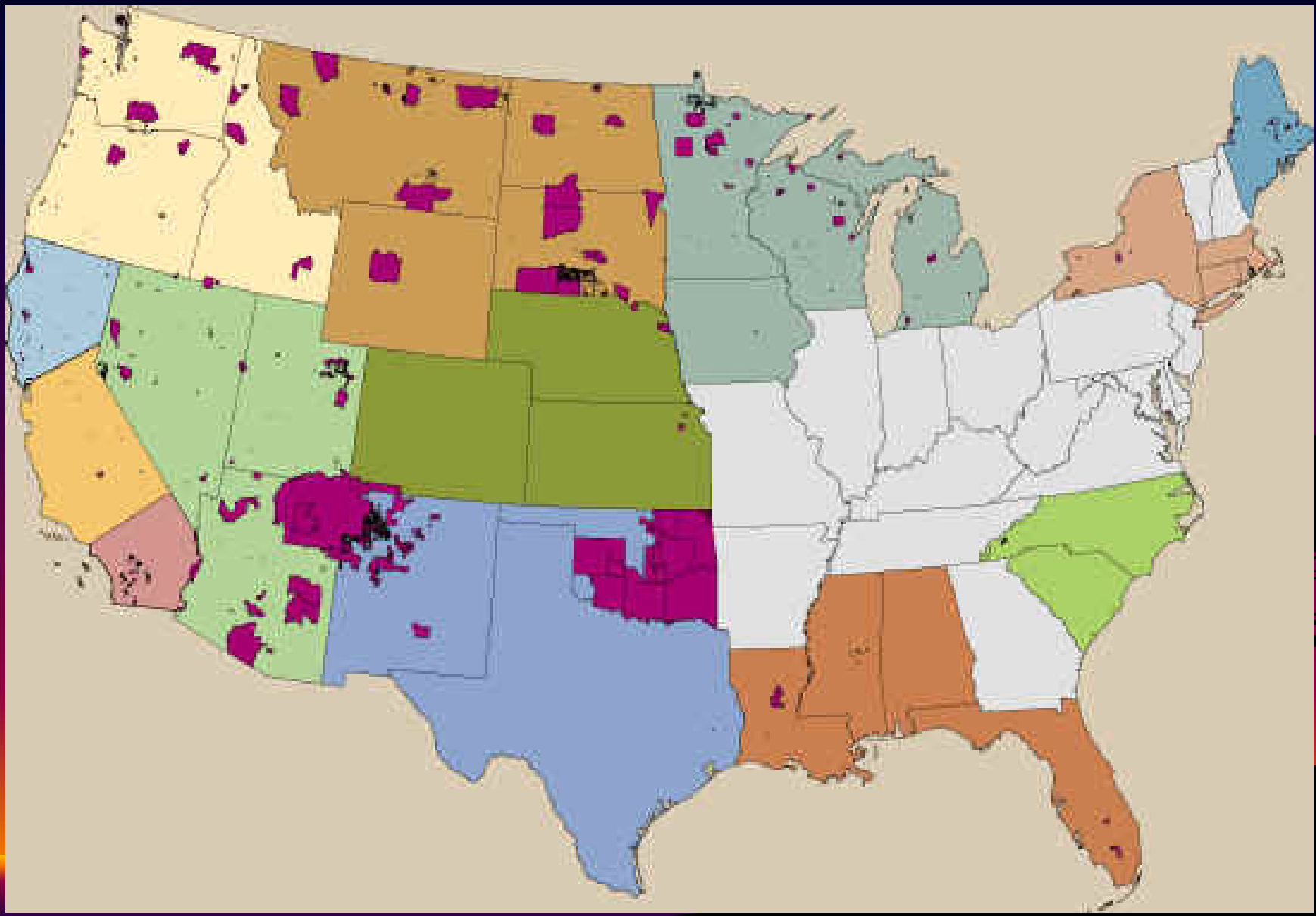
Northern Arizona University's Institute for Tribal Environmental Programs

- Mission is to ***develop tribal capacity*** to assess, understand and prevent environmental impacts that adversely affect health, cultural, and natural resources
- Funded by NAU and EPA
- Air, including Emissions Inventory assistance, with some water, and solid waste

Tribal lands in continental US:

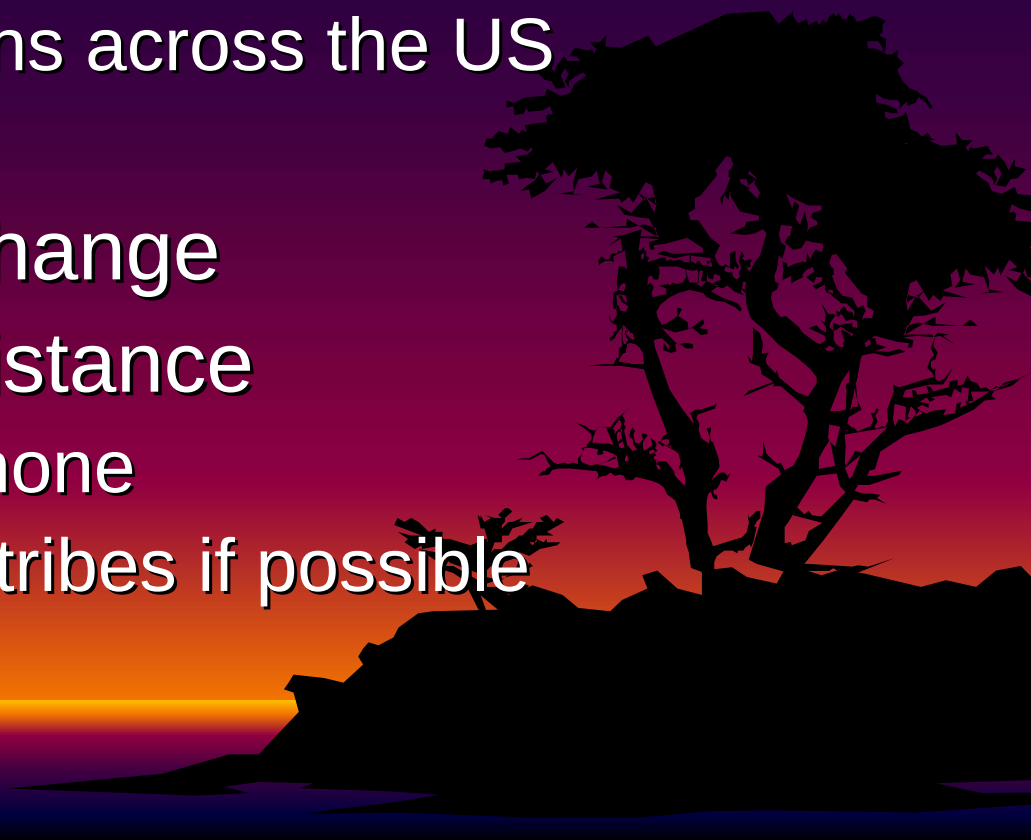


Capacity-Building:

- Enhance tribal capacity in air program management
- Work with the tribal values and context
- Build from the necessary holistic, cross-media approach
- Provide high-quality, up-to-date technical training
- Use “learn-by-doing” approach

Assistance methods:

- Workshops
  - Hands-on, with instruments, computers
  - Variety of locations across the US
  - on-line courses
- Professional Exchange
- Professional Assistance
  - Via e-mail, telephone
  - On-site, multiple tribes if possible



Professional Exchange:

- More formal, individualized training
- Identify host sites based on interns' needs
- Host sites include tribal agencies, EPA regions, OAQPS and state/local agencies
- Projects are 2-3 weeks long, depending on need

Workshops:

Man-Made Sources
Fossil Fuel driven engines
Manufacturing Plants and Factories
Dust generated by mining or driving on unpaved roadways

Professional Assistance:

- On-site or in central location
- Emphasis on sharing experience and tools
- Multiple tribes
- Can be focused on equipment, documentation, data management or analysis

Example of one ITEP Project: The Tribal Data Toolbox--a Free, Comprehensive Data Base for Tribes

Includes AQS pipe formatting

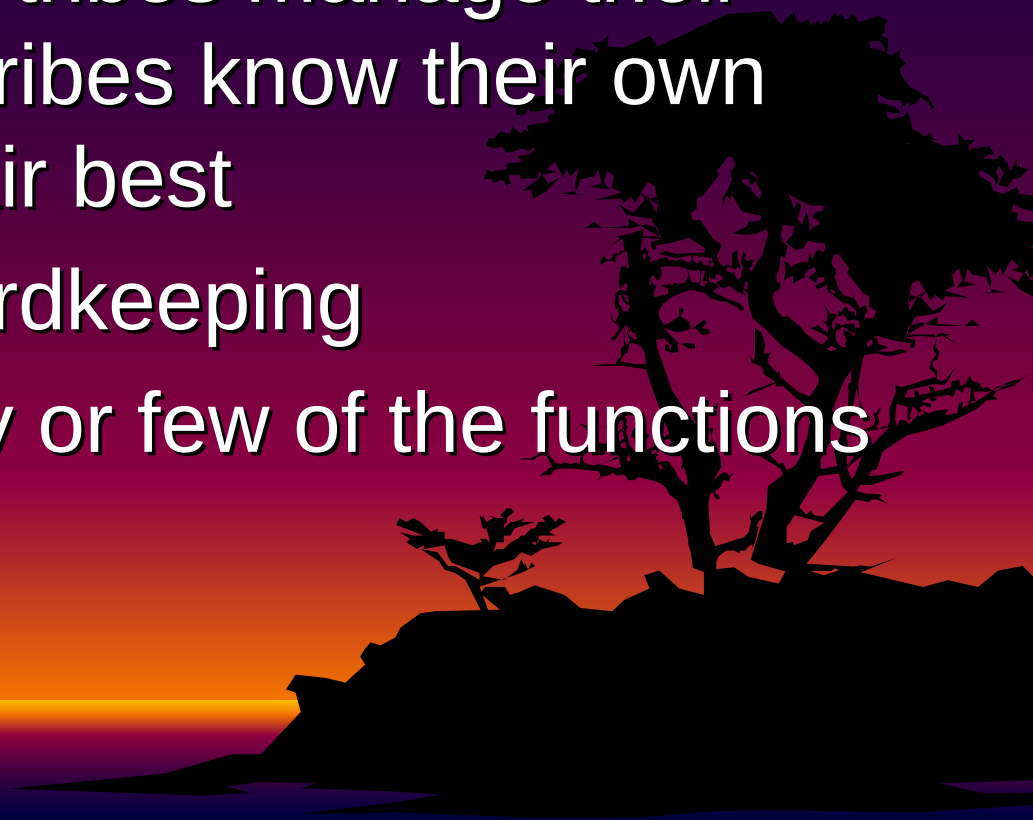
Developed in response to need for flexible data management system for small organizations

Uses MS Access:

- Already on most computers with MS Office
- Easy to export/import data, reports, graphs with other MS programs such as Word and Excel
- Form-driven, similar to what people see on websites—no programming needed

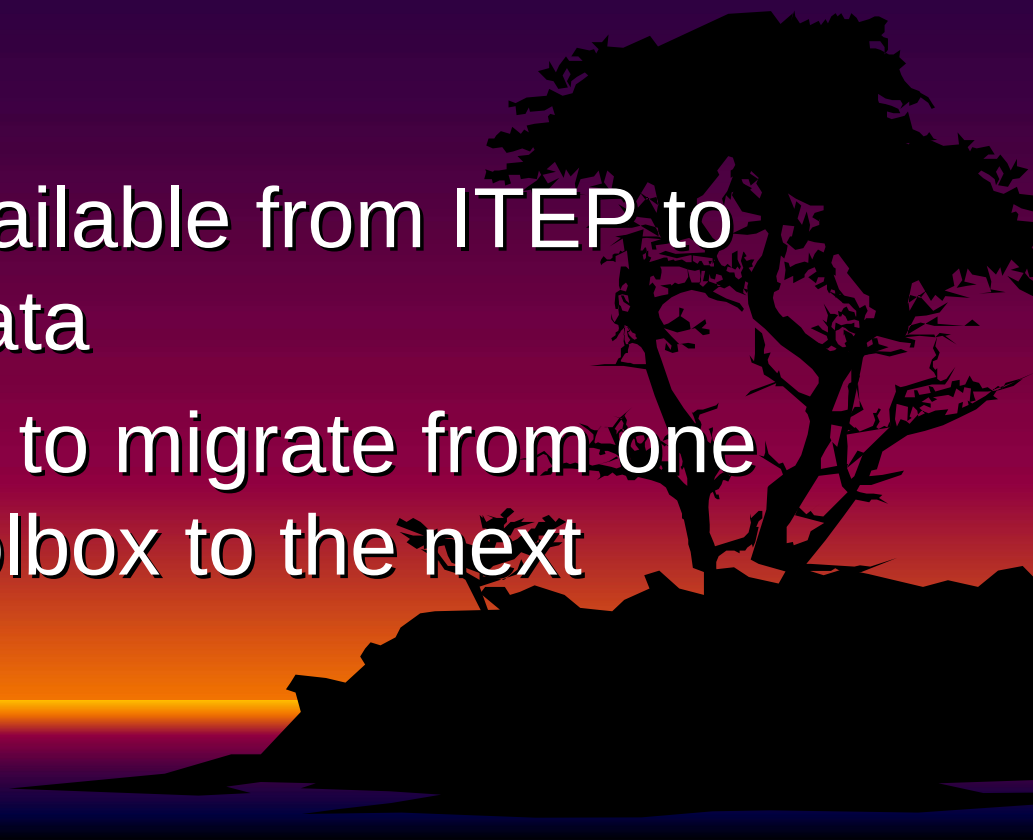
Designed for small offices:

- Structures a data management system
- Designed to help tribes manage their *own* data, since tribes know their own data, sites, and air best
- Streamlines recordkeeping
- Can use as many or few of the functions as you need



Existing data can be easily imported:

- Text files
- Excel files
- Access files
- Personal help available from ITEP to import existing data
- Functions built-in to migrate from one version of the toolbox to the next

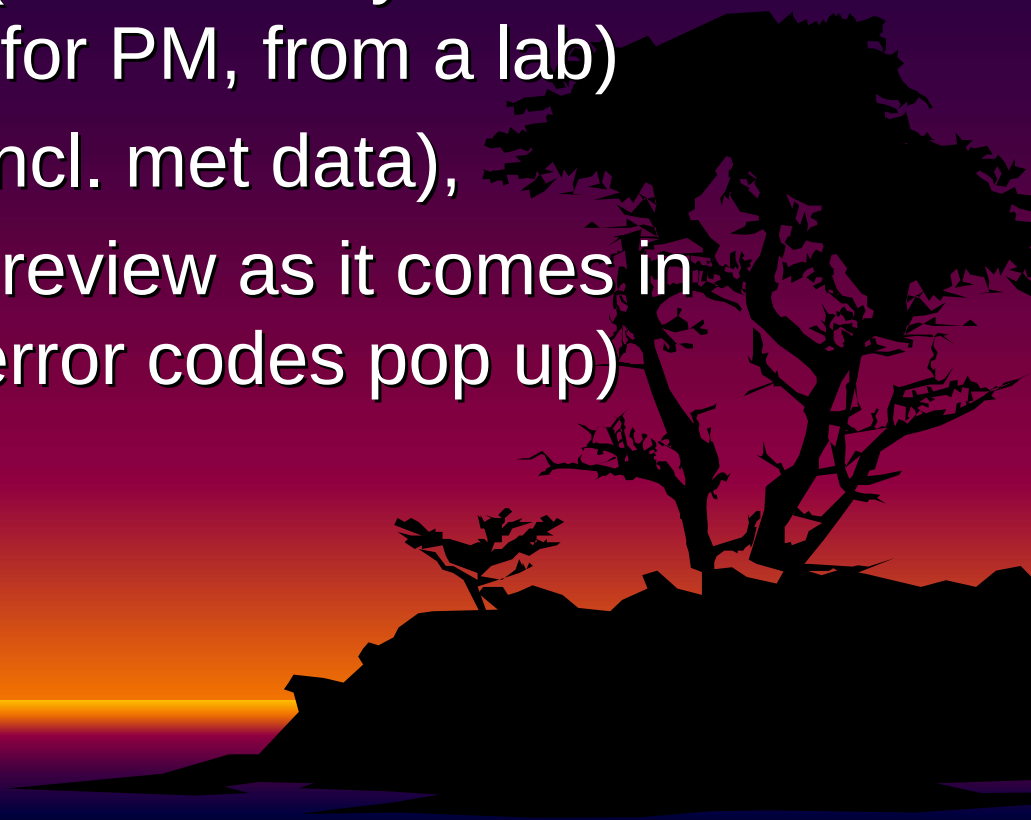


Tribal Data Toolbox: 5 major functions

1. Administrative
   - Site data,
   - Instrument data,
   - QC equipment data, and
   - personnel data
   - Data backup and archiving
   - Provides legal record of data management system

Routine data moving:

2. Operational
   - importing data (both directly from an instrument and for PM, from a lab)
   - tracking units (incl. met data),
   - phase I of data review as it comes in (weird values, error codes pop up)



Enables you to look at your data as it comes in:

3. Analytical
   - QC reports (calculates %, uses latest EPA guidance)
   - Summary reports,
   - Charts,
   - Ozone NAAQS calculations
   - PM lab, blank, collocated reports

Data review and flagging:

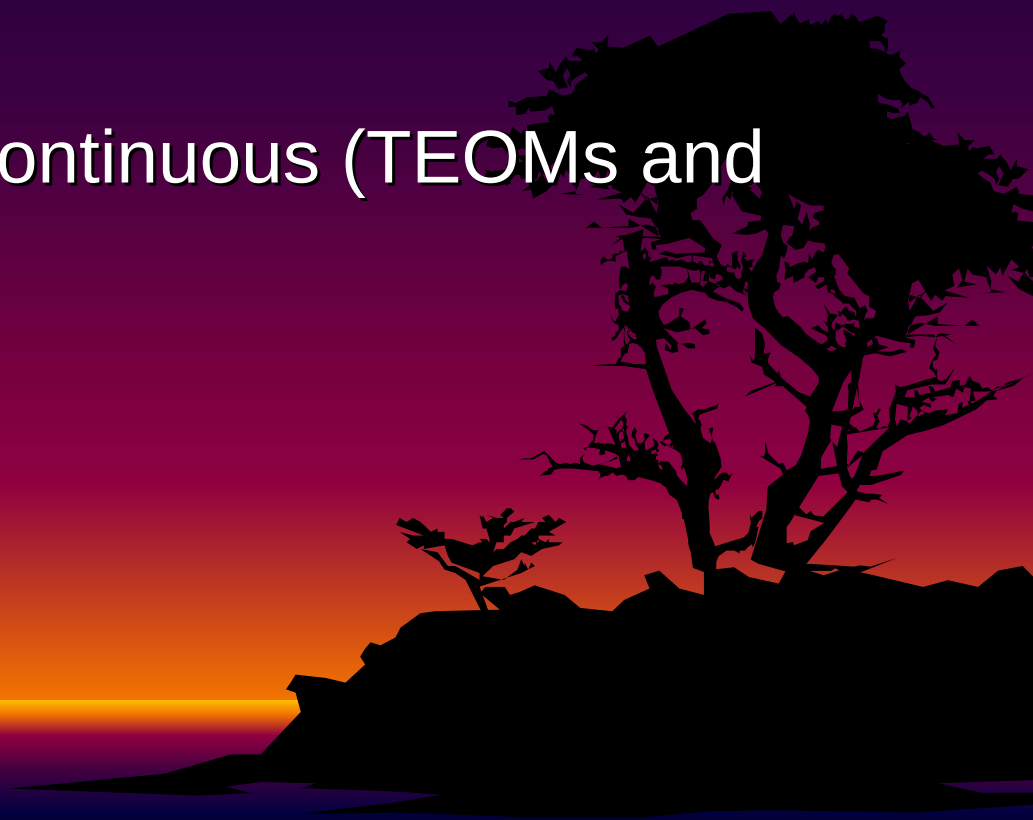
4. Data Review-- 3 tiers of data review:
   - initial data review as it is imported off the analyzer, datalogger, or from lab
   - periodic data review as QC check results are entered
   - quarterly to decide on data usability for release and decisions on how it can be used (NAAQS or AQS)

Data Reporting:

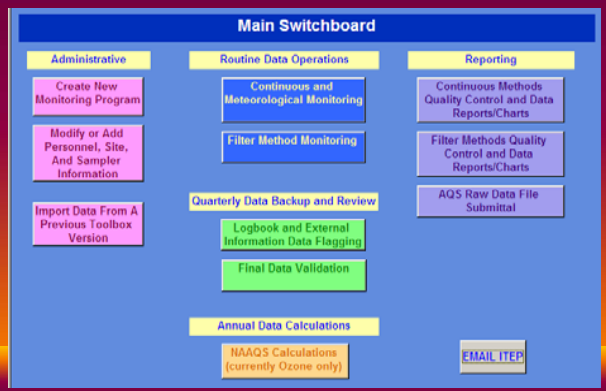
5. Final Data File Generation
   - Data files can be exported as Excel, text
   - Reports can be exported as Word, Adobe
   - shows codes for missing data
   - AQS formatted
     - AQS function includes ALL protocol codes
     - Generates pipe-delimited text file
     - Any start and end date
     - Gives tribe flexibility to resubmit subsets of data

Documented and tested:

- 150 pages of hyperlinked Help files
- Tested with data from:
  - PM2.5 manual
  - PM10 filter and continuous (TEOMs and BAMs)
  - Ozone
  - Met
  - Dataloggers



Training available:

- On-site at your office
- On-line ITEP course available in August
- Classroom courses beginning in August

LET'S GO!