

**National EPA-Tribal Science Council
Fall/Winter 2024 Face-to-Face Meeting**

“Diving Into the Water”

Robert S. Kerr Environmental Research Center
Ada, Oklahoma

December 3–5, 2024

FINAL MEETING SUMMARY

Tuesday, December 2, 2024

Morning Session: Cultural Session

Chickasaw Cultural Center

National EPA-Tribal Science Council (TSC) Members and Guests

Afternoon Session: Welcome and Introductions

Opening Blessing

Dana Adkins, Chickahominy Indian Tribe

Opening Remarks

Shasta Gaughen, TSC Tribal Co-Chair, Pala Band of Mission Indians, and Tim Canfield, Outgoing TSC Agency Co-Chair, Center for Environmental Solutions and Emergency Response (CESER), Office of Research and Development (ORD), U.S. Environmental Protection Agency (EPA)

Passing the Baton of the TSC Agency Co-Chair

Kacee Deener, Director, Office of Science Advisor, Policy and Engagement (OSAPE), ORD, EPA

Introduction to and Welcome From the New Agency Co-Chair

Marie Schaefer, Incoming TSC Agency Co-Chair, Center for Public Health and Environmental Assessment, ORD, EPA

Tribal Host Welcome and Opening Remarks

Kristopher Patton, Director of Natural Resources, Chickasaw Nation

EPA ORD Welcome and Opening Remarks

Greg Sayles, Director, CESER, ORD, EPA, and Maureen Gwinn, Acting Assistant Administrator for Research and Development, ORD, EPA

The TSC—Addressing Priorities and Building Collaborations

Kacee Deener, Director, OSAPE, ORD, EPA

Relationship Building

TSC Members and Guests

Caucus Breakout Sessions

Tribal Caucus and EPA Caucus

The Tribal and EPA Caucuses met separately to discuss internal Caucus business.

Daily Afternoon Reflections

TSC Members and Guests

The TSC members reviewed the goals for the day and determined that they had met them. They did not offer any suggestions for improvement and supported the relationship-building activities. Tim

recognized Curtis Hicks, EPA Region 6 staff member and Muscogee (Creek) Nation citizen, who thanked the TSC for the invitation to join them.

Wednesday, December 4, 2024

Morning Session: Learning and Collaborative Product Development

Managed Aquifer Recharge in Karst Geology

Doug Beak, CESER, ORD, EPA

Doug Beak explained that U.S. groundwater levels are generally declining, but groundwater use is increasing. These groundwater declines will have many effects, including on the drinking water supply and economy. Groundwater accounts for 98 percent of domestic water use, comprising 40 percent of the public water supply and nearly half of irrigation use. Therefore, groundwater sustainability and management to maintain water quality must be considered, and recharge versus withdrawals must be balanced. The Earth's water supply is finite; all water is reused.

Currently, U.S. water conservation is not optimal, but managed aquifer recharge (MAR) can increase recharge. MAR is defined as "the intentional recharge of water to aquifers for subsequent recovery or environmental benefit." The American Geosciences Institute considers MAR a viable solution for water management. Research is important for identifying MAR's positive (e.g., enhanced water quality and quantity) and negative (e.g., sinkholes, microbial community changes) consequences. Doug described groundwater spreading methods (e.g., infiltration ponds, ditches, furrows), induced bank filtration methods (e.g., dune filtration), in-channel modifications (e.g., dams), and green infrastructure (e.g., permeable pavement systems, rain gardens) to increase recharge and water reuse.

Karst aquifers are important because 40 percent of U.S. drinking water from groundwater is derived from them. Karst aquifers are highly heterogeneous and vary directionally; they store groundwater in the rock matrix and transport it through openings. Research is needed to develop innovative approaches for better understanding and managing karst aquifers and their valuable water resources.

Doug displayed a satellite image of his MAR study area and described the site geology and hydrogeology. The site is primarily composed of carbonates (limestone), with preferential flow paths developing over time through faults and fractures. Groundwater travel times vary by orders of magnitude, from hours to years. Different recharge mechanisms occur at the site through sinkhole events and monthly rain. Doug showed images from the electrical resistivity imaging (ERI) done at Byrds Mill Spring, highlighting areas more conducive to water movement. The interactions among native water quality, geology and the source water affect the native water quality. The Arbuckle-Simpson Aquifer native water quality is quite variable for a variety of reasons, including geological changes, geochemical changes over time and different land uses. The geology of the location influences the monitoring design. The researchers collect a variety of data, including climatic data, to understand the system as a whole, including water balance and budget, water sources, and microclimate variations. Satellite images and EPA data indicate the presence of three groundwater flow systems in the study area. Doug displayed graphs depicting the major anions and cations, reduction-oxidation impacts, and microbial trends of the Byrds Mill site, noting that the karst aquifer represents a substantial puzzle. The site faces several potential sources of contamination, including ranching, septic systems, wildfires and prescribed burns, sediment, and spills and leaks. Researchers found a surprising connection between one of the specific sites within the study area and a sinkhole, which allows the intrusion of fish and tadpoles that die and introduce microbial contamination that cannot be attenuated naturally.

Shasta asked how this research can help Tribes manage their water sources, what tools are available for examining subsurface water sources, and how to determine whether a site previously contained a spring or other water source. Doug responded that determining whether a spring once existed requires

examining the history of the site; no tools exist to find previous springs or water sources. If the spring dried up recently, it may be possible to examine the soil type. California does well at performing 3D imaging of the subsurface; ERI can be used as a follow-up to gain more detail. California conducts a great deal of aquifer storage and recovery research and has a number of resources. The Berkeley and Davis campuses of the University of California have considerable aquifer work underway.

Shasta has an ongoing concern regarding how data are collected and protected. Many Tribes do not want to participate in surveys if the data could be made public. Doug replied that he is unable to release data without landowner permission; if data are released, all identifying characteristics are removed. Landowners should share their concerns with researchers before a project begins. Marie agreed that data privacy needs to be discussed in the planning and scoping stage, and EPA researchers must be honest about whether or not they can protect the data as requested. Doug agreed, noting that he removed himself from a project because he could not provide the specific guarantees asked of him; he cautioned that data may need to be released as a result of Freedom of Information Act (FOIA) inquiries.

Venessa Madden noted that aquifers in western Kansas are disappearing and asked about work in that location. Doug responded that research is being undertaken in Wichita, Kansas, but he is unsure about elsewhere. Farmers would like to use recharged aquifers for non-potable purposes but are not able to do so because of a disconnect between regulations and the reality of a contaminated aquifer. Multipurpose aquifers may be a solution.

Janette Marsh asked about sediment impacts around urban and rural areas. Region 5 is promoting two-stage ditches in agricultural areas to address sediment pollution, but Janette is unsure how water quality is affected. Doug explained that he is trying to include research on this topic in the next StRAP. A solution in Australia involved building a system of wetlands for surface water runoff; the first wetland removed sediment, the second removed nutrients, and the third refined the water before it was reinjected into the groundwater.

Joshua Tweeton asked whether the researchers study the zone of influence. Doug responded that the study explores which wells are influenced more quickly than others. Josh added that his Tribe's aquifer recharges a nearby town's aquifer and that the town uses significantly more water than the Tribe, which then affects the Tribe. Doug suggested checking for U.S. Geological Survey data. State regulations vary greatly, but the EPA regional environmental justice office may have additional resources and information. The Regional Science Liaison (RSL) can connect the Tribe with ORD researchers who are willing to help but must go through the proper channels.

Tribal Exchange Network Grants, Training and Technical Assistance for Tribes

Frank Harjo, Muscogee (Creek) Nation, and Chair, Tribal Exchange Network Group (TXG)

Frank Harjo explained that the TXG is a diverse team of Tribal environmental professionals who help provide technical assistance to Federally recognized Tribes to give them access to knowledge, tools and resources that support their decision-making and environmental data management goals. The group is innovative because it is standards based, and it set up nodes to allow Tribes and EPA to use the same vocabulary. The first Exchange Network grants were awarded in 2000, and the Tribal Governance Group—which was renamed TXG in 2020—was established in 2008.

The TXG holds training and events (e.g., Tribal Exchange Network Conference, Tribal Data and Technology Academy), provides Tribal assistance with data management (e.g., data sharing agreements, best practices for protecting data) and coding and programming, supports communities of practice with monthly Tribal data drop-in sessions, and advocates for Tribes by engaging with EPA and Exchange Network partners. The TXG always looks for help and continuously recruits individuals, encouraging them to work with Tribal colleges and universities to leverage the expertise of professors and find students to engage. Information about the TXG may be found at www.tribalexchangenetwork.org,

www7.nau.edu/itep/main/neien and www.epa.gov/exchangenetwork or by email at TXG@tribalexchangenetwork.org.

Frank explained that the Muscogee (Creek) Nation is leveraging the Exchange Network and GIS. The Nation has more than 3 million acres in Oklahoma, more than 300 Tribal facilities and more than 100,000 members, making it the fourth largest Tribe. The Nation's 1867 constitution established a three-branch government and 24 charter Tribal communities within the reservation. Frank noted that each of the 574 Federally recognized Tribes differs from the others, but Tribal staff generally "wear many hats." Staff changes are common, making it difficult for Tribes to keep up with technology trends and changes, particularly in terms of cost. Tribes often look to one another for support, and Excel spreadsheets are often cited as solutions that Tribes can use for data management. Other data sharing and exchange challenges include myriad information outlets (e.g., citizens, departments, programs), IT capacity limitations, long-term sustainability, rural geography, infrastructure issues, and overall operations and maintenance costs. Once a grant is finished, the lack of avenues to fund continued operations and maintenance often renders the use of technologies unsustainable.

Better data allow better decisions, and data basics include automation, standardization and real-time access. EPA has awarded competitive funding through the Exchange Network for 22 years and made Tribes a priority over States in fiscal year (FY) 2024. The TXG supports the grants program through an annual meeting with the National Tribal Caucus, an annual priorities document, engagement with the Office of Mission Support, and ongoing engagement with RTOCs; Beth Jackson can provide contact information for each region's coordinator. A grant to the Northwest Indian Fisheries Commission, for example, encourages data exchange among 20 Tribes; leveraging 20 datasets has enabled the creation of an impressive document.

Matt Small asked about resources associated with data sovereignty. Frank responded that the TXG is focusing on the [CARE Principles for Indigenous Data Governance](#) and leveraging available resources. Drones and artificial intelligence are emerging concerns, and the TXG is interested in partnering to address these topics.

Phillip Cravatt agreed that sustainability is an issue, and air and water quality data should be open because open-source data benefit everyone. The Tribal Air Monitoring Support Center provides open-source air quality data. Marie agreed that data are available, but it is necessary to understand how to access data in the long term. Beth added that the Exchange Network grants program has opportunities for different media and capacity building for data management, as well as for partnering to increase sustainability. The TXG is identifying solutions for sustainable capacity-building grants.

Janette asked for clarification about support for the TXG and grants. Beth explained that the Institute for Tribal Environmental Professionals has a cooperative agreement to support Tribes and provide program support for the TXG. EPA funds and manages the grant program. Once grants are awarded, EPA regions manage the specific grants.

Collaborative Product Development

TSC Members and Guests

Following Marie's overview of the TSC's past products—including forums and workshops, issue papers, the Tribal lead curriculum, and the aquatic biota subsistence literature review—the TSC members and guests made the following points, suggestions and decisions about potential collaborative products.

- Terms such as "tool" or "resource" are preferred over the word "product."
- Tools or resources must have a timeline for completion (e.g., calendar year 2025).
- After discussing a number of potential tools and resources, the TSC made the decision to weave multiple resources into one overarching resource (e.g., Handbook for Tribal Science).

- Each resource will be assigned a workgroup, which will meet regularly.
 - The workgroups must have a leader.
 - The meetings must be efficient.
 - The full TSC will review each workgroup's output.
- One workgroup will develop a template Tribal research protocol.
 - Marie and Shasta volunteered to serve on this workgroup.
 - Neil Patterson and José Zambrana will be approached to work on the template.
- One workgroup will develop a "Tools Tool" (possibly called the ToTo) to be added to the TSC website.
 - Existing tools for air, water, climate change and other areas of Tribal interest will be identified, collated and leveraged.
 - Gaps will be identified to determine what tools need to be developed and how the TSC can facilitate their development.
 - Page Hingst, Beth and Candice volunteered for this workgroup.
- One workgroup will develop a list of resources for conducting ORD research, including contacts (e.g., RSLs).
 - Ian Dombroski, Troy Hill, Amina Pollard, Dawn Taylor, Heather Webb and Monica volunteered for this workgroup.
- One workgroup will develop a Tribal addendum to EPA's [Interim Framework for Advancing Consideration of Cumulative Impacts](#).
 - This effort must consider the importance of consultation and include impacts that have occurred since First Contact, which are detailed in Indigenous knowledges (IK) and traditional ecological knowledge (TEK).
 - Krishna Woerheide and Matt volunteered to serve on this workgroup.
 - Jason Todd would like to serve on this workgroup and will decide if he is able in early 2025.
- One workgroup will develop a strategy for allowing implementation of IK/TEK in EPA decision-making.
 - Developing an actual strategy is critical so that EPA moves forward, from conversations to implementation.
 - Francine St. Denis, Kai Tang and Janette volunteered for this workgroup.
 - Josh and Neil will be approached to serve on the workgroup.
- One workgroup will develop a factsheet about cultural burns.
 - Ted Coopwood, Matt, Page, Shasta and Tim volunteered for this workgroup.
- In terms of data sovereignty, sharing of IK/TEK is complicated even among clans in one Tribe, let alone at higher levels. The Tribal Caucus could develop a white paper to champion data sovereignty within Congress to protect Tribal data from FOIA requests.
- Consultation with Tribes is not simply a "check the box" activity; Tribes must be at the table and consulted face-to-face before decisions are made. The TSC could develop training on what true consultation is and the importance of understanding and respecting Tribal leadership as the government of a sovereign nation.
- A concern is that artificial intelligence is gathering Tribal information from EPA libraries.
- The TSC could help recruit Federal employees with Tribal government experience as a preemptive effort to prevent misunderstandings.

- Region 3 Tribes are concerned about the saltwater intrusion into the Potomac Aquifer, which affects Tribal water resources. Tribes would like to know EPA's plan for addressing these challenges (e.g., database, adaptation plans).
- The TSC could develop a Tribal children's health resource.

Afternoon Session: Environmental Field Trip

Arbuckle-Simpson Aquifer and Byrds Mill Spring

TSC Members and Guests, led by Doug Beak and Randall Ross, CESER, ORD, EPA

Randall Ross and Doug led the participants on a guided tour of the Arbuckle-Simpson Aquifer and Byrds Mill Spring to learn about Ada's sole water source and view the sites described by Doug during his presentation.

Daily Afternoon Reflections

TSC Members and Guests

The TSC members reviewed the goals for the day and determined that they had been met.

Janette requested that a summary map be developed to show the relationship between the two sites the TSC visited that afternoon, including photographs of the sites. A factsheet about the demonstrations with Doug and Randall's contact information would be helpful so that Janette can share the experience with her colleagues.

The following suggestions for improvement were made:

- Ensure that the TSC identifies actionable items during the face-to-face meetings.
- Hold more conversations with presenters before the meeting to ensure that they understand their audience when developing their presentations.
- Develop an acronym sheet or play "Acronym Jeopardy" to help with acronyms.
- Ensure that workgroups developing products have time to meet during the face-to-face meetings (i.e., more focused time to do TSC work).
- Maintain time limits more diligently to ensure enough time for each agenda item.

Thursday, December 5, 2024

Morning Session: TSC Business

Caucus Breakout Sessions

Tribal Caucus and EPA Caucus

The Tribal and EPA Caucuses met separately to discuss internal Caucus business.

Tribal Children's Environmental Health Action Plan Update

Ted Coopwood, Office of Children's Health Protection (OCHP), EPA

Ted summarized a presentation that he had given about children's health during Children's Health Month in October, including that it is important to focus on Tribal children's health because of Tribal lifestyles, locations and cultural practices, as well as significant disparities in Tribal children's health. OCHP is addressing children's environmental health in Tribal communities through partnerships with Tribes, EPA-Tribal partnership groups, EPA's Tribal programs and other federal partners. With the Office of International and Tribal Affairs (OITA), OCHP developed the draft *FY25 Tribal Children's Health Action Plan*, which aims to build EPA's internal program capacity, build external capacity and establish Tribal partnerships, and encourage EPA programmatic activities. To develop the plan, OCHP and OITA collaborated early on with EPA's children's health coordinators, Tribal managers and Tribal partnership

groups, ultimately identifying the priority issues of pesticides exposure, indoor and outdoor air quality, water quality, and risk assessment methods.

The plan identifies a number of action items to build internal capacity (e.g., seek additional partners, establish a formal EPA Tribal Children's Workgroup, identify and organize outreach and educational tools and resources), build external capacity and establish Tribal partnerships (e.g., meet with at least five RTOCs, brief senior leadership on opportunities for engagement with the Pediatric Environmental Health Specialty Units), and implement EPA programmatic activities (e.g., collaborate with the Inter-Tribal Council of Arizona Inc. and Tribal Pesticide Program Council to develop children's health training for Tribal pesticide professionals, analyze a pilot to expand air quality flag programs into Tribal schools).

The next steps are to share the draft action plan with and incorporate feedback from Tribes and EPA programs and regions, finalize and share the plan, and create a timeline to accomplish the action items. Ted requested the TSC's help in gathering Tribal input on the draft plan; he would like the TSC to work with OCHP to provide input.

Dana suggested working with the Indian Health Service, which constructs medical facilities on reservations.

Shasta asked how OCHP is deciding on the boundaries for Tribal children's exposure, particularly for those children who do not live or attend school on reservations. Ted acknowledged that many Tribes are urban, and off-reservation school exposures must be identified. Coordinating with Tribes is necessary to determine where Tribal children are exposed and get the right messages and tools to them. OCHP understands that it is necessary to reach Tribal children where they are.

Guidelines on Validation of Non-Regulatory Chemical and Radiochemical Methods

Anand Mudambi, National Program Manager for Regional Laboratories, ORD, EPA

Anand Mudambi explained that EPA develops regulatory and non-regulatory methods, the latter of which are developed and validated to meet current and evolving Agency needs. Because of the lack of EPA-wide guidance for consistent non-regulatory method validation, a cross-Agency workgroup developed the [*Guidelines on Validation of Non-Regulatory Chemical and Radiochemical Methods*](#). These guidelines address newly developed, adopted or modified chemical and radiochemical methods and provide an overview of key aspects of method validation (e.g., method performance characteristics) and links to more detailed method validation resources. The guidelines introduce three new concepts to promote consistent method development and communication of validation results: method life cycle, validation descriptor and method validation summary. Use of these concepts promotes consistency and conciseness.

The method life cycle illustrates the steps and processes of the method, from the beginning to its retirement. The validation descriptor is a standardized description that concisely conveys the extent of the validation. The method validation summary provides a consistent and brief overview, easy access to pertinent information, and a comparison of similar validation studies; it facilitates sharing across the Agency. This summary is designed to be placed at the front of the full method validation report, which should be prepared in accordance with relevant protocols. Anand showed an example summary document, which includes four sections across two pages.

EPA's Environmental Methods Forum developed "[*Terms Used to Describe the Standing of U.S. EPA Methods*](#)" as a compendium of terms used by EPA to describe and designate the standing of its methods; the goal of the document is to promote a better understanding of these terms inside and outside of EPA.

Francine asked whether the validation summary helps with expedited regulatory method approval. Anand responded that the guidelines and validation summary are for non-regulatory methods only.

Francine noted that some non-regulatory methods become regulatory methods and asked if the summary could help that process. Anand thought that it could help; it does not contradict regulatory method guidance.

TSC Business

TSC Members and Guests

Shasta reported that the Tribal Caucus had discussed the list of collaborative resources identified the previous day. She noted that it is important to educate Tribes about the CARE principles so that they can demand that they be followed when engaging in research; this aspect will be included in the research protocols effort. The Tools Tool must include metadata that indicate when a tool was created and/or last updated. The Tribal Caucus also discussed the term “consultation.” Only government-to-government consultation can be considered consultation, and only if the Tribal government designee and EPA decision-maker are in the room together. Anything else is a conversation, listening session or engagement. The Tribal Caucus also would like an index of acronyms to be developed.

Francine asked if the Tribal Caucus has a vision for the implementation of IK/TEK in EPA decision-making. The American Indian Environmental Office developed and disseminated training to EPA staff on how to incorporate IK. Shasta responded that the workgroup must have a scoping conversation. Indigenous people have a lived experience that she does not, so the leader of the workgroup must be Indigenous. The group will start with the TSC’s 2011 TEK white paper and White House IK guidance. Tribes see IK is being discussed but not implemented; the TSC effort will focus on implementation.

Marie reported that the EPA Caucus is interested in developing a flow chart of how to connect Tribes with ORD and other EPA staff, depending on whether the need is related to research or administration. The EPA Caucus also discussed developing information for the TSC website or a factsheet on how to be supportive of cultural burning while protecting Tribal populations from its effects. The TSC will need to have a scoping discussion about the cumulative impacts addendum to determine what end product will work best for EPA and Tribes. The EPA Caucus also discussed research best practices and how to approach this work, including developing training on resources and identifying obvious gaps. It will be important to keep the scope of the overall effort under control so that all goals can be accomplished. Each workgroup must consider its audience and the best way to disseminate the resources.

Janette noted the importance of bringing the broadness of EPA to the regional level to be effective with local Tribes. Beth added that EPA also must be straightforward about what it can and cannot do to protect Tribal data. Data sovereignty could be included in the Indigenous research protocols effort. Shasta outlined items that could be included in a research protocol template, such as the rights of the Tribe to retain its data or withdraw from the study at any time, entitlement for compensation for staff or community member time, and jurisdictional issues.

Matt explained that RSLs are the entry point for connecting with ORD; grant project officers are another good point of contact. Page asked how to move forward if an RSL is unresponsive. Another champion in the region might exist, and she wondered how Tribes would know this. Janette noted that not all EPA staff know that the RSL is the regional point of contact for working with ORD. Shasta added that accountability is important, and staff must be responsive. The TSC’s resources should address the problem that Tribes do not know ORD. The audience should be entry-level environmental staff. Beth suggested sending an annual reminder to Tribal environmental audiences of what resources are available.

Matt commented that his view of the cumulative impacts assessment has evolved, and he now thinks of it as a tool that empowers Tribes to collect their own information and bring that information to decision-makers in a more powerful manner to enhance decision-making. The effort should go beyond exposure assessment. Krishna cited EPA’s 2003 [*Framework for Cumulative Risk Assessment*](#), Region 5’s 2007 *Final*

Protocol to Assess Expanded Cumulative Impacts on Native Americans, EPA's 2011 *Applying Cumulative Impacts Analysis to Tribes and Tribal Lands*, and Region 5's 2013 [Tribal Cooperating Agencies Cumulative Effects Analysis](#) and noted that resources already exist. Matt suggested that part of the effort may be to raise awareness of these documents and the opportunities for Tribes to apply this information. Jason noted that cumulative risk and cumulative impacts mean two different things in his office; language differences and similar issues must be considered in the scoping. Matt thought that the goal is to show how Tribes can be better integrated into the cumulative impact assessment process. Shasta stated that EPA staff must understand that Tribal cumulative impact assessments must include the historical condition and use of lands. Locations are immemorial to Tribes; even if a location has been built or paved over, it still exists to the Tribe and must be included in the assessment.

The TSC discussed the two 2025 face-to-face meetings, determining that they will be held in Region 10. The spring meeting can be held at the EPA laboratory in Corvallis, Oregon. Rory O'Rourke can help the TSC identify a host Tribe in the region for the fall meeting. The preference is to meet in April or the first half of June, if possible, and the week of October 6, 2025.

Monica recognized Dana for 5 years of service and Mari Nord and Janette for 4 years of service. She highlighted the memorial for former Tribal Co-Chair Curtis Munoz in the latest edition of the *EPA Tribal Science Bulletin*. Curtis was instrumental to the success of the National Forum on Tribal Environmental Science held in September 2006 in partnership with the Quinault Indian Nation in Ocean Shores, Washington, and the 2010 National Tribal Science Forum held in June 2010 in partnership with the Grand Traverse Band of Ottawa and Chippewa Indians in Traverse City, Michigan. Curtis was always happy and positive, which showed in his interactions with everyone. Finally, Monica recognized Tim for his 2 years of service as the Agency Co-Chair.

Closing

TSC Members and Guests

Shasta and Marie closed the meeting.

National EPA-Tribal Science Council Fall/Winter 2024 Face-to-Face Meeting Participants

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TSC Tribal Co-Chair
Pala Band of Mission Indians (Region 9)

Marie Schaefer

TSC Agency Co-Chair
U.S. Environmental Protection Agency
Office of Research and Development

Dana Adkins

Chickahominy Indian Tribe (Region 3)

Doug Beak

U.S. Environmental Protection Agency
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Tim Canfield

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Ted Coopwood

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