Exchange Network Forum

Thursday, January 11, 2024 1:00 to 2:00 PM ET

Agenda:

- Welcome
- Tribal Engagement Roundtable
- Update on Node Security
- EN National Meeting
- Questions & Answers
- Open Forum

Welcome and Opening Remarks

Alex O'Neill, EPA Office of Information Management (OIM), Office of Mission Support (OMS)

- The Exchange Network (EN) Forum is an open meeting, and the goal is for the meetings to be collaborative.
- Future calls will have breakout groups to brainstorm ideas.
- Polls and surveys will be used to gauge interest in topics.
- Participants are encouraged to ask questions while also being mindful that the audience of these calls is broad with both technical and non-technical participants. If a question is too technical, EPA may need to follow-up after with an answer.

Tribal Engagement Roundtable

Angie Reed, Co-Chair Tribal Exchange Network Group

- The Tribal Engagement Roundtable was November 28-30 at the Penobscot Nation. The meeting was hybrid with participants both in person and virtual.
- The overall goal was to explore how Tribes engage in the EN and identify solutions to improve engagement. EPA made actionable commitments to meet Tribes where they are in terms of IT and data management.
- There were three main themes from the meeting:
 - Recognition that Tribal participation was limited in the early days of the EN, which had consequences to the Tribes' participation.
 - The tribal environmental programs accomplish a lot with significantly limited resources. The roundtable participants were able to see first-hand the work Penobscot is doing and the benefits the EN grants have had for their data management. The grants have helped Penobscot to organize their data and format it so it is easily accessible and available

when they need to use it. They also talked about how Penobscot use the data to enforce regulations in Maine. They get a lot of bang for their buck with the EN grants.

- The Tribes do not have a lot of resources. Many tribal programs are lacking IT infrastructure.
- Improving tribal engagement requires consciously and consistently meeting Tribes where they are in terms of their IT/IM infrastructure and resource needs. The roundtable was a start to an ongoing conversation.
- Roundtable participants made commitments during the meeting, including:
 - Regular engagement with the Tribal Exchange Network Group (TXG) and EN Tribal Partners.
 - Gather and share information on EN Tribal Data flows. This data will be used to evaluate what support TXG can provide for trainings.
 - Increase coordination between EPA Regions, Regional Exchange Network Groups, and Program Offices to improve Tribal engagement via the EN. Currently the engagement is different based on each organization.
 - Increase collaboration and support among state and tribal organizations to develop synergies. State participation in the roundtable was very meaningful. There are many tribal and state relationships with some that are better than others. There is potential for states and Tribes to work together more.
- Angie reviewed the timeline of the TXG's participation in the Exchange Network.
 - 2000: One-stop grants
 - 2002: Exchange Network was established
 - o 2008: Tribal Governance Group was formed
 - 2015: E-Enterprise launched
 - 2020: Tribal Governance Group was renamed Tribal Exchange Network Group to reflect that the group's focus is less on governance and more on training and assistance with data analysis, data visualization and sharing data with EPA. TXG is still working on the relationship between TXG and the E-Enterprise Leadership Council (EELC)
- TXG has relationships with the EN and the Institute for Tribal Environmental Professionals (ITEP).
 - TXG includes tribal professionals working on aspects of the EN. The TXG's primary purpose is to ensure representation and consideration of tribal perspectives and issues and to support tribal participation in the EN through advocacy, mentoring and technical assistance.
 - ITEP supports tribal involvement in the EN. ITEP works closely with the TXG to strengthen the tribal voice amongst EN stakeholders and to identify ways to foster projects and initiatives that are both relevant and sustainable for Tribes.
- The TXG is tribally focused and smaller so they can focus on the work of the Tribes. Some examples of TXG's support includes:

- Conducting training and events, such as data and technology academies, which include training on data management, analysis, and GIS. In addition, the TXG hosts a Tribal Exchange Network conference—the next one will hopefully be in the fall.
- Providing tribal assistance, which is focused on one-on-one support—if a Tribe has a data issue, for example, they can ask for help and someone from TXG will assist.
- Advocating for tribal representation in the EN grants. Members can request assistance in writing grants. TXG advocated for capacity building for Tribes in the grants. Many Tribes still need to build capacity. EPA helped with meeting the Tribes where they are with capacity building within the grants.
- Promoting tribal access, equity, and inclusion in the EN.
- One of the benefits of going to the Penobscot Nation for the roundtable is that participants had the opportunity to go to the river and give tobacco to the river as an offering. This provided a perspective for how Tribes engage with the world around them—it's a mindset. Monitoring is different for the Tribes. They see the river as a relative they are protecting. It's an important part of the experience. They are hoping to provide this type of perspective at future meetings.
- Participant Comments:
 - Working with the TXG is helpful in providing tribal communications and a forum to talk about tribal needs, which are different than states. There are many Tribes who have benefitted from TXG's support and the work of the TXG can be expanded to help more. We are a small Tribe in western Washington with two staff people who are trying to accomplish a lot of things. Angle assisted us with using R code, which resulted in efficiencies and improved data quality.
 - Another participant commented that TXG's tribal assistance program, such as R, has helped with data management, analysis, and reporting and sharing.
- ITEP has conferences and national meetings scheduled in 2024. For more information, visit <u>ITEP's conference web page</u>.
- Visit the <u>Tribal Exchange Network Website</u> for more information and contact <u>Frank Harjo</u> or <u>Angie Reed</u> if interested in joining TXG.

Update on Node Security

Joe Carioti, EPA Office of Information Management (OIM), Office of Mission Support (OMS)

- The Transport Layer Security (TLS) provides communications security over the internet.
 TLS is the security encryption for websites with HTTPS in the address.
- The Central Data Exchange (CDX) environment was deployed into the Azure cloud several years ago, and Azure announced as of October 31, 2024, they will end their support for TLS 1.0 and 1.1, which are the older versions of TLS.
 - This change will impact any node and node client communicating with CDX.

- This change should mostly be a non-event for users of OpenNode2 or EN Node; however, there may be other nodes or node clients that may not support TLS v1.2 and they will need to be updated (e.g., custom node applications).
- To test the version of TLS, point your node client to the CDX environment and keep the rest of the URL the same and then test whether the implementation is successful from a TLS perspective.
 - For questions, contact the <u>Exchange Network Node Helpdesk</u>.
- Question:
 - Q: Is the dev environment the same as test?
 - A: The development environment is not the same. Fundamentally they are separate isolated environments so testing should be done within the development environment.

Exchange Network National Meeting

Dwane Young, EPA Office of Information Management (OIM), Office of Mission Support (OMS)

- EPA is planning an EN National Meeting. The tentative date is mid-September 2024 in Oklahoma City, OK or Kansas City, MO.
- EPA will send out a request for sessions and programmatic ideas.
- The conference will be an opportunity to connect with colleagues, learn about EN and get new ideas.
- The date will be finalized in the next few months.

Questions and Answers

Alex O'Neill, EPA Office of Information Management (OIM), Office of Mission Support (OMS)

Alex reviewed the questions and answers from the last meeting, which are in the <u>November 9, 2023</u> <u>Meeting Summary</u> and the <u>January 11 Meeting Slides</u>.

Open Forum

Alex O'Neill, EPA Office of Information Management (OIM), Office of Mission Support (OMS)

Alex presented the participants with poll questions to learn about the participants and their interests. The following are the questions, responses and discussion.

Question 1

1. What type of organization do you represent? (Single Choice)

State Government	55%
Local Government	0%
Territorial Government	0%
Tribal Government	13%
Federal Government,	23%
University, Academia	0%
Industry	6%

Question 2

2. What do you most hope to learn from these meetings? (Single Choice)	
Learn about important Exchange Network information and updates.	53%
Share challenges and opportunities to improve the Exchange Network's collaborative model, communication channels, and technical framework.	21%
Learn about innovative ways States, Tribes, and Territories are using the Exchange Network.	26%
Other	0%

Question 3

3. What is the biggest challenge faced by your organization? (Multiple Choice)	
Skilled staff and technical capacity to manage data flows	
IT security concerns, including risks of dated technology	27%
Trouble getting technical assistance (e.g., EPA, IT operations, contractors)	27%
Sustainable funding	31%
Communication within the Exchange Network	17%
Other	15%

Question 3 Discussion:

- Skilled staff and technical capacity received the highest response.
- A state participant commented that he picked skilled staff and technical capacity because their state organization is moving from on-premise to AWS cloud and they are looking to migrate applications from the cluster they are in now to microservices. To accomplish this, staff need to get up-to-speed with microservices. Hearing about others' experiences in this area would be a helpful topic at the National Meeting.
- A state participant commented that trying to hire people with state salaries is difficult compared to national company salaries. It is hard to keep staff when they can leave for a company with a higher salary.
- Retention is hard. Once we get someone skilled up, we lose them. We are grant funded so we can't offer someone a higher salary. We hire entry level staff out of college, train them, and then about a year and a half or two years later they are looking for a new job with a higher salary. We are constantly in a cycle of training.
- Centralized IT is a barrier toward hiring people with technical skills and making sound decisions without someone in a CIO position. It's difficult to hire someone with enough knowledge and experience to communicate with centralized IT. It is important to have IT and business knowledge.
 - Miriam Patrocinio from the North Carolina Department of Environmental Quality helps to bridge the communication gap between the NC business unit and centralized IT. She works for the business unit and leads strategy. She is happy to meet at the national

event to brainstorm about connecting the business unit with central IT and how to write job descriptions for this type of position.

Question 4:

4. From the list of possible workshops or training sessions, please select topics that most interest you: (Multiple Choice)		
Data Management Systems	73%	
Agile Project Management	17%	
Data Analytics Tools	52%	
GIS and Geospatial Analysis	40%	
Digital Storytelling, Communication	29%	
API Strategy, Development & Management	56%	
Quality Assurance Project Plans	15%	
Cybersecurity	21%	
User Experience, User-centric Design	33%	
Other	4%	

Question 4 Discussion:

- The top response is data management systems, which is a broad topic. What type of sessions would people be interested in for this topic at the National Meeting?
 - EN is about exchanging information and to do that we need common approaches organizations can take to address the gaps that they have and to move to where they want to be.
 - What strategies and policies are environmental partners using for low code tools for data management, for instance, Microsoft's Power Platform and Power Apps. It would be helpful to learn what other organizations are doing from an administrative perspective of these environments, including how much control people have over these environments.