



**Good Neighbor Environmental Board (GNEB) Virtual Public Meeting
Microsoft Teams Virtual Platform
August 24–25, 2022; 3:00 p.m.–5:00 p.m. EDT**

MEETING SUMMARY

AUGUST 24, 2022

Welcome and Member Roll Call

Eugene Green, GNEB Designated Federal Officer, Federal Advisory Committee Management Division, Office of Resources and Business Operations, Office of Mission Support, U.S. Environmental Protection Agency (EPA); Paul Ganster, Chair, GNEB; and Irasema Coronado, Vice Chair, GNEB

Mr. Eugene Green welcomed the participants, informed them that the meeting would be recorded, and conducted the roll call. 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.

Dr. Paul Ganster, GNEB Chair, and Dr. Irasema Coronado, GNEB Vice Chair, thanked the GNEB members for their contributions in developing the current draft of the advice letter and acknowledged the EPA and contractor team for organizing the meeting.

Overview of Agenda and Meeting Goals

Paul Ganster, Chair, GNEB, and Irasema Coronado, Vice Chair, GNEB

Dr. Ganster provided an overview of the agenda and meeting goals. The overarching goal of the meeting is to develop a more refined draft of the advice letter. The Board will meet again in November to approve the final advice letter. The editing team organized the current draft of the advice letter around a central message. The advice letter will be relatively short, and GNEB will provide a more detailed, lengthy report (full report) on the same topic in 2023.

The overall context emerging from the advice letter is that the U.S.–Mexico border region is underserved in terms of water and wastewater infrastructure, and the combination of poverty and ethnicity in the region constitutes an environmental justice issue. The broader context is that the U.S.–Mexico border region is poorer than other U.S. regions per capita by a number of measurements.

The overall focus will be on three central messages that will be emphasized in the advice letter:

1. The limited opportunity to take advantage of unprecedented federal funding is coming to a close. The current U.S. administration is committed to addressing water and wastewater infrastructure shortfalls throughout the country, and the U.S.–Mexico border region must be a priority. This provides an opportunity to address the chronic water and wastewater infrastructure problems that the border region has experienced for many decades.
2. Federal funding and related state programs must be tailored to meet the needs of small rural communities, *colonias* and tribes, which often neither have the resources or training nor meet the requirements (e.g., matching funds, income to repay low-interest loans) to compete for grants and other funding.

3. Being adjacent to the international boundary presents unique challenges for U.S. border cities, where water and wastewater issues are intimately linked to and negatively affected by the flow of pollutants, trash and sediment from the Mexico side of the border. These cities are required to address transborder issues without having the tools to do so. Federal and state programs that fund water and wastewater projects must be granted the flexibility to establish projects on the Mexico side of the border to benefit U.S. communities. Institutional mechanisms and improved binational cooperation are needed to proactively manage these predictable transborder challenges, which is a recurring theme of GNEB's recent reports.

The GNEB members should consider the advice letter in the context of these key points and develop recommendations based on this consideration.

Public Comments

Mr. Green called for public comments and acknowledged the members of the public who had requested to attend the meeting. No oral or written comments were offered.

Drafting Teams Report Outs and Discussions

GNEB Team Leads

Each of the draft teams summarized their sections for the full Board.

Dr. Josiah Heyman explained that the focus of Section 1, "Border Socioeconomic Context," is on the cultural, social and economic characteristics of the U.S.–Mexico border that will inform discussions surrounding justice qualities, as well as associated opportunities, challenges and barriers. The section is straightforward and introduces issues surrounding water and wastewater.

Dr. Joaquin Murrieta-Saldivar thought that it would be interesting to frame the section in terms of watershed boundaries and water sources to provide the proper geographic context. Dr. Heyman agreed that a paragraph could be added discussing cross-border watersheds, particularly given the number of geographic definitions that exist in the border area. Dr. Ganster added that the full report can include a call-out box discussing the "One Watershed" concept and the population and other issues surrounding that watershed. Managing watersheds in the border area is challenging because the available data are generated by local administrative units and do not correspond with watersheds. Dr. Coronado agreed that this concept is important, noting the examples of Sonora, Mexico, and the Santa Cruz River.

Mr. John McNeese provided an overview of Section 2, "Institutional Framework for Binational Management of Water Sources." The draft team touched on the major institutions and treaties affecting the border (e.g., International Boundary and Water Commission [IBWC], La Paz Agreement, Border 2025 U.S.–Mexico Environmental Program [Border 2025], North American Development Bank [NADBank]). The NADBank discussion can be moved to the section in which financing is highlighted. Section 2 does not have an emphasis on the state, tribal, county or local levels. Border 2025 contains a robust stakeholder framework, and the Texas Commission on Environmental Quality (TCEQ) may be able to provide text on how local governments can coordinate to address binational issues. Mr. Jonathan Niermann agreed that TCEQ could provide text about local or state coordination. How GNEB frames the advice letter's central message, as well as the necessary content to support this framing, will determine how much information about collaboration and coordination to include in this section. Mr. José Palacios agreed to provide material on state-to-state agreements and local collaboration on water-related issues.

Because of the current institutional framework, Mr. Alejandro Barcenas thought that the only sharing of water involves the Rio Grande and Colorado River. Institutional cooperation is limited because of the

different state regulations on each side of the border. The communication between the two countries provides challenges for local communities to develop water-related solutions at the border.

Mr. McNeese commented that the Commission of the Californias is newly reinvigorated, and IBWC's community-input groups are active. Although state-to-state action is limited, state and local governments coordinate through a robust stakeholder process. Dr. Ganster agreed that stakeholder involvement is key, and Border 2025 and its predecessors have strongly focused on generating public input for border environmental policy information. Significant institutional barriers still hinder the ability of localities to work across the border to solve local water and wastewater issues. This is a structural issue, and GNEB has commented on this in the past. An aspirational goal is significant, institutionalized U.S.–Mexico government support for local and stakeholder mechanisms to solve border water and wastewater problems.

Mr. William Micklin thought that the advice letter is written around the need to adjust transboundary water management to adapt to changes; however, international agreements do not account for climate change uncertainties, including changes in precipitation and the frequency and strength of storm events. The advice letter points to mechanisms for transboundary agreements and mechanisms to adapt to climate change, but many institutions are somewhat inflexible in adapting their mechanisms to the changing climate. It is important for GNEB to describe opportunities for adaptation.

Mr. Mario Lopez agreed that transborder watersheds present tremendous challenges, and the advice letter must mention governance issues surrounding these watersheds, as well as provide recommendations on how to address cross-border watershed management issues.

Dr. Murrieta-Saldivar commented that some nonprofit organizations coordinate binationally; the advice letter can recognize these groups, several of which are devoted to environmental conservation, wildlife management and borderland restoration. Dr. Ganster asked Dr. Murrieta-Saldivar to provide text about these groups. GNEB advises the U.S. federal government, but the federal government is more efficient if it has wide local collaboration, and mentioning this fact is useful.

Dr. Jeffrey Payne acknowledged that Section 3, “Border Water Supply and Challenges,” must include more information about climate change effects. He will develop text about the significance of climate and climate impacts in the region. The text can be enhanced to establish a baseline for the relevance of any recommendations that the Board develops about climate variability. For the advice letter and full report, GNEB can source material from authoritative documents with climate projections. The Board's recommendations must flow from the best-available climate science and descriptions of regional climate impacts. The Fifth National Climate Assessment—which will include climate science, climate impacts and regional climate information—will be released in late 2023, and preliminary data can be used to inform the Board's full report.

Dr. Alan Sweedler believes that models have become sophisticated enough to focus on regions and can be used to examine projections about water quality and quantity in the U.S.–Mexico border region. It also is important to connect regional models to global models.

Ms. Rebecca Roose will share a recently finalized science report, *Climate Change in New Mexico Over the Next 50 Years: Impacts on Water Resources*. The state of New Mexico convened a panel of science experts, including Dr. J. Phillip King, and prepared a focused analysis of different regions in New Mexico, including the U.S.–Mexico border region, but much of the science can be applied throughout the entire border region. Perhaps the report can contribute to the advice letter's discussion on the state of the science in terms of climate science impacts on water in the border region.

Dr. King noted that climate change and its potential impacts will affect more than water resources, and GNEB needs to convey the sense of urgency appropriate to this issue because the situation will deteriorate rapidly. For example, if Mexico is to meet the requirements of the *1944 Treaty Between the United States of America and Mexico Relating to the Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande* (1944 Water Treaty), agriculture will need to be reduced, which in turn will reduce employment and increase population movement, which will further stress border infrastructure.

Mr. McNeese commented that Section 3.ii, “Riparian and Water Rights,” should discuss the ongoing conflict regarding how to manage drought conditions on the Colorado River. The U.S. Bureau of Reclamation was going to control water use on the river but retained the old management plan. Tribal water rights, which arise from reservation allocations made by the federal government, also must be mentioned. Dr. Coronado agreed that the Colorado River is an important point of discussion because of water scarcity and binational allocation aspects. Mr. McNeece noted that the 1944 Water Treaty proportionately reduces Mexico’s access when the Colorado River is in drought conditions, which is reflected in IBWC Minute 319. Tijuana and Mexicali are highly dependent on the Colorado River as a water source. Dr. Ganster will work with Mr. McNeese and Mr. Micklin to include language on Colorado River and Indigenous water rights issues, respectively. He noted that increasing water scarcity will accelerate conflicts over water rights.

Mr. Palacios suggested adding information on the current cycle of Mexico deliveries under the treaties to Section 3.iii, “Water Deliveries Under International Treaties.” Mr. Niemann and TCEQ will revise the text relating to the complex relationship with Mexico deliveries and long-term issues with Texas water users for the full report.

Dr. Ganster noted that Section 3.iv, “Transborder Groundwater,” characterizes aquifers, but treaties and effective management of transborder aquifers are not in place. He explained that TCEQ had drafted Section 3.v, “Water Quality,” and he had added information about water quality as it relates to California, Arizona and New Mexico.

In Section 3.ix, “Stormwater Management,” TCEQ points out that binational rivers have transborder stormwater effects. This section may be appropriate to highlight the urgency surrounding climate change. Projections indicate more intense storm events and more severe flooding. A previous GNEB report highlights concerns about redrawing flood maps, which are critical for real estate and land use planning. Models have not been adjusted to reflect climate science data.

Mr. Joaquin Marruffo liked that the advice letter mentions that stormwater and sewer systems are not separated in Mexico, which negatively affects U.S. infrastructure. He thought that the full report also should focus on the operation and maintenance aspects of funding, which should include strategic planning for monsoon season. Dr. Ganster agreed that operation and maintenance issues apply to stormwater management, in addition to water and wastewater management. Dr. Coronado added that the Board has discussed this topic in previous reports, and the full report could highlight these previous discussions because this has been a recurring problem for more than 20 years.

Dr. Payne commented that one urgency that must be considered is the opportunity to improve infrastructure through the Bipartisan Infrastructure Law and Inflation Reduction Act funding while this funding is available. The accuracy in determining future flood plains for flood mapping needs improvement. An executive order requires that agencies and the recipients of federal flood assistance ensure that flood plain actions are resilient and long-lasting. The ability to project future flood plains will require new flood mapping. The Federal Flood Risk Management Standard prefers that a climate-informed science approach be used for decision-making. He agreed to provide text to this point.

Dr. Ganster agreed that flood mapping is important, and many *colonias* in Texas are susceptible to flooding. Binational sister cities do not benefit from flood maps that cover only half of their area.

Dr. Murrieta-Saldivar will develop text about incentives and education around residential rainwater harvesting infrastructure to this section. Dr. Heyman provided a link to an [article on rainwater collection and other measures for colonias](#). Ms. Roose noted that text about stormwater management and identification of funding also could be added to Section 6.

Dr. Ganster explained that Section 3.x, “Watershed Protection and Management,” mentions that the Board’s Eighth Report from 2005 addressed water resources in the U.S.–Mexico border region. GNEB first raised this as a priority issue in 2002. The fact that these issues still are being discussed 20 years later is evidence of the complex nature of transborder watershed management.

The Board discussed Section 4, “State of Border Water and Wastewater Infrastructure and Challenges in Providing Services, Including Financing for Small and Large Providers and Technical Capacity.”

Mr. Barcnas commented that some of the Federal Emergency Management Agency requirements that are applied on a national scale do not make sense for some localities (e.g., Nogales, Arizona). He recommended that these requirements include a focal point in the local environment.

Ms. Melisa Gonzales commented that counties are not regulated by state water permitting, and it is necessary to work with counties in regard to regulating *colonias*. Unfunded mandates also are counterproductive. Dr. Maria-Elena Giner agreed, noting that when she interviewed utilities for her dissertation, stormwater management and other public infrastructure were identified as pending issues. The advice letter mentions the role that counties should have in terms of onsite systems and the need to grow capacity for counties. Ms. Gonzales’ comments complement this text. Dr. Ganster noted that *colonias* face administrative challenges because they “fall between the cracks” of local and state governance.

Dr. Ganster explained that he had added text to the advice letter about tribes and large cities. Ms. Gonzales will provide text about small cities that highlights the challenges that small cities face in competing with larger entities for funding. Dr. Ganster requested that Mr. Micklin, Mr. Evaristo Cruz (not present on the video teleconference), and staff from EPA’s Office of International and Tribal Affairs (OITA) review Section 4.iv., “Tribal Areas,” and develop additional or revise language as appropriate.

Dr. Ganster explained that he had trimmed Section 4.v., “Irrigation Districts,” within the advice letter, but a full discussion of this topic will be important to include in the full report, including urban uses. Mr. José Hinojosa added that most municipalities in the Lower Rio Grande Valley rely on irrigation districts; only two municipalities draw directly from the river. Infrastructure funding must include the conveyance of well water to irrigation districts; most irrigation districts do not have viable funding to improve their infrastructure. The definition of infrastructure must be expanded to be more holistic and include conveyance and salt water issues.

Dr. Ganster provided an overview of Section 4.vi., “Dams and Levees,” which was trimmed considerably. Dr. Giner commented that it is important to highlight that IBWC did not receive any funding for the Rio Grande from the Bipartisan Infrastructure Law, Inflation Reduction Act or climate bills. The U.S. Bureau of Reclamation, however, received \$4 billion from the Bipartisan Infrastructure Law and Inflation Reduction Act for the Colorado River. Sediment is a significant challenge for levees and dams on the Rio Grande, which in turn reduces the capabilities of the flood protection system. Dr. Ganster noted that the advice letter can point out that the Bipartisan Infrastructure Law does not provide viable funding for communities along the U.S.–Mexico border, including tribes and *colonias*, nor does it support IBWC’s

significant activities. Dr. Giner agreed, noting that programmatic funding also is not available for the Rio Grande or Santa Cruz River.

Dr. Sweedler provided an overview of Section 4.vii., “Energy and Water Services.” The important point of this section is that energy, despite its importance, is not discussed in terms of water and wastewater. Energy can account for up to 40 percent of a water project’s budget. If Board members have information on electricity use and budgets for water and wastewater infrastructure, it would be helpful to include. Dr. Sweedler also is interested in engineering studies or papers on non-electricity input (e.g., biodigestion). Ms. Roose added that Clean Water and Drinking Water State Revolving Funds have Green Project Reserve subsidies. EPA and OITA contacts may be able to provide data that demonstrate energy use and savings at wastewater treatment plants. Ms. Roose volunteered to investigate New Mexico’s State Revolving Funds to determine whether it includes information about energy use and savings in the wastewater sector. Perhaps representatives from California, Arizona and Texas could examine their State Revolving Funds for the full report. Mr. Rafael DeLeon agreed that he might be able to provide some information and asked Ms. Roose and Dr. Sweedler to email him with the specific data needs. Dr. Ganster added that this information might be relevant for decentralized water and wastewater systems.

Preparation for Day 2

Paul Ganster, Chair, GNEB, and Irasema Coronado, Vice Chair, GNEB

The Board members will discuss Sections 5 and 6 during Day 2 of the meeting. The members should consider the overarching message of the advice letter and the points that must be made to make this letter as effective as possible. The Board also must consider which items can be set aside at this stage and included in the full report. GNEB members will revise the draft so that it can be reviewed prior to the video teleconference in November, during which the Board will approve the advice letter.

Dr. Coronado thanked the members for the productive discussion and noted the importance of crafting the advice letter in a strategic manner to ensure that action is taken.

Dr. Ganster recessed the meeting at 4:58 p.m. EDT.

AUGUST 25, 2022

Recap of Day 1 Activities and Objectives for Day 2

Paul Ganster, Chair, GNEB, and Irasema Coronado, Vice Chair, GNEB

Mr. Green called the meeting to order, and Dr. Ganster summarized the highlights from the first day of the meeting:

- It is important to engage local stakeholders, including governments, to solve transborder water and wastewater issues. Local nongovernmental organizations with proven successes in addressing transborder issues should be included.
- Climate change is a key component of this topic. The Fifth National Climate Assessment is underway, and the initial results can inform the full report. New Mexico also has a relevant, high-quality scientific report on climate change.
- Because of climate change effects—including precipitation changes and an increasing number of storm events—current flood maps must be updated. Much of the water and wastewater infrastructure in the U.S.–Mexico border region is located in areas susceptible to flooding.

- Governance of watersheds, including socioeconomic conditions in a watershed, is important and can be discussed in the full report.
- Rainwater harvesting at the residential level is an easily applied solution that can have important benefits.
- *Colonias* face many challenges because of the uncertain governance and responsibility for water, wastewater and stormwater infrastructure. These responsibilities need to be clarified to assist *colonias*.

Discussion of Report Focus and General Theme(s)

GNEB Members

Ms. Roose provided an overview of Section 5, “Water and Wastewater Infrastructure Services: Best Practices and Recommended Improvements for the Border Region.” The drafting team ensured that robust information about best practices was included. The first few paragraphs are redundant to Sections 3 and 4 and can be trimmed, which would allow the inclusion of additional examples of best practices and success stories from across the border region. Examples that should be added are successful coalition building and local collaboration across the border, best practices for preparing engineering plans for water and wastewater infrastructure, technical assistance success stories, best practices for regionalization of water and wastewater systems, and the creation of broader local capacity operations by consolidating aspects of water and wastewater systems. Section 5 moves the advice letter from describing issues and challenges to illustrating what is working well and what is needed in the border region.

Mr. McNeese agreed that more success stories should be included, including a discussion on accomplishments that previous funding has achieved and commentary on the funding’s effectiveness. Successful application of money, expertise and technical information shows that a difference can be made in the border region.

Dr. Theresa Pohlman suggested including a map to highlight how all of these streams cross, which would illustrate how everything is interconnected. Dr. Ganster noted that a complex map is not needed; the map simply needs to communicate the message in a clear, concise manner. Mr. Lopez agreed that a map would be helpful, and he knows of existing maps that could be used. Dr. Coronado noted that her colleague also may have maps that would be appropriate. Dr. Ganster encouraged the Board members to contribute any maps that they think would be helpful.

Ms. Roose provided an overview of Section 6, “Available Financing Programs for Water and Wastewater Infrastructure Planning, Design and Construction Projects and Local Capacity Building in the Border Region.” This section was written at a high level because the advice letter will be too short to include much detail; the section summarizes key financing programs. Some examples of state funding from Arizona and New Mexico also are included; examples from California and Texas would strengthen this section. Section 6 also discusses best practices and associated gaps with available funding, noting that the available resources do not meet all communities’ needs. Some of the concepts discussed on the prior day (e.g., flood plains and updated flood mapping; the need for infrastructure to cover irrigation and agriculture; the lack of dedicated funding for IBWC, which highlights a macro-level gap in appropriations of recent federal investments) can be incorporated into the bullets at the end of the section.

Mr. Erik Lee commented that NADBank must not act like a highly risk-averse commercial lending institution and act more in the interest of risk capital project development and technology assistance, particularly for small communities. Dr. Ganster added that the Board always has championed the continuation of NADBank during congressional and other efforts to eliminate the bank, citing the significant transformation of water and wastewater infrastructure in the border region since the

establishment of NADBank. Unfortunately, NADBank must follow the operating rules under which it was established. GNEB could suggest new responsibilities for NADBank that would address the important needs and underserved areas identified in the advice letter (e.g., rural, tribal and *colonias* needs; binational cooperation). Although doing so may require legislative changes, NADBank's processes and requirements ultimately could be made more user-friendly, particularly for rural and tribal communities and *colonias*. Mr. Lee agreed that although NADBank is necessary, its processes and requirements are opaque, and its structure of six giant binational agencies is unwieldy. He thought that the government should examine this structure.

Dr. Giner commented that NADBank must engage with communities in a more meaningful manner, becoming more grassroots focused and embracing a more service-oriented style. The Texas Water Development Board, which has a *colonias* program, can provide NADBank with ideas and best practices. NADBank offered a low-interest loans program that allowed it to provide a low market rate to utilities; however, because NADBank cannot offer tax-exempt funds, it is not competitive for loan programs for small communities. NADBank is a border bank that has an opportunity to provide technical assistance and capacity building that is more customized for small communities and small utilities in the border region. Dr. Giner emphasized Dr. Ganster's and Mr. Lee's comments that NADBank is necessary but must be overhauled. Mr. Lopez also agreed and mentioned that NADBank currently is holding its annual U.S.–Mexico Border Environmental Forum. Ms. Lisa Almodovar added that the Forum is open to the public, widely advertised and offered in a hybrid format.

Mr. Eddie Moderow wondered how the Bipartisan Infrastructure Law will affect NADBank's portfolio on the U.S. side of the border. The portfolio in Texas has been balanced between each side of the border, but this balance may change with the significant additional funding for water and wastewater being invested by the United States. Ms. Roose thought that the Board could investigate this topic further in the full report.

Ms. Almodovar suggested that GNEB's message about NADBank focus on how it can be improved instead of being critical. NADBank was established as an environmental bank under the North American Free Trade Agreement to support the Border Environmental Infrastructure Fund. NADBank's charter has evolved during the last few decades as border needs have changed. Mr. Carlos Suarez agreed that the Board's recommendations must be about specific improvements. Mr. Moderow thought that the Board could recommend inclusion of water and air quality monitoring in NADBank-funded infrastructure projects, which would increase the amount of border data available.

Dr. Pohlman commented that government funding requires applicants to follow strict procedures to apply for grants, which include properly spending, monitoring and accounting for the funds. Many communities do not have the resources or training to successfully navigate this process. The Board could recommend that training be provided to allow smaller communities better access to funding.

Ms. Roose agreed that these discussion points are key themes, and Section 6 concludes with important gaps and points of focus; building local capacity is an overarching theme. In addition to training, the section advocates funding for technical assistance. For example, the Rural Community Assistance Corporation is a resource for many communities, helping communities obtain funding and develop plans for design and construction and helping local water and wastewater systems with asset management. State chapters of the National Rural Water Association, which are receiving funding from the Bipartisan Infrastructure Law, are another example. Mr. Moderow added that [Communities Unlimited](#) provides technical and other assistance in Texas. Ms. Gonzales noted that the Texas A&M University Colonias Program works directly with *colonias* and small rural communities in the Lower Rio Grande Valley.

In response to a question from Dr. Ganster about resources for tribes, Ms. Roose explained that the Southwest Environmental Finance Center provides technical assistance to tribes and has built capacity for tribes to address their water and wastewater infrastructure needs. Mr. Micklin added that nonprofit organizations and intertribal groups provide technical assistance to tribes. Infrastructure deficiencies in tribal communities and *colonias* are caused by insufficient investment in these communities, the competitive grant process, and the inability of these communities to raise operations and maintenance capital. This investment inequality was captured in the advice letter.

Dr. Heyman commented that EPA is establishing technical assistance support centers for energy justice. They are not water-focused, but energy and water overlap. He agreed that the Board must emphasize the need to support infrastructure at all levels.

Dr. Kimberly Collins suggested investigating the model of Community Development Block Grants and regionalizing the funding process. Ms. Gonzales noted that the Community Development Block Grants funding process is not fair to small cities, which receive smaller allocations that do not support larger projects. Small communities are not considered as “entitled communities” and as a result receive lower funding amounts.

Dr. Giner noted that small communities do not always have the technical expertise to develop projects that qualify for NADBank funding. This issue was raised at the onset of NADBank’s development. Mr. Lee added that NADBank should modify its process to serve the communities, which often are small, and entities that it is mandated to help, rather than the reverse.

Dr. Ganster asked the GNEB members to consider the theme of the advice letter. Dr. Sweedler responded that an essential theme is that the U.S.–Mexico border region is very different from other parts of the United States.

Ms. Roose thought that one theme is the optimism and urgency that accompany this unprecedented opportunity to improve water and wastewater infrastructure and protect environmental and public health along the border as a result of the historic recent investments and development of innovative technologies. The urgency around climate change and the need for resilient infrastructure must drive decisions about how resources are leveraged and managed in the border region, in addition to driving investment and collaboration. Another key area touches on local capacity. The U.S.–Mexico border region is unique, so solutions and funding access must be tailored to the particular issues that occur along the U.S.–Mexico border (e.g., the types of communities, cross-border cooperation, large urban areas that are binational in nature).

Mr. Suarez commented that one theme should be equality and inclusion. Communities along the border, which often are poor, are affected by climate change more than other regions of the United States. Issues must be addressed within a framework of equality and inclusion to allow these poor communities to obtain the same level of services that other U.S. communities enjoy.

Dr. Pohlman noted that GNEB’s advice letter and full report provide unique mechanisms to strategically examine all of the water and wastewater infrastructure issues along the border. The distinctiveness of the advice letter and full report is that the Board examines all topics, including inclusion and equality, but has a very narrow window to make a difference. The urgency should be highlighted, as well as the fact that GNEB is unique in that it provides a strategic examination of the entire border.

The GNEB members discussed the format of the advice letter and how to present the recommendations. The full report will allow the Board to present its recommendations by topic, but the advice letter should be more general. The length of the advice letter will dictate the format and level of specificity. The Board members agreed that a shorter, concise advice letter will be more powerful, attention-getting and widely

read than a lengthy document. The members came to consensus that the advice letter will be approximately 2 to 4 pages and highlight key points, and the current draft will be included as supplementary material—possibly referred to as an “interim report”—that provides the basis for the full report. The advice letter can point to the fact that many of these issues have been discussed for decades, but the government has a unique opportunity to address them because of the current unprecedented funding and urgency surrounding climate change.

Dr. Ganster summarized the Board’s discussion. The U.S.–Mexico border region is underserved, with a co-incidence of poverty and ethnicity and a lack of proper water and wastewater services. The border region is unique because of the complications related to cross-border flows that provide challenges for solving otherwise relatively straightforward issues. The increased availability of infrastructure funding provides an urgent opportunity to address border water and wastewater issues and needs; this urgency also should be driven by the increasing complexities and dangers presented by climate change, which is accelerating needs and reducing the time for a proper response. Making the U.S.–Mexico border region more resilient helps meet the needs of and protect the diverse border population.

Next Steps: Assignments and Deadlines for Writing and Editing

Paul Ganster, Chair, GNEB, and Irasema Coronado, Vice Chair, GNEB

Dr. Ganster explained that the next step is to develop a draft that can be circulated among the members and their agencies prior to the approval meeting; the Board will meet the week of November 7 by video teleconference to approve the advice letter and will not have the opportunity to meet in full to discuss the advice letter before November. He asked whether 1 month of review time is enough for those representatives who need agency approval. Mr. Suarez requested 45 days for his agency’s review process, which will include his undersecretary. Dr. Ganster noted that although the agency review process can be cumbersome, GNEB’s advice letters and reports serve to educate the chains of command in federal agencies and state capitols.

The GNEB members discussed two approaches for developing the key points for the concise advice letter and determined that members would submit, by September 2, the language that they think is most effective to communicate these key points. The editorial team will produce a draft of the concise advice letter from this language. The GNEB members also will revise the current text as discussed, and the editorial team will combine the revisions into a new draft that will serve as supplementary material for the concise advice letter.

Mr. Moderow noted the balance of developing a letter that is neither overly broad and generic nor too specific. Ms. Kathryn Becker suggested that each priority list could be divided between general and specific actions.

Dr. Ganster commented on the need for congruency between federal and state programs. Ms. Roose noted that although GNEB does not advise states, the Board can describe the interplay between state and federal programs, particularly to the extent that it helps reinforce the Board’s advice to the federal government (e.g., importance of federal funding to allow state dollars to go further and vice versa). Federal policies and programs should be complementary to and supportive of state, tribal and local programs. As a state official, she will consider how to use the Board’s advice letter and interim report to educate other state officials around these issues.

Adjournment

Dr. Ganster thanked the Board members for their efforts and adjourned the meeting at 4:51 p.m. EDT.

Action Items

- All GNEB members will—
 - Send effective language surrounding the key points for the 2- to 4-page advice letter to the editorial team no later than September 2.
 - Revise the text of the interim report as discussed and submit the revised language to Dr. Ganster.
 - Consider how to provide examples of success stories that highlight the information in Section 5.
 - Provide appropriate references for the advice letter’s supplementary material.
- The editorial team will—
 - Produce a draft of the advice letter from the key points submitted by the members.
 - Update the supplementary materials with the revised text submitted by the members.
- Dr. Ganster will—
 - Work with Mr. McNeese and Mr. Micklin to include language in Section 3.ii. about Colorado River water rights and Indigenous water rights, respectively.
 - Explore the possibility of including a basic map to illustrate the Board’s points.
 - Add text in Section 4.vi. about the lack of Bipartisan Infrastructure Law and programmatic funding for the Rio Grande and Santa Cruz River.
 - Circulate the updated draft to the GNEB members for their comments.
- Mr. Cruz will review Section 4.iv. and revise the current text or develop additional language as appropriate.
- Mr. DeLeon and OITA staff will—
 - Respond to Dr. Sweedler’s and Ms. Roose’s requests for EPA data regarding wastewater infrastructure energy use and energy savings at wastewater treatment plants, respectively.
 - Review Section 4.iv. and revise the current text or develop additional language as appropriate.
- Ms. Gonzales will—
 - Develop text for Sections 4 and 6 about challenges that small cities face.
 - Develop text for Section 4.iii. about county-level challenges and actions.
- Mr. Hinojosa will develop text about issues faced by irrigation districts and the need to expand the definition of infrastructure.
- Mr. Lopez will explore existing maps that could be used to illustrate the Board’s points.
- Mr. McNeese will work with Dr. Ganster to include language in Section 3.ii. about Colorado River water rights.
- Mr. Micklin will—
 - Work with Dr. Ganster to include language in Section 3.ii. about Indigenous water rights.
 - Review Section 4.iv. and revise the current text or develop additional language as appropriate.

- Dr. Murrieta-Saldivar will develop text about—
 - Nonprofit organizations that coordinate binationally on environmental conservation, wildlife management, borderland restoration and other transborder issues.
 - Incentives and education around residential rainwater harvesting and infrastructure.
- Mr. Palacios, Mr. Niermann and TCEQ staff will—
 - Develop text for Section 2 about state and local coordination on binational water issues.
 - Revise the text in Section 3.iii. relating to the complex relationship with Mexican deliveries and long-term issues with Texas water users, which will be used in the full report.
- Dr. Payne will develop text about—
 - The significance of climate change and climate impacts in the border region.
 - How projections about future flood plains will require new mapping.
- Ms. Roose will—
 - Share a recent report, *Climate Change in New Mexico Over the Next 50 Years: Impacts on Water Resources*.
 - Investigate New Mexico’s State Revolving Funds to determine whether there is information about energy use and savings in the wastewater sector that can be added to the full report.
 - Contact Mr. DeLeon to describe the specific data needs around energy savings at wastewater treatment plants.
 - Add text in Section 6 about stormwater management and identification of funding.
- Dr. Sweedler will contact Mr. DeLeon to describe his data needs regarding energy use in wastewater infrastructure.
- Representatives from Arizona, California and Texas will investigate their state’s State Revolving Funds to determine whether there is information about energy use and savings in the wastewater sector that can be added to the full report.

Appendix A: Meeting Participants

Chair

Paul Ganster, Ph.D.

Director
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Vice Chair

Irasema Coronado, Ph.D.

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Cultural Ecologist
Watershed Management Group
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Jonathan Niermann

Commissioner
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Rebecca Roose, J.D.

Deputy Cabinet Secretary of Administration
Former Water Protection Division Director
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Alan Sweedler, Ph.D.

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José Luis Palacios

Border Affairs Intern
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Appendix B: Video/Teleconference Agenda



Good Neighbor Environmental Board (GNEB) Virtual Meeting: Microsoft Teams August 24–25, 2022, 3:00 p.m.–5:00 p.m. EDT

AGENDA

Day 1: August 24, 2022

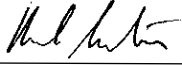
- 3:00–3:10 p.m.** Welcome and Member Role Call
- Eugene Green, GNEB Designated Federal Officer
 - Dr. Paul Ganster, Chair, GNEB
 - Dr. Irasema Coronado, Vice Chair, GNEB
- 3:10–3:20 p.m.** Overview of Agenda and Meeting Goals
- Dr. Paul Ganster, Chair, GNEB
 - Dr. Irasema Coronado, Vice Chair, GNEB
- 3:20–3:30 p.m.** Public Comments
- 3:30–4:50 p.m.** Drafting Teams Report Outs and Discussions
- GNEB Drafting Team Leads
- 4:50–5:00 p.m.** Preparation for Day 2
- Dr. Paul Ganster, Chair, GNEB
 - Dr. Irasema Coronado, Vice Chair, GNEB
- 5:00 pm** Recess

Day 2: August 25, 2022

- 3:00–3:15 p.m.** Recap of Day 1 Activities and Objectives for Day 2
- Dr. Paul Ganster, Chair, GNEB
 - Dr. Irasema Coronado, Vice Chair, GNEB
- 3:15–4:45 p.m.** Discussion of Report Focus and General Theme(s)
- GNEB Members
- 4:45–5:00 p.m.** Next Steps: Assignments and Deadlines for Writing and Editing
- Dr. Paul Ganster, Chair, GNEB
 - Dr. Irasema Coronado, Vice Chair, GNEB
- 5:00 pm** 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 video/teleconference held August 24–25, 2022, and that the minutes accurately reflect the discussions and decisions of the meeting.



September 26, 2022

Paul Ganster, GNEB Chair

Date