members must act only as private citizens if they choose to forward the reports to their specific representatives. Congressional briefings by FACA committees also are considered lobbying.

### **Adjournment**

Dr. Ganster recognized Mr. Joyce and EPA staff for ensuring that the meeting occurred despite the current transition. Mr. Joyce thanked the DHS representatives for coordinating the outstanding presentations, and the DOI and NOAA representatives for assisting. Dr. Ganster thanked the GNEB members for their participation and adjourned the meeting at 11:31 a.m. PST.

### **Action Items**

- Ms. Hass will make the source statistics about the port of entries available to the GNEB members.
- Dr. Ganster will provide text based on the data about the economic and environmental impacts of border crossing waiting times that are available from SANDAG.
- Ms. Mather-Marcus will provide the current standing agreements regarding border emergency response to Mr. Joyce so that he can forward them to the GNEB members.
- Ms. Mather-Marcus will develop a definition for the term “security” for Mr. Joyce to circulate among the GNEB members.
- Mr. Joyce will send the current GNEB roster to the meeting participants.
- Dr. Ganster will send the report outline to the GNEB members, who will provide comments using track changes. Dr. Ganster will collate all of the comments and send the revised outline to the GNEB members.
- The next report will include the following sections:
  - Retrospective and context (gap analysis).
  - Border infrastructure, including:
    - Ports of entry and border crossing wait times.
    - Wastewater infrastructure.
    - Fencing and access roads.
    - Human health and border crossings/plant and animal health (topic may be moved later).
  - Challenges and opportunities, including:
    - Ecosystem services strategies.
    - Emergency response and preparedness.
    - Water management, trash control and sediment management.
  - Recommendations.
- The following topics will be included in all sections of the report:
  - Exemplary practices.
  - Community understanding, will, and information regarding the bigger picture.
  - Cross-border coordination.
  - Invasive species (as appropriate).

- Incorporation of innovative technology.
- The topic of the food/water/energy nexus may be included in the report.
- Dr. Pohlman will lead the gap analysis effort; Dr. Eaton, Mr. Andrew, Ms. Grijalva, Ms. Mendoza, Ms. Mather-Marcus and Ms. Hass will assist.
- Ms. Abram and Mr. Storment will lead the team focusing on border infrastructure; Mr. Belzer, Dr. Zamora-Arroyo and Mr. Davis will serve on this team. Ms. Hillary Quam, U.S. Department of State, who was not present at the meeting, also will serve on this team. A DHS representative should be added to the team.
- Mr. Cruz will provide tribal examples for all of the relevant, specific challenges and opportunities.
- Ms. Lisa Schaub, EPA Region 6, will coordinate the section on challenges and opportunities.
- The following teams will focus on these specific challenges and opportunities:
  - Ecosystem services strategies: Ms. LaRocque (lead), Mr. Salinas, Dr. Payne, Ms. Baldwin and Mr. Andrew.
  - Emergency response and preparedness: Dr. Eaton (lead), Ms. Quam (possible co-lead), Ms. Mather-Marcus and Ms. Abram. Dr. Pohlman has a recommendation for a Federal Emergency Management Agency representative to serve on this team.
  - Water management, trash control and sediment management: Mr. Angel (co-lead), Dr. Zamora-Arroyo (co-lead), Ms. Mendoza, Dr. Pezzoli and Dr. Payne. An IBWC representative also should serve on this team.

## Appendix A: Meeting Participants

### Chair

**Paul Ganster, Ph.D.**

Director  
Institute for Regional Studies of the Californias  
San Diego State University  
San Diego, California

### Nonfederal, State, Local, and Tribal Members

**Laura Abram**

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**Jose Angel**

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State Water Resources Control Board  
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LBJ School of Public Affairs  
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### Designated Federal Officer

**Mark Joyce**

Acting Designated Federal Officer  
Good Neighbor Environmental Board  
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**Edna A. Mendoza**

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**Scott D. Storment**

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**Jose Francisco Zamora-Arroyo, Ph.D.**

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#### **Salvador Salinas**

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#### **Jeff Payne, Ph.D.**

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#### **Jonathan Andrew**

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#### **Sylvia Grijalva**

U.S.-Mexico Border Planning Coordinator  
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## **Federal Alternates**

### *International Boundary and Water Commission*

#### **Wayne Belzer**

Environmental Engineer  
Environmental Management Division  
U.S. Section  
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### *Department of State*

#### **Beverly Mather-Marcus**

Energy and Environment Officer  
Office of Mexican Affairs  
U.S. Department of State  
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### *Department of Homeland Security*

#### **Jennifer Hass, J.D.**

Environmental Planning and Historic  
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### ***Region 3***

#### **Jose Redmond**

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#### **Jeanne Eckhart**

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### ***Region 9***

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San Diego National Wildlife Refuge Complex  
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## Appendix B: Meeting Agenda



### Good Neighbor Environmental Board

Marriott Pier South, 800 Seacoast Drive, Imperial Beach, California

February 9 – 10, 2017

## AGENDA

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### Meeting Day 1

#### Thursday, February 9

- |                  |  |
|------------------|--|
| 8:30 a.m.        | Registration   |
| 9:00–9:30 a.m.   | Welcome, Introductions and Overview of Agenda <ul style="list-style-type: none"><li>• Mark Joyce, Acting Designated Federal Officer, EPA</li><li>• Paul Ganster, Chair, Good Neighbor Environmental Board</li><li>• Honorable Serge Dedina, Mayor of Imperial Beach</li><li>• Board Introductions</li></ul>  |
| 9:30–10:30 a.m.  | Federal Perspectives on Environmental Conditions Along the U.S-Mexico Border—Federally Managed Trust Resources <ul style="list-style-type: none"><li>• Jon Andrew, Interagency Borderlands Coordinator, DOI<br/><i>Overview of Federal Lands and Border Conditions</i></li><li>• Andy Yuen, Project Leader, FWS<br/><i>San Diego National Wildlife Refuge Complex</i></li><li>• Jeff Payne, Director, Office for Coastal Management, NOAA<br/><i>Tijuana River National Estuarine Research Reserve</i></li><li>• Q&amp;A and Discussion (15 minutes)</li></ul> |
| 10:30–10:45 a.m. | Break  |

- 10:45 a.m.–12:00 p.m. Illegal Cross-Border Activity and the Environmental Impacts
- James Nielsen, Supervisory Border Patrol Agent, U.S. Border Patrol, U.S. Customs and Border Protection, DHS  
*Overview of Border Security Profile*
  - Paul Enriquez, Chief, Environmental Branch, Office of Facilities and Asset Management, U.S. Customs and Border Protection, DHS  
*Positive and Negative Environmental Impacts of Border Security*
  - Jon Andrew, Interagency Borderlands Coordinator, DOI  
*Successfully Balancing Management of Border Security Infrastructure and the Mission of the Department of the Interior*
  - John Armijo, Assistant Director, San Diego Office of Field Operations, U.S. Customs and Border Protection, DHS  
*Security Inspections at Commercial and Non-Commercial Ports of Entry*
  - Q&A and Discussion (15 minutes)
- 12:00–12:15 p.m. Public Comments
- 12:15 p.m. Depart for Working Lunch at the Tijuana River National Estuarine Research Reserve Visitors Center
- 12:30–2:15 p.m. Overview of the Tijuana Slough National Wildlife Refuge and the Tijuana River National Estuarine Research Reserve
- Brian Collins, Refuge Manager, FWS  
Tijuana Slough National Wildlife Refuge
  - Jeff Crooks, NOAA  
Tijuana River National Estuarine Research Reserve
- 2:15 p.m. Return to Hotel
- 2:30–4:00 p.m. Discussion of the 18th Report to the President and Congress on Environment, Security and Prosperity in the U.S.-Mexico Border Region
- 4:00–4:15 p.m. Break
- 4:15–5:30 p.m. Continuation of Discussion of the 18th Report
- 5:30 p.m. Recess



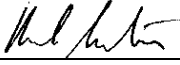
## Meeting Day 2

### Friday, February 10

8:00 a.m.	Registration
8:30–9:30 a.m.	Discussion of Next Meetings and Other Business
9:30–9:45 a.m.	Public Comments
9:45–11:30 a.m.	Continued Work on Development of the 18th Report
11:30–11:45 a.m.	Break
11:45 a.m.–2:00 p.m.	Continued Work on Development of the 18th Report
2:00 p.m.	Adjournment

**Appendix C: Chair Certification of Minutes**

I, Paul Ganster, Chair of the Good Neighbor Environmental Board (GNEB), certify that this is the final version of the complete minutes for the face-to-face meeting held February 9–10, 2017, and that the minutes accurately reflect the discussions and decisions of the meeting.



\_\_\_\_\_  
**Paul Ganster, GNEB Chair**

March 2, 2017

\_\_\_\_\_  
**Date**