

Tribal Data Development Work Group Work Plan

I. Background and Purpose

The Institute for Tribal Environmental Professionals (ITEP) has been actively involved in both the Western Regional Air Partnership (WRAP) and its predecessor, the Grand Canyon Visibility Transport Commission (GCVTC). The WRAP promotes, supports and monitors the implementation of the GCVTC recommendations throughout the West. ITEP has an ongoing commitment to building tribal environmental program management capacity, and has developed significant expertise in tribal air program training since 1992. In addition, ITEP has successfully achieved long-term working relationships with many of the tribes within the WRAP region, and has been working with the tribes and the Tribal Data Development Working Group (TDDWG) to begin to bridge the gap in available tribal air quality data.

In August 2001, ITEP published “An Assessment of Tribal Air Quality Data and Programs in the Western United States” (the TDDWG report). This report, funded by the WRAP’s TDDWG, was the first step in gathering existing information on tribal air quality in the WRAP region which covers 13 western states and includes 237 federally recognized tribes. This report assessed the current state of tribal air quality data and programs in the WRAP region and clarified future needs in tribal air quality data development. The information collected and summarized was meant to inform the committees and forums of the WRAP on the magnitude of the gap in air quality data over tribal lands. It provided a starting point for planning future data development efforts on Indian Reservations in the WRAP region.

II. Statement of Need

Several issues critical to bridging the tribal air quality data gap were identified through the TDDWG report:

- A serious limitation on environmental program resources among the WRAP tribes.
- A high demand for new and continuing tribal air quality programs in the WRAP region.
- A high demand to develop tribal emissions inventories.
- A shortage of tribal staff to deal with air quality issues.
- Tribes must play an integral part in regional air quality planning.

The TDDWG report was based on information obtained from 156 tribes in the WRAP region. ITEP compiled a list of the 237 federally recognized tribes in the WRAP region, along with environmental and/or air program contacts for each of the tribes. ITEP attempted to contact 220 of these tribes and 156 tribes completed the assessment instrument (AI).

One of the critical findings of ITEP’s inquiries was a serious limitation on environmental program resources among the tribes located in the WRAP region. Staff time appeared to be a significant limiting factor in the ability of tribes to participate in WRAP activities. Information gathered indicated that only 22% of the 156 tribes contacted were currently involved in the WRAP. Of those not currently involved in the WRAP, 41% indicated that they were not involved due to lack of staff and/or resources. Twenty-five percent (25%) said that they were

not aware of the WRAP prior to being contacted by ITEP. This data suggests a need for a more active outreach program for tribes in the WRAP region.

The shortage of tribal staff to deal with air quality issues was apparent in every phase of the project. It was difficult to schedule meetings due to tribal staff's full schedules. Often one staff person was responsible for both the fieldwork and the administration of their program. These examples indicate that it can be difficult for tribal staff to keep up with the demands of their own programs, and even more difficult to find time to participate in the regional activities. Additional staff in tribal air programs would increase the capability and quantity of tribal air programs, as well as provide tribal staff with time for informed and meaningful participation in WRAP.

ITEP's research also revealed a high demand for new and continuing tribal air quality programs in the WRAP region. Currently, 38% (60 tribes) of the tribes participating in this project said that they have an air program. Fifty-five (55) tribes indicated that they planned to start an air program in the next 1 to 2 years. These results indicate that demand for program development resources will double over the next few years. Planning to meet the demands should be underway, not only for these new tribes but also for the tribes that have been found to be seriously understaffed. As more tribes endeavor to assess, monitor and protect their air resource, additional funds must be identified to support quality tribal air programs.

ITEP found that demand to develop tribal emissions inventories (EIs) was also high. Of the 156 tribes questioned, only 18% (28 tribes) indicated that they had done an EI or source identification on their reservations. Seventy-seven (77) tribes said that they planned to complete an EI in the next 1 to 2 years. This would almost quadruple the number of tribal EIs in the WRAP region over the next 1 to 2 years. The GCVTC, in their June 1996 report, specifically identified a "...need for more comprehensive emissions inventories for areas on and near tribal areas". The EI serves as an excellent starting point for tribes in identifying air pollution sources of concern to their communities. It also allows tribes to be represented in regional modeling, market trading programs, and planning. Identifying funding and resources for tribal EIs is a critical issue that needs to be addressed.

The TDDWG report identified several challenges and opportunities for tribal air quality programs in the WRAP region. The greatest challenges are in continuing to build capacity in tribal air programs and finding the resources to build this capacity. The opportunities lie in the development of better relationships between tribes and the WRAP and among tribes themselves. The TDDWG exists to facilitate these relationships. Five primary objectives and related tasks are outlined in this workplan, which is designed to further bridge the tribal data gap and enhance tribal participation in the WRAP.

The initial work of the TDDWG successfully established the first step of the assessment and planning tasks identifying the magnitude of the air data gap in the WRAP Region. The information that has been collected and the initiation of the development of the EI software provide the next step in increasing the role of tribes in managing air quality in the WRAP Region.

The tasks outlined in this proposal were created based on the findings presented in the TDDWG report in conjunction with the objectives the TDDWG workplan developed in 1999. In reviewing both the report findings and TDDWG workplan tasks, ITEP has prepared the following work plan and budget to address the tribal data gap.

III. Work Plan

Task 1: Completion of Emissions Inventory Software

ITEP will coordinate the completion of the emission inventory software for tribes in the WRAP Region. Design of the EI software began in 1999. ITEP initiated the preparation of a Request for Proposal (RFP), which outlines the specifications and technical requirements of the EI software application. The RFP will include specifications to incorporate QA/QC procedures to provide guidance for tribes that implement the software. The RFP will specify that the bidders prepare their work plans in several phases to allow flexibility in obtaining funding for the completion of the project. ITEP plans to release the RFP in late 2001. Finalizing the software and preparing it for pilot testing will be conducted under this proposal. The chosen contractor will provide “train-the-trainer” instruction during this phase of the project. The timeline for this task will be dependant on the chosen contractor’s working schedule. The test version of the software is anticipated to be completed in late 2002. The final version is anticipated to be complete at the end of the grant period, in June 2003, after the results of the pilot testing specified in task 3 have been analyzed and applied to the test version.

Task 2: Quality Assurance/Quality Control

ITEP will develop a written QA/QC plan for data collection and data management associated with both the underlying database and emission inventory software. The plan will be a general template for tribes to use when they begin entering data into the software. This will ensure data creditability and will provide guidance to tribes that choose to use the software. The QA/QC plan for the underlying database will describe the methods and procedures used for data collection and verification, data tracking protocols, data custody transfer, and other control mechanisms to protect the integrity of the database. This task will be concurrent with the software development. QA/QC procedures developed will be tested, along with the software, in the pilot testing described in Task 3.

Task 3: Pilot Test of EI Software

When a complete test version of the emission inventory software is fully developed, ITEP will identify 3 tribes to test the software. The software will be provided to 3 pre-selected tribes who will fully implement the software using their own data. ITEP will provide onsite assistance as necessary to ensure that tribes will have support in using the software. Tribes will also have the QA/QC plan to assist them in assessing the quality of their data before being entered into the software. The pre-selected tribes will provide feedback on the application and effectiveness of the software. As a result of the pilot test ITEP staff will work with the contractor to review and modify the software as necessary. The start date for this task is dependent on the contractor completing the test version of the software. It is anticipated that the test version will be

completed in late 2002, therefore pilot testing would take place at the end of 2002 or in the early spring of 2003. The completion date for the final version of the software will be determined by the extent of the modifications required after the pilot testing is completed.

Training for EI software

When the final version of the emission inventory software is complete (anticipated at the end of the grant period, June 30, 2003), ITEP will begin distributing the software to tribes in the WRAP Region. ITEP will conduct training on the use of the EI software. This task will be undertaken in the year following the completion of the software and will be addressed in a future grant proposal. It is anticipated that the training will be conducted in Flagstaff, AZ for five selected tribal air quality professionals. After successful completion of the training these professionals will be available to train other tribes in the use of the EI software, and will also be available for telephone consultation. The training will provide instruction for the implementation of the software, QA/QC on the tribal data and the generation of reports. Individual professional assistance will be made available to tribes as they conduct their EIs.

Task 4: WRAP Tribal Data Gathering

At present, ITEP receives numerous calls from WRAP forums and contractors to the forums who need information on or from tribes to include in their decision-making processes. Under this task, ITEP will gather tribal data required by WRAP. The following bullets list data to be delivered to TDDWG. TDDWG will provide direction over time to ensure that the data collected is responsive to the current and future needs of the WRAP. TDDWG would also play a role in prioritizing the development of tribal data.

- ITEP will maintain contact lists targeting tribes who are interested in receiving information on specific WRAP issues (such as smoke management, pollution prevention, emission inventory, etc.), based on the 2001 data gathering effort. The targeted contact lists will be provided to NTEC and the WRAP forums and kept on file at ITEP. These lists will be provided no later than June 30, 2002. In January 2003, ITEP will update the lists to ensure that the contact information is still correct. This work will be completed by the Program Coordinator and the Research Specialist.
- ITEP will continue its efforts to collect tribal emissions inventories as they become available and approved by the tribes for release. EI data collected will be formatted for the National Emission Inventory (NEI) and submitted on the appropriate date for inclusion in the 2002 NEI. Point, area and mobile sources on tribal lands will be included in this data collection effort. Data collection under this task will take place over the entire grant period. A list of tribal air pollution sources and their estimated emissions, based on the EIs released to ITEP and the WRAP during this grant period, will be provided at the end of the grant period on June 30, 2003. Any WRAP forum or the TDDWG could obtain a copy of the EI data collected to date upon request to ITEP. The TERC Manager, Database Specialist, Program Coordinator, Research Specialist and Administrative Secretary will support this work task.

- Tribal GIS information for all WRAP tribes will be compiled from existing sources, including the EPA's existing national American Indian Lands Environmental Support Project (AILESP). Data compiled will include reservation boundaries, major roads on reservations, emission sources obtained from tribal EIs and the 1999 NEI, tribal air monitoring sites, location of metropolitan statistical areas near WRAP tribe reservations, locations of Class I and II areas near WRAP tribe reservations, and other map products as directed and prioritized by the TDDWG. These map products will be provided to the TDDWG throughout the grant period on a schedule chosen and prioritized by TDDWG. All map products will be provided by the end of the grant period on June 30, 2003. This work will be completed by a graduate student under the supervision and direction of the TERC Manager and Database Specialist.
- GIS Analysis on the compiled information will be conducted as directed and prioritized by the TDDWG. Initial GIS analyses will include creating lists of tribes within given radii of metropolitan statistical areas and Class I and II areas, a list of tribes within and adjacent to nonattainment areas, and a list of tribes within given radii of major air pollution sources. Other GIS analysis needs will be determined based upon the current needs of the WRAP. All GIS analysis products will be completed and provided to TDDWG throughout the grant period on a schedule chosen and prioritized by TDDWG. This work task will aid in the assessment of where data gaps exist geographically in the WRAP region. All GIS analysis products will be provided by the end of the grant period on June 30, 2003. This work will be completed by a graduate student under the supervision and direction of the TERC Manager and Database Specialist.
- Census data from the 1990 and 2000 Federal Census will be compiled in an Access Database. The database will be provided to the TDDWG at the end of the grant period on June 30, 2003. This task will be supported by the Research Specialist, Database Specialist and Program Coordinator under the supervision of the TERC Manager.

IV. Budget Narrative

The proposed budget includes funding for the following staff:

ITEP Director (10% FTE), The ITEP Director will provide general supervision and guidance for all project activities and deliverables. The ITEP Director will be the Principal Investigator.

Tribal Environmental Resource Center Manager (45% FTE), The TERC Manager will provide program supervision and guidance for the completion of the EI software, pilot testing for the EI software and for the data gathering effort. Technical assistance for the pilot testing and data gathering will also be provided by this position. The TERC Manager will assist in and provide oversight on the organization, presentation and management of GIS and EI data collected.

Budget Manager (20% FTE), The Budget Manager will assume budget oversight across all tasks, perform cost forecasts and analysis, and project cost reporting.

Research Specialist, (30% FTE), The Research Specialist will assist the TERC Manager in preparation of materials, accessing and analyzing database information. The research assistant will be responsible for developing needed data through research and contact with the tribes.

Database Specialist (30% FTE), The Database Specialist will administer, manage, monitor and update associated information systems associated with project activities. Assistance in the supervision of the GIS graduate student and full supervision of the computer support student will also be provided by this position.

Assistant Budget Manager (10% FTE), The Assistant Budget Manager will assist the Budget Manager in monitoring all financial records and procedures on task specific activities.

Quality Assurance/Quality Control Specialist (20% FTE), The QA/QC Specialist will develop a plan for data collection and management associated with the database and EI software. The QA/QC Specialist will assist in the EI Software pilot testing and review of all materials associated with the EI software program.

Professional Assistance/Professional Training Outreach Specialist (50% FTE), A PA/PT Outreach Specialist will be hired to develop and administer EI training and outreach for tribes that are developing or implementing EI capabilities. The specialist will provide one-on-one support for tribal EI development. This position will be hired at full time for half of the grant period (January 1 through June 30, 2003) to assist in the pilot testing and QA/QC tasks. The future proposal for training the tribes on the EI software after its completion would contain full-time salary for this position for a year.

Program Coordinator (20% FTE), The Program Coordinator will manage project tasks, develop reports, monitor project activities and disseminate information. This position will coordinate all ITEP contact with the tribes for the data gathering and pilot testing tasks.

Administrative Secretary (10% FTE), The Administrative Secretary will provide secretarial and logistical support for all task associated to this project.

Graduate Assistant, A graduate assistant will be hired to coordinate an academic project that will conduct GIS analysis and produce maps as directed by the TDDWG.

Student Computer Specialist will provide hardware and software support to all project staff.

Supplies and Communications (\$5,000)

Funds are requested for general office supplies, printing, postage, communication and memberships. These supplies are necessary to support the project activities.

Contractual (\$125,000)

Contractual funds are requested to obtain professional services for EI software completion verification and validation, program evaluation and training development; tribal training including travel and support costs.

Equipment (\$5,000)

Funds are requested to acquire two laptop computers to support all the tasks of this project.

Staff Travel (\$20,121)

Funds are requested to support travel to TDDWG meetings and other forums and to meet with the chosen EI Software Contractor. Funds for staff travel to the three tribes selected for pilot testing of the EI Software are also included.

Indirect Cost (\$52,852)

Northern Arizona University's indirect rate is currently 48.3%. This cost covers the administrative overhead handled by the university, expenses associated with ITEP's office space and its maintenance, telecommunications and information systems support.

Attached is a summary budget for the estimated cost of this proposal. This budget is based on 12 months, from June 1, 2002 to June 30, 2003.

TRIBAL DATA DEVELOPMENT WORKING GROUP

June 1, 2002 to June 30, 2003

TASK 1-Completion of Software

I.	SALARY & WAGES			Ann. rate	% of time	
	A. ITEP Director			65100	5%	3,255
	B. TERC Manager			42000	15%	6,300
	C. Budget Manager			30997	5%	1,550
	D. Database Specialist			38183	10%	3,818
	E Total Salaries					\$ 14,923
II.	FRINGE BENEFITS					
	A. ITEP Director	23.00%				\$ 749
	B. TERC Manager	25.10%				1,581
	C. Budget Manager	30.00%				465
	D. Database Specialist	27.50%				1,050
	E. Total Fringe Benefits					\$ 3,845
III.	A. Supplies/communications					1,000
	B. Total Supplies/communications					1,000
IV.	STAFF TRAVEL					
	Travel to Denver	# persons	# nights	cost		
	A Airfare	2		850		1,700
	B Lodging	2	3	86		516
	C Per diem	2	4	36		288
	D Shuttle bus	2		40		80
	E Total Staff Travel					2,584
V.	A. Contractual					125,000
	B. Total Contractual					125,000
VII.	Total for Task 1					147,352

TASK 2-QA/QC

I.	SALARY & WAGES	Ann. Rate	% of time	
	A. QA/QC	\$54,000	15%	8,100
	B. PT/PA	\$38,792	10%	3,879
	C. Budget Manager	\$30,997	5%	1,550
	D. Total Salaries			\$ 17,404
II.	FRINGE BENEFITS			
	A. QA/QC	30.00%		\$ 2,430
	B. PT/PA	30.00%		\$ 1,164
	C. Budget Manager	30.00%		\$ 465
	D. Total Fringe Benefits			\$ 4,059
III.	A. Supplies/communications			500
	B. Total Supplies/communications			500
IV.	Staff Travel			
	Travel to Denver	2 mtgs.	# persons	# nights
	A. Airfare	2	1	
	B. Lodging	2	1	2
	C. Per diem	2	1	3
	D. Car rental	2		
	E. Total staff travel			2,700
V.	Total for Task 2			24,663

TASK 3- Software Pilot Testing

I.	SALARY & WAGES	Ann. Rate	% of time	
	A TERC Manager	\$42,000	15%	6,300
	B. Budget Manager	\$30,997	5%	1,550
	C. Research Specialist	\$25,547	10%	2,555
	D Database Specialist	\$38,143	10%	3,814
	E Asst. Budget Mgr.	\$12,000	5%	600
	F QA/QC	\$54,000	5%	2,700
	G PT/PA	\$38,792	40%	15,517
	H Program Coordinator	\$32,114	10%	3,211
	I. Admin. Secretary	\$21,500	5%	1,075
	J Total Salaries			\$ 37,322
II.	FRINGE BENEFITS			
	A TERC Manager	25.10%		1,581
	B. Budget Manager	30.00%		465
	C. Research Specialist	33.17%		847
	D Database Specialist	27.50%		1,049
	E Asst. Budget Mgr.	30.00%		180
	F QA/QC	30.00%		810
	G PT/PA	30.00%		4,655
	H Program Coordinator	46.12%		1,481
	I. Admin. Secretary	36.00%		387
	J Total Fringe Benefits			\$ 11,456
III.	A. Supplies/communications			1,000
	B. Total supplies/communications			1,000
IV.	STAFF TRAVEL			
	Travel out-of-state	# persons	# nights	cost
	Boise, Idaho			
	A Airfare	2		850
	B Lodging	2	5	61
	C Per diem	2	6	32
	D Car rental	1	5 days	\$44/day

Albuquerque, NM

A	Airfare	2		250	500
B	Lodging	2	5	86	860
C	Per diem	2	6	36	432
D	Car rental	1	5 days	\$40/day	200

San Diego, CA

A	Airfare	2		300	600
B	Lodging	2	5	99	990
C	Per diem	2	6	40	480
D	Car rental	1			250
E	Total Staff Travel				7,226

V. Total for Task 3 57,004

TASK 4 - Data Gathering (formerly task 5)

I.	SALARY & WAGES	Ann. Rate	% of time	
	A. ITEP Director	\$65,100	5%	3,255
	B. TERC Manager	\$42,000	15%	6,300
	C. Budget Manager	\$30,997	5%	1,550
	D Research Specialist	\$25,547	20%	5,109
	E Database Specialist	\$38,183	10%	3,818
	F Asst. Budget Mgr.	\$12,000	5%	600
	G PT/PA	\$38,792	0%	0
	H Program Coordinator	\$32,114	10%	3,211
	I Admin. Secretary	\$21,500	5%	1,075
	J Graduate Student			11,000
	K Computer Spec (Stdnt)			5,000
	J Total Salaries			\$ 40,919
II.	FRINGE BENEFITS			
	A. ITEP Director	23%		749
	B. TERC Manager	25%		1,581
	C. Budget Manager	30%		465
	D Research Specialist	33%		1,695
	E Database Specialist	28%		1,050
	F Asst. Budget Mgr.	30%		180
	G PT/PA	30%		0
	H Program Coordinator	46%		1,481
	I Admin. Secretary	36%		387
	J Graduate Student	1%		110
	K Computer Spec (Stdnt)	1%		50
	J Total Fringe Benefits			\$ 7,748
III.	A. Supplies/Communications			\$ 2,500
	B. Total Supplies/communications			\$ 2,500
IV.	Equipment			
	A. Laptops (2)			\$ 5,000
	B. Total Equipment			\$ 5,000

V. Staff Travel

3 trips (2 persons for 2.5 days each)

		# persons	# days	# trips		
A. Airfare	850	2		3	\$	5,100
B. Lodging	99	2	2	3		1188
C. Per diem	36	2	3	3		648
D. Car Rental	\$45/day		15/days			675
E. Total Staff Travel					\$	7,611

VI TOTAL FOR TASK 5 \$ 63,778

DIRECT COSTS FOR ALL TASKS \$292,796

INDIRECT COST 47.8% OF SALARIES \$52,852

Total for Tasks 345,648