Tribal Infrastructure Task Force Meeting Summary
September 7, 2011 - 2:00 PM

A. Welcome & Introductions

Jason Adams, Confederated Salish and Kootenai Tribes
Jose Aguto, National Congress of American Indians
Dana Baer, Indian Health Service (IHS) Sanitation Facilities Construction (SFC) Program
Jeff Besougloff, U.S. Environmental Protection Agency (EPA) American Indian Environmental Office (AIEO)
Steve Bolan, IHS Alaska
Sandra Boughton, U.S. Department of Agriculture (USDA) Rural Utilities Service (RUS) Water and Environmental Programs
Jennifer Bullough, U.S. Department of Housing and Urban Development (HUD) Office of Native American Programs
Marta Burg, EPA Region 9 Tribal Caucus
Erin Cabral, Horsley Witten Group, Inc.
Kyle Carey, EPA Office of Ground Water and Drinking Water (OGWDW)
Dave Clark, Rural Community Assistance Partnership
Dennis Daniels, National Indian American Housing Council
Ron Ferguson, IHS, SFC Program
Sheila Frace, EPA Office of Water, Office of Wastewater Management (OWM)
David Harvey, EPA OGWDW
Ron Hoffman, Alaska Regional Housing Authority
Luke Jones, EPA AIEO
Rex Kontz, Navajo Tribal Utility Authority
Kellie Kubena, EPA Office of Water, OWM
Shaun Livermore, Poarch Band of Creek Indians Utility Authority
John Mosley, Pyramid Lake Tribe
Ken Norton, National Tribal Water Council
Steve Poloncsik, EPA Region 5
Linda Reeves, EPA Region 9
David Saddler, Tohono O'odham Water Utility Authority
Nathalie Wilson, Navajo Housing Authority

B. Review Strategy Comments (David Harvey)

Two comments were received on the Strategy Document, from Jose Aguto (National Congress of American Indians) and EPA Region 5. Other participants who wish to comment on the document should email David Harvey.

The EPA Region 5 comment was supportive overall, and pointed out that the critical work lies in determining how the concepts of sustainable infrastructure are rolled into the Tribal programs moving forward. Jose Aguto's comments related to the need to recognize the lack of funding for

infrastructure. Sheila Frace will discuss how that may be partially addressed. Jose's comments also discussed small-scale solutions for cloud harvesting, but this does not directly fit in the goals and concepts of the strategy. David Harvey offered to discuss this offline.

Jose Aguto clarified his comments on the Strategy Document. His main concern was that the goals and concepts in the document do not address the main concerns of Tribes in improving access to safe drinking water and sanitation. The Millennium Development goal to reduce the lack of access by 50% has been incorporated by the federal agencies in memoranda of understanding signed at the highest levels. The Infrastructure Task Force (ITF), comprised of federal agencies and tribal members, recognized that substantial funding would be needed to meet this goal. IHS has evaluated the monetary value of the need, which is significant. Tribes feel that funding will be needed to meet this goal, but the current document does not reflect the need to find funding. The work conducted by the previous task force listed an array of challenges in meeting this goal, with a list of recommendations as a result of work from sub-groups. These recommendations include conducting research on operation and maintenance (O&M) costs, taking advantage of under-utilized funding, specific work for the Navajo Nation and Alaska Native Villages. Why is that work being moved forward, and why is the ITF refocusing on a very narrow vision that was not developed with tribal consultation and tribal input?

Marta Burg had asked Region 9 Tribes for input on the document and was unable to submit feedback by the August 3rd deadline, but wished to support Jose's comments. Marta commented that the document lacks information on implementation. She understands that actions will be identified for implementing the plan, but she suggested adding a section to the document to summarize an approach to implementation. That section could recognize the continuing relevance of the prior work completed by the ITF with the identification of multiple barriers and the series of recommendations, including an upfront recognition of the need for funding and the difficulty of obtaining funding in the current economic context. That section could also identify the workgroups discussed during the last call that have continuing work, including a follow-up on O&M needs and streamlining paperwork. This could help identify ways in which this new vision will be implemented.

Steve Poloncsik said he views sustainability mainly in the Tribal utility organization's ability to manage the facilities that have been built with both Tribal and federal funds. He understands the agencies' effort to maximize the useful life of the facilities, and complimented the IHS annual needs survey. Steve encouraged IHS to continue their efforts, and to continue providing feedback to the Tribal utilities and governments regarding their management capabilities, which will help make them more sustainable as responsible management entities, but he suggested that the scope also be broadened beyond the annual feedback by IHS to the Tribes. It should help Tribal utilities improve their capabilities and become truly effective utilities at managing the limited financial resources and at lengthening the useful life of the infrastructure. Tribal utility training in certain areas (e.g., asset management, preventative maintenance) would be beneficial. This would represent a visible way to improve sustainability of Tribal infrastructure.

Marta Burg asked if this document has been sent out to the Tribes for input. David Harvey clarified that a letter has been sent out to invite Tribes to join the ITF group for development of

the document, but the document itself has not yet been sent to Tribes. This document is currently being reviewed by the ITF workgroup to get initial feedback. The letter summarized the accomplishments to date, pointed to the report describing these accomplishments, and discussed the refocus of the ITF in a "looking ahead" section.

David Harvey clarified that the goals and concepts document is a stand-alone document that does not summarize the actions, which are described in the flowchart that was developed. Its goal is not to summarize or re-create what has already been done.

Sheila Frace emphasized that from a federal agency perspective, this document built on the work to date and recognizes that historically, the federal government partners have primarily focused on access as first-time service. This focus can be viewed as short-sighted in that there are other potential ways to define access. Is providing service that does not survive mean progress is being made, or are the partners failing in providing access? The federal partners are proposing that the group build on previous work - one of the working groups is looking into the O&M issue - but they also felt that they should be taking a step back to review the original goals and look at the issues through a new lens. This enabled the partners to identify missing elements or potential efficiencies that could improve the overall strategy. Therefore, the partners tried to articulate that the goal is not limited to providing first-time access, but rather to provide long-term access in a sustainable way. There are many components to that, which have not all been identified, and which the ITF can help identify. It is also important to identify the responsible parties for each component (i.e., federal agencies or individual Tribes).

Sheila Frace indicated that the broadened goal reaches beyond first-time access by seeking to provide sanitation services to all Tribal areas in a way that can be sustained in the future. As the ITF moves forward, consultation will come into play to identify actions required to meet this goal, as well as the parties that should be involved. Does the federal government have any role to play? What are the actions needed to achieve the goal? Some of the workgroups are continuing their efforts, but in defining next steps, it was important to clarify the goal, as well as the role of the federal agencies in meeting this broader goal. The purpose of the goals and concepts document was probably not clear enough in the document. There may not be a quick fix solution, but a supplemental document (e.g., addendum or companion piece) could be developed to reference back to the accomplishments report, identify the ongoing work, and discussing how the ITF will help identify actions, priorities, and next steps. These have not yet been identified, and will hopefully be developed by the ITF.

Marta Burg commented that the Tribes applaud the expansion in focus to include maintenance and long-term sustainability of the infrastructure, and that Sheila's clarification would be helpful to have in writing in a supplemental document.

Jose Aguto asked to clarify if the goal of the refocus was to identify all the needs and challenges in a more coherent and consolidated manner.

Sheila Frace clarified that the agencies are trying to acknowledge that the goal should shift from providing a first-time access to providing a sustainable, continuing access, and to identify the most important factors that lead to sustainable access. This will involve building the right

infrastructure in the first place, ensuring that the responsible entity has the necessary authority, funding, and capability to successfully manage the infrastructure. The main purpose was to clarify that the goal should be expanded, and identify some of the key implications.

Jose Aguto emphasized that the access goal is to provide access to people who lack access to drinking water and basic sanitation. This document and the recent discussions emphasize existing infrastructure for those who have it, and making sure it is sustainable, and de-emphasizes the lack of access, which is the ultimate access goal. What happened to the primary focus on people who lack access altogether?

Sheila Frace clarified that the federal agencies did not view the refocus as moving away from first-time access, but rather as a way to add to that goal. It is still a priority to provide first time access, but it should be done in a sustainable manner rather than with a short-term vision that puts the Tribe back in the same situation a few years later.

Ron Ferguson pointed out that the federal agencies are still moving ahead with providing first time access, and looking at funding availability for this purpose, but at the same time, they want to make sure that funding is targeted to first time access by ensuring that these facilities are sustainable. IHS has been providing access for 53 years and collecting data. These data indicate that in two of the 12 areas, most of the funds are directed to providing first-time service, except for some upgrades to existing systems when new service is being added. These areas have well-established Tribal utility authorities (Tohono O'odham in Tucson, and Navajo). This is not the case in the other areas, which is the basis for the discussion of this federal group on sustainability. In order to concentrate the funding on first-time access, there needs to be a way to ensure sustainability of the infrastructure already built or under construction.

Jose Aguto wishes to see more upfront explicit recognition for the need for first-time access in addition to sustainable access and recognition of the work from the prior access workgroups to move this effort forward.

Sheila Frace closed the discussion by mentioning that the goals and concepts document will not be finalized at this meeting, but suggestions are welcome. She did not perceive a strong disagreement with the document, but rather a lack of recognition of certain items, making the document appear to improperly suggest that first-time access is no longer a priority. This is not the intent of the federal agencies behind this document, which will be edited for clarification.

C. The New Direction of the ITF

The ITF will build on the key components identified in the goals and concepts document during more detailed discussions. These discussions will help identify the drivers and barriers at the Tribal level, and the role of the federal government to help achieve the access goal. Rather than keeping discussions in a vacuum, the federal agencies wished to invite Tribal participants to discuss their approach to sustainability. Each ITF meeting can focus on one or two components required for sustainability. NTUA has been invited to discuss their approach to sustainability on the Navajo Nation, particularly how a stable organizational structure has been beneficial. Following NTUA's presentation, meeting participants can add to the discussion, and help

identify the federal role in this approach, if there is one. Future meetings can focus on other components to sustainability.

D. NTUA's Approach to Sustainability (Rex Kontz) and Potential Discussion Questions

Basic sustainability requires a caretaker, who must generate some source of income that must be managed. The income must be adequate for O&M (i.e., keep the infrastructure running), repairs for elements that break down, equipment replacement, but also for growth and development, and debt service. The main role of NTUA is to perform the caretaker role after systems are built. NTUA is a multi-utility enterprise providing services for electricity, water and wastewater, natural gas. They also have solar projects, and are looking to expand to wind generation, solar farms, and telecommunications. They are building 500 miles of fiber cable across the Navajo Nation to cover 26,000 square miles of territory. This will include 80 new towers in addition to the 32 existing towers, a secure data center with secure backup, and outlets for 4G type equipment in each of the six district offices. Revenue from water and wastewater can be limited, so NTUA has been forced to combine all these utilities into a single entity to supplement the income from water and wastewater operations. The electric utility has been a good revenue generator, subsidizing other activities. One of the main challenges on the Navajo Nation is the rural and sparse setting of the territory, with residents far apart from each other. An increase of larger commercial, industrial and governmental metered customers is needed to generate more revenue, so the Nation has been trying to focus on economic development. This has been a challenge.

1. *What are the purpose and duties of the Board of Directors that provides governance to NTUA as an Enterprise of the Navajo Nation?*

Any utility should be run as business, be independent, and have independent authority to act. This is what the Navajo Nation did for NTUA, which operates under a Board of Directors. The Board's purpose is to provide oversight and large-scale direction, review and approve annual budgets, review and establish policy, and to ensure accountability. The Board then loosely reports to the Navajo Nation. The NTUA general manager is required to provide an annual report, just like any enterprise of the Navajo Nation. The government structure recently changed, from 88 delegates separated into 11 committees, down to 24 delegates with four major committees. Typically, NTUA reports to one of the committees on a quarterly basis with status and updates, and the committee in turn provides guidance and direction. Other than the reporting, the NTUA keeps its independence in its day-to-day operations.

2. *What kinds of decisions or input does the Board of Directors provide versus the types of decisions provided by the Navajo Nation Council?*

The Council provides greater and broader direction to the whole Nation, including the enterprises, and sets some very broad goals and targets. That can be challenging, because every four years, the focus may change. Different administrations may have different focuses, such as education, health care, economic development. The current group is focused on economic development. NTUA also reports to the Council, but again, independence is maintained for day-to-day activities.

3. *What types of ordinances, laws, and or regulations are in place with the Navajo Nation to allow you to operate?*

The Council approved a Plan of Operations for NTUA, outlining many delegated authorities that enable the enterprise to be independent. This includes the ability to establish its rate structure, to manage its funds and budget, and to be independent from the Nation. The plan of operations is the key document that identifies delegated authorities and sets limits.

4. *What problems do you have with your system of governance?*

There are very few major concerns, beside the political aspect. Every four years, a changeover takes place, and the political leadership must be re-educated about the NTUA activities. Some of the enterprises are set up as for-profit entities, which typically have to report to the economic development branches. The other entities, including the housing authority and NTUA, are set up as non-profit service providers. The focus is on serving the people rather than making money, which eliminates some of the business concerns.

5. *What advantages does this system of governance provide?*

The main advantage is flexibility and independence, which allows NTUA to move and be responsive, without having to wait on Council meetings, or other political decisions.

6. *What else allows NTUA to operate as an effective O&M organization?*

NTUA is allowed to pursue funding independently. The Nation developed a reputation for having difficulty taking money and spending it, so NTUA had to work hard to make itself visible, to create its own reputation, and to open the doors to obtaining independent funding. The plan of operations is the key document that specifies that NTUA is still a part of the Nation, but can work independently. The funds do not flow through the Nation, so no funding is lost through administrative funds directed to the Nation.

7. *How are NTUA water and wastewater rates set? How often are they reevaluated and what are the rates?*

The rates are built on a five-year structure, that may take into account some political input. NTUA may look at phasing, the current economic climate, and what people can afford. NTUA has been relatively successful at getting what they need. The greater challenge has been the high unemployment which translates into low median income, so an increase in rate must be strategically balanced in order to be successful.

8. *What are NTUA's other challenges, if any, to providing water and wastewater in a sustainable manner?*

The widespread nature of the service territory, the limited availability of O&M funds (as opposed to construction funds), and the low incomes and high unemployment are the main

challenges. The Nation needs larger development and government services in concentrated areas in order to supply a revenue base that can sustain a low density rural residential customer base. There is a radius of feasibility such that the greater the density, the further out the service can expand. With minimal development, it is difficult to expand residential service. In order to offset those challenges, NTUA is trying to take advantage of technology and automation. For example, an automated meter reading system is being installed for a few million dollars, as well as a remote connection and disconnection system, which will help with operations by saving operator time and transportation costs.

NTUA has a long in-house apprenticeship program for water and wastewater operators. There have been challenges with the Nation obtaining primacy and taking the on a State type role. The NTUA training is a four-year detailed program that includes study materials, on-the-job training, and practical testing where operators must demonstrate their ability to complete certain tasks (e.g., water sampling, wastewater sampling). The goal is to have well-rounded and qualified operators. It is an intensive training program, but the local Navajo EPA does not want to recognize the program, and recommends the generic state certifications. This represents another challenge to NTUA.

NTUA has looked into standardizing designs and materials, which simplifies warehousing and can cut costs. More recently, NTUA has tried to create partnerships in funding. For residential service to be sustainable, economic development is required. IHS infrastructure costs cannot be used for economic development, but a combination with other funds can make a project more sustainable on the long run. Establishing partnerships has been challenging, but there needs to be a global understanding and a more global plan.

NTUA is seeking to become an information-centered company. The telecommunications arm allows NTUA to move more data faster, and by creating a high-speed system, will allow NTUA to sell their data and telecommunications services. The telecommunications branch is its own utility; it meets NTUA's business needs, but also generates revenue. As it grows it will no longer has to be supported by the other utility revenue.

NTUA has partnered with the Nation on bond financing. The Nation must focus on money-generating development to generate income and create employment. Infrastructure funding is needed to supply services to the development, so partnering is important.

A global perspective is required to provide a driver for development, and NTUA has been one of the local drivers for the Navajo Nation. Regarding the specifics of infrastructure sustainability, NTUA started a program for septic system maintenance because without adequate maintenance, funds are being spent on second time service. This pilot septic system pumping program placed customers on a monthly billed cycle which requires them to pay a minimum fee every month, similar to domestic sewer. NTUA then goes out to pump individual septic systems on a scheduled preventive basis prior to any problems.

Overall, NTUA is stretching its operations beyond the creation of a simple utility.

Sandra Boughton asked if the four-year NTUA program is specific for operators, and if these operators are able to become employed when they complete the training, either by NTUA, or outside of NTUA.

Rex Kontz responded that the training program is indeed for operators. As for employment outside of NTUA, most job postings refer to the traditional state certification programs and do not necessarily recognize the NTUA apprenticeship program. Most trainees have been able to take the test and successfully pass them at higher levels (e.g., level 4). A short course may be required at times, but many of them have attended those and passed the tests.

Sandra Boughton mentioned that this operator certifications and training are being reviewed at a more global scale, and the agencies are looking at future opportunities. Several Tribes have tried to set up programs, which represent great opportunities for Tribal members.

Rex Kontz pointed out that they have had challenges with wastewater certifications at the plant operator level because NTUA only has one true wastewater plant in their system. When people are trying to go through that part of the training, they have to rotate through that one plant. Many of the communities are now being upgraded from naturalized lagoons to more complex wastewater treatment facilities. The program covers both water and wastewater operations, and when they graduate, trainees are called "master systems operators." The dual training provides NTUA with a lot more flexibility in staff utilization, with backup and cross-training.

Sheila Frace suggested that Rex's presentation be used as a starting point for future discussions about identifying the federal role in helping Tribes move toward sustainable governance structures, if there is one. A discussion of other working structures, their pros and cons, and successes and shortcomings would be beneficial. This will all take some time. Sheila recommended that the next call be focused on a follow-up to Rex's presentation, and asked if there were volunteers who would be willing to share their experiences. There should be some discussions around Rex's presentation before moving to other concepts. Participants should send their comments to Sheila Frace, David Harvey, or Matt Richardson.

E. Thank You, Review of Action Items, & Invitation to the Next ITF Call

Participants who have comments on the meeting minutes from the June 30th call should email them to David Harvey. David Harvey will look into posting the meeting minutes on the AIEO website available for ITF documents. Action items from the meeting were reviewed to verify completion. David Harvey received comments on the Sustainable Infrastructure Goals & Concepts, as discussed earlier. No comments were received on the bios, so these will be posted on the AIEO website shortly. Any last minute comments or additions to these bios should therefore be submitted by the end of the week. This document can be a living document and can always be edited later. David Harvey contacted Rex Kontz regarding NTUA efforts to increase sustainability, which was a large part of this meeting.

The following are the action items for the September 7 meeting.

- Additions and edits to the bios document should be emailed to David Harvey by September 9, 2011.

- Rex Kontz will review the meeting summary for this call to make sure it reflects NTUA's structure and efforts.
- Participants with comments and questions on Rex's presentation, or who would like to volunteer to share their experiences with improving infrastructure sustainability should email Sheila Frace, David Harvey, or Matt Richardson.

The next two calls are scheduled for October 13 and November 9, 2011 from 2 to 3:30 p.m. Kyle Carey, who has helped develop these documents, will be taking a leave of absence shortly to go on a detail.

Sheila Frace thanked all participants for their time and feedback.