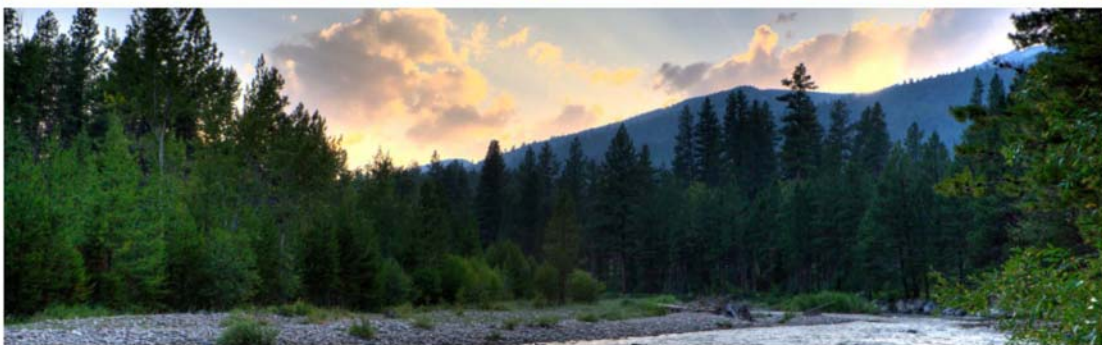


2011
National Tribal Science Priorities
Framework and Instruction Guide



U.S. Environmental Protection Agency
National EPA-Tribal Science Council

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Background on National Tribal Science Priorities

EPA’s National–Tribal Science Council, commonly referred to as the TSC, is a standing working group comprised of 27 representatives—17 Agency representatives from each major EPA region and headquarters program office, and 10 Tribal representative from each EPA region with federally recognized tribes, and an additional member representing Alaska Native communities. It was formed in 1999 to serve as a vehicle through which the Agency could gain an understanding of scientific issues that are of highest priority to Indian Tribes at a national level, and so that tribes could influence the Agency’s scientific agenda by raising their priority issues to an Agency-wide group. At the request of the National Tribal Caucus, the TSC was created in partnership with Tribal representatives to help integrate Agency and Tribal interests, specifically with respect to environmental science issues. The TSC provides a cross-Agency forum for tribes and EPA to identify priority environmental science issues and collaboratively design effective solutions. In addition, it provides opportunities for Tribal Nations and Alaska Native Villages to exercise sovereign rights concerning their environment and community well-being. The Council seeks to increase tribal involvement in EPA’s scientific activities—building bridges between Tribal and Agency programs by focusing on tribal priority science issues.

Initial National Tribal Science Priorities Process

The first set of national tribal science priorities was identified by the TSC Tribal representatives in September 2002. The priorities were compiled by the representatives from input they had received from tribes in their respective regions. Upon examining the various lists of Regional tribal science priorities, the Tribal representatives selected only priorities that were national in scope and then organized them based on a discreet number of criteria for presentation to their Agency counterparts. From November 2004 through May 2005, the Tribal representatives continued to refine and clarify the national tribal science priorities, reframing each science priority in terms of its overarching relationship to and impact on Tribal traditional lifeways. In addition, through a series of workshops and consideration of new or changing science priorities in Indian country, the Tribal representatives identified a final list of science priorities that were documented in “National Tribal Science Priorities” in April 2006, which included:

- Habitat Loss
- Contaminated Precipitation
- Biological Stressors
- Environmental Triggers for Respiratory Distress with a special emphasis on mold
- Pharmaceuticals in Wastewater
- Dioxin and Dioxin-like Compounds
- Persistent Bioaccumulative Toxics Source Reduction
- Endocrine Disruptor Chemicals (EDCs)

New National Tribal Science Priorities Process

One of the primary responsibilities of the tribally-driven National EPA-Tribal Science Council is to work collaboratively to identify priority science issues of national significance. The TSC has identified an initial set of issues, and has developed objectives and criteria to narrow and prioritize potential priorities. The six-month process will formally launch in January 2011 and be completed by July 2011. To obtain more information on the ensuing process and obtain the

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Tribal Science Priorities Framework package, please visit the American Indian Tribal Portal and Science in Indian Country Web sites found at: <http://www.epa.gov/tribalportal/> and <http://www.epa.gov/osp/tribes/tribes.htm>.

Instructions to Identify Tribal Science Priorities

Purpose: The purpose of the Tribal Science Priorities process is to establish a framework for identifying national level tribal science priorities and incorporating these priorities into EPA’s budget process.

STEP 1: Apply Tribal Science Priority Goal, Objectives, and Criteria

The goal, objective, and criteria must be applied to each tribal science issue. Provide examples developed by Tribal Caucus (e.g., climate change, fish consumption, or ambient air).

Issues that do not meet the goal, at least one of the objectives, or any of the criteria are not eligible to be considered as a national tribal science priority.

STEP 2: Complete the Tribal Science Priorities Template

Tribal science issues that satisfy the objectives and criteria may be submitted for consideration to be a tribal science priority.

The tribal science priority template is the format for which the priority issues will be received by the Tribal Science Council.

The reviewers are strongly encouraged to provide explanation for each tribal science issue identified and submitted in each section of the template.

For assistance with completing the template, please contact your Tribal Science Council Tribal representative (Appendix D).

STEP 3: Submission of Tribal Science Priorities

Mail or e-mail completed template to Monica Rodia, Executive Secretary of the Tribal Science Council at Rodia.Monica@epa.gov or mail to U. S. Environmental Protection Agency, MC 8104R, Ronald Reagan Building Room 51159, 1200 Pennsylvania Avenue, N.W., Washington, DC 20004.

Deadline: Your template must be received by April 1, 2011. Please contact Monica Rodia with any questions you may have by telephone at 202.564.8322 or e-mail at Rodia.Monica@epa.gov.

Tribal Science Priorities Process

The TSC has developed a new process to identify tribal science priorities in Indian country. The purpose of the tribal science priorities process is to establish a framework for EPA, tribes, and tribal stakeholders to prioritize environmental and human health issues, and to elevate these issues to national level status within EPA’s strategic plan. The Regional Tribal Operations Committees (RTOCs) are critical to developing tribal science priorities. The TSC seeks your input on significant environmental challenges you face and would like to obtain feedback for identifying TSPs from the RTOCs, federally recognized tribes, and tribal organizations as a first step toward identification of national tribal science priorities.

Tribal Science Priorities Evaluation and Selection Criteria Process

The objectives and criteria outlined below must be applied to develop a final set of tribal science priorities.

The objectives to select new Tribal Science Priorities should accomplish at least one of the following:

- Contribute to science that is Tribal and Alaska Native specific and advances the field of Tribal environmental research.
- Provide methods to understand and address Tribal and Alaska Native environmental issues, inclusive of smaller populations.
- Foster a new generation of Tribal and Alaska Native researchers and scientists.

Criteria that will be considered in selecting Tribal Science Priorities include:

- Does the potential Tribal Science Priority have national implications? Regional impacts also will be considered.
- What is the Tribal Science Priority's impact on Tribal and Alaska Native sovereign rights?
- How will the Tribal Science Priority assist Tribal and Alaska Native populations, including sensitive populations (e.g., children and the elderly)?
- How can the Tribal Science Priority be tangibly implemented in Tribal and Alaska Native communities?
- How can the Tribal Science Priority be measured in terms of products and outcomes?
- Does the Tribal Science Priority provide opportunities to create and form partnerships and/or increase Tribal and Alaska Native capacity?

Tribal Science Priorities Process Timeline

Beginning of December 2010

- TSC Tribal Representatives develop initial set of Tribal issues.

Late January 2011

- Announce/Issue Tribal Science Priority (TSP) framework package from the American Indian Environmental Office.

Mid–Late March 2011

- Distribute TSP package, which includes memo, goals, criteria, timeline, and dates for submissions to Regional Tribal Operations Committees (RTOCs), Regional Councils, and Regional Indian Coordinators (RICs).
- TSC engages with the stakeholders throughout the 60-day review and input period to develop the initial set of TSPs.

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- This is a full TSC responsibility. Both Tribal and EPA Regional representatives will be engaged in their respective discussions.

April 2011

- TSC coordinates and communicates with stakeholders to establish final set of TSPs and transmits them to National Tribal Caucus (NTC) for input and approval.
- NTC receives TSPs and proposes actions and approves (use April NTC meetings in DC) to obtain feedback on priorities within a 30-day time period.

May 2011

- NTC sends TSPs to TSC for final revisions.
- EPA Headquarters and Regional representatives are responsible for informing their Indian Program Policy Council (IPPC) principals in advance of relevant priorities and to begin the discussion of what can be accomplished and/or approved from a Program/Regional standpoint.

May–Early June 2011

- Inform IPPC of final TSPs and brief EPA senior management.
- Seek approval and/or rationale for disapproving TSP during scheduled IPPC meeting.

June 2011

- IPPC approves TSPs. (If TSPs are not approved, the Tribal Caucus requests that the IPPC help facilitate partnerships with other agencies that might be able to address the TSPs.)
- IPPC sends TSPs to Executive Management Committee (EMC) for discussion and approval.

July 2011

- Roll out TSPs at annual NTOC meeting.
- Break out TSPs by funding sources and Program Office/Regional Support.

August–October 2011

- Senior Managers follow up and document Agency action (what will be done by whom) on moving forward with TSP implementation.
- Discuss the rationalization behind the decision-making process of why particular TSPs were addressed while others were not.
- Implement an accountability loop to ensure this is an ongoing process.

APPENDICES

Appendix A
Tribal Science Priorities Template

The purpose of the template is two-fold. First, it is the official format for which the priority issues will be received by the Tribal Science Council. Second, the template serves as the vehicle to highlight the specificity of each tribal science issue. Reviewers are required to provide explanation in the sections listed below for each tribal issue submitted to be considered for final tribal science priorities.

- Priority Title:

- Issue Statement:
 - Why is this important to tribes and/or Alaska Native villages?
 - What is the impact on elders and children’s environmental health?
 - What is the impact on ecologic health of biological populations?
 - Does the issue meet TSC criteria for TSPs?

- Explanation of the issue:
 - Use case studies or stories to illustrate tribal importance/relevancy
 - Highlight use of Traditional Knowledge related to issue
 - Include pictures/photographs

- What do tribes and Alaska Native villages specifically need from EPA to address the issue?
 - Examples: training, technical assistance, research, tools, communication (Webinars), specific interventions to protect children and other community members from hazards in home, school, daycare, etc.

- Proposed implementation strategy and potential measures of success:
 - How will the priority be implemented at the community level?
 - How will implementation of the priority be measured?

Appendix B Initial Tribal Science Issues

At the Tribal Science Council Meeting in Hollywood, Florida, in late December, the Tribal Caucus was charged with developing an initial set of issues for your consideration. The Caucus determined that the original set of priorities established in 2006 could be further defined and offered these as the initial set of topics to be considered. These issues are simply to initiate the discussion to develop a final set of tribal science priorities. The criteria outlined in the previous section must be used to facilitate the discussion on this preliminary set of priority issues.

Tribal Science Priority No. 1: Climate Change Adaptation Planning and Actions

Actions and resources necessary to address this priority:

- Funding to allow Tribes/Alaska Native Villages to implement Tribal-specific adaptation/mitigation
- Pursue collaboration with universities, professional societies, etc.
- Develop forecasting tools and technologies
- Promote “green building” standards to increase energy efficiency
- Holistic (cross-media) approach.

Tribal Science Priority No. 2: Improvement in Core Scientific Competency

Actions and resources necessary to address this priority:

- Update information technology
- Provide training on best available software for risk assessment (e.g., Tribal LifeLine™ software/T-FERST)
- Provide funding, capability, etc., for data management/information exchange
- Pursue collaboration with universities, professional societies, etc.
- Conduct webinars and training
- Promote capacity building
- Incorporate peer-to-peer training
- Provide comprehensive baseline assessment to provide a foundation for effective Tribal participation in the strategic planning and budget process
- Address Tribal ambient air and/or indoor air programs for all Tribes
- Increase funding
- Conduct permit reviews
- Involve Regional Planning Organizations.

Tribal Science Priority No. 3: Ambient Air Quality

Actions and resources necessary to address this priority:

- Address off-reservation sources affecting ambient air quality since Tribes are primarily impacted by nontribal sources
- Provide resources and capacity to address nontribal sources affecting ambient air quality
- Analysis of national monitoring networks that are tribally representative

- Develop comprehensive tribal monitoring strategy
- Research environmental triggers for respiratory distress (asthma, mold, etc.)
- Facilitate Tribes' Primary Quality Assurance Organization
- Use Regional Planning Organizations to monitor and model resources for Tribes
- Develop partnerships with States with jurisdiction over sources affecting Tribes upcoming permits review
- Strategy to complete and update inventories of Tribal emissions sources using TEISS training and resources
- Discuss contaminated precipitation
- Partner with National Tribal Air Association (NTAA) and Institute for Tribal Environmental Professionals (ITEP).

Tribal Science Priority No. 4: Indoor Air Quality

Actions and resources necessary to address this priority:

- Research why Tribes have the highest rates of asthma
- Partner with other Federal agencies to determine the number of Tribal homes, schools, and office buildings with indoor air assessments and mitigation for mold, radon, asbestos, and particulates with the goal of targeting remediation and woodstove/furnace change-out programs
- Address mitigation issues
- Partner with NTAA and ITEP
- Provide training, tools, and resources for Tribes.

Tribal Science Priority No. 5: Monitoring Pharmaceuticals in Wastewater

Actions and resources necessary to address this priority:

- Research affordable methodologies
- Research and implement criteria to protect against pharmaceuticals in wastewater.

Tribal Science Priority No. 6: Mining Hazardous Waste

Actions and resources necessary to address this priority:

- Need Tribal trained scientists to analyze and collect data
- Clean up communities
- Work for environmental justice
- Proper reclamation
- Stricter regulatory compliance
- Follow up on cleanup/mitigation
- Allow Tribes to perform their own studies
- Partner with the Brownfields program.

Tribal Science Priority No. 7: Hydrofracturing

Actions and resources necessary to address this priority:

- Recognize how hydrofracturing affects ground and surface water.

Tribal Science Priority No. 8: Clean Up All Harmful Chemicals at Remediation Sites

Actions and resources necessary to address this priority:

- Conduct community forums on clean-up activities needed
- Recognize that land and water are still harmful if only some chemicals are removed
- Recognize that the assessment process still leaves harmful chemicals (i.e., averaging)
- Partner with the Brownfields program.

Tribal Science Priority No. 9: Biological Stressors

Actions and resources necessary to address this priority:

- Resources to investigate effects of harmful algae blooms and cyanobacteria.

Tribal Science Priority No. 10: Mercury/Fish Consumption

Actions and resources necessary to address this priority:

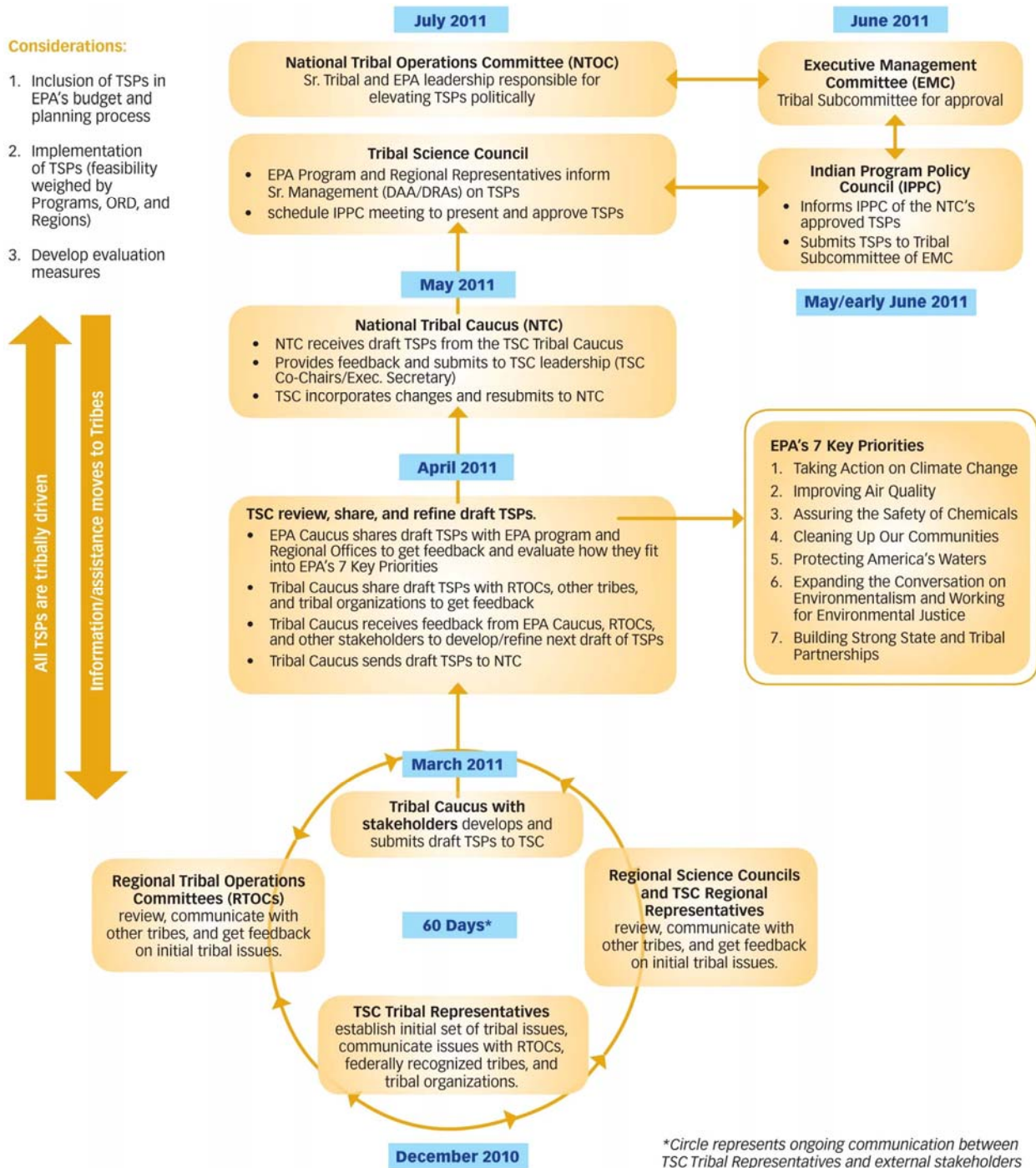
- Increase EPA fish consumption default value by supporting fish consumption assessments and incorporating into EPA policies
- Conduct Tribal-specific data acquisition/research projects to support tribal-specific fish consumption numbers
- Training on steps, processes, and tools to develop fish consumption rate.

Tribal Science Priority No. 11: Seek Partnerships on Existing Science Issues in Indian Country

Seek partnerships on:

- Air
- Pesticides
- Water quality
- Solid waste
- Nonpoint sources
- TSC Tribal Science Priorities as a conduit to elevate other groups' priorities within EPA.

Appendix C
Tribal Science Priorities Information Flow Chart



National EPA–Tribal Science Council

Appendix D National EPA–Tribal Science Council Tribal Representatives

Region	Name	Phone	E-mail Address
Region 1	Dan Kusnierz (Penobscot Indian Nation)	207-817-7361	Dan.Kusnierz@penobscotnation.org
Region 2	Vacant		
Region 4	Katie Renwick (Eastern Band of Cherokee Indians)	828-497-1832	katerenw@nc-choerokee.com
Region 5	Jeffrey Mears (Oneida Tribe of Indians of Wisconsin)	920-869-4550	jmears@oneidanation.org
Region 6	Curtis Munoz (Kiowa Tribe) <i>Alternate:</i> Genevieve McGeisey (8 Northern Indian Pueblo Council)	580-654-1975 505-692-8542	nethkuplega@yahoo.com gencat@gmail.com
Region 7	Denise Jensen (Winnebago Tribe of Nebraska)	402-878-4060	winnewater@huntel.net
Region 8	Rich Janssen (Confederated Salish & Kootenai Tribes)	406-883-2888	richj@cskt.org
Region 9	Sirirat (Tia) Chullakorn (Kashia Band of Pomo Indians of the Stewarts Point Rancheria) <i>Alternate:</i> Dan Mosley (Exec. Dir. Pyramid Lake Fisheries – NV)	707-591-0580 x113 775-476-0500	u2sc@yahoo.com dmosley@plpt.nsn.us
Region 10 (ID, OR, WA)	LeeJuan Tyler (Shoshone Bannock Tribes)	208-478-3814	lt Tyler@sbtribes.com
Region 10 (Alaska)	Harold Frank, Jr. (Tlingit and Haida Indian Tribes of Alaska)	907-209-9029	apasdu@hotmail.com