TRIBAL AIR MONITORING SUPPORT (TAMS) CENTER

Presented by:
Mike Natchees
TAMS Steering Committee Member

And
Hayden Hardie
EPA Co-Director, TAMS
TAMS WEBSITE

- Web search “NAU TAMS”
- Screenshot of webpage below:

Welcome to Tribal Air Monitoring Support Center

The TAMS Center offers different training courses that focus on a variety of topics related to ambient and indoor air quality monitoring. To date, over 1,900 tribal professionals have been trained by the TAMS Center, representing 206 tribes.

TAMS Center courses have been designed to complement other American Indian Air Quality Training Program courses, and generally address more advanced air quality issues. Each course is designed with tribal audiences and issues in mind, integrating tribal case studies and tribal professionals as part of the instructional team in every course. Class size is kept to a minimum to ensure a higher level of interaction and one-on-one training opportunities with the instructors.

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22 YEARS OF SERVICE

The Mission

The Partnership

TAMS Steering Committee

The TAMS Center Services
THE MISSION

Established in 2000

... to develop tribal capacity to assess, understand, and prevent environmental impacts that adversely affect health, culture, and natural resources.
THE PARTNERSHIP

Tribal Air Monitoring Support Center

INSTITUTE for TRIBAL ENVIRONMENTAL PROFESSIONALS

Tribal Air Monitoring Support Center Steering Committee

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Established in February 2000. Advisory body composed of seven tribal representatives from different tribal air programs. Provide input regarding air monitoring priorities for tribes across the country.
TAMS CENTER SERVICES

• Training courses at Virgil Masayesva Environmental Learning Center in EPA’s Facility in Las Vegas, NV (AKA “The TAMS Center”)
• Professional Assistance
• Equipment Loan Program
  • Ambient Air Monitoring
  • IAQ Diagnostic Equipment

• * Tribal Air Toxics Monitoring
• * Gravimetric Laboratory Service
TAMS COURSES

Pictures of students in TAMS Courses
COURSES OFFERED CONTINUED

• Indoor Air Quality
• Treatment as a State
• Permit Review
• Fundamentals of Air Monitoring
• Emissions Inventory
• Quality Assurance Project Plan
• GIS for Air Quality
• Air Pollution Technology
• Data Management
## COURSES OFFERED

### ITEP Training:

#### Air Quality
- Air Quality Webinars Archive
- Tribes & Climate Change

#### Energy

#### Waste & Response

#### eLearning

#### Training Home

#### ITEP Home

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### ITEP Training:

**Air Quality Trainings Schedule:**

We are interested in your input regarding potential upcoming courses. Please use our [feedback form](#) to submit your input. Thank you!

**Please keep in mind that these dates are subject to change. This schedule reflects the most current date changes.**

<table>
<thead>
<tr>
<th>Dates</th>
<th>Course Name</th>
<th>Location</th>
<th>Registration</th>
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<tbody>
<tr>
<td>2022</td>
<td>In-person courses</td>
<td></td>
<td></td>
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<tr>
<td>July 26 - 28</td>
<td>Management of Tribal Air Programs and Grants</td>
<td>Flagstaff</td>
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<tr>
<td>Aug 16 - 18</td>
<td>Air Quality Outreach &amp; Education in Tribal Communities</td>
<td>Flagstaff</td>
<td><a href="#">Form</a></td>
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<tr>
<td>Sept 27 - 29</td>
<td>Reviewing Air Quality Permits</td>
<td>TBD-Region 5</td>
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<tr>
<td>Oct 18 - 20</td>
<td>Indoor Air Quality in Tribal Communities</td>
<td>TBD-Region 9</td>
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<tr>
<td>TBD-Oct or Nov</td>
<td>Project Planning, QAPPs, and Grants for Alaska</td>
<td>Anchorage, Alaska</td>
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<tr>
<td>Nov 15 - 17</td>
<td>Fundamentals of Air Monitoring</td>
<td>TAMS Center</td>
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<tr>
<td>Dec 13 - 15</td>
<td>Sensors Technologies</td>
<td>TAMS Center</td>
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<tr>
<td>2023</td>
<td>In-person courses</td>
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<tr>
<td>Jan 24 - 26</td>
<td>Introduction to Air Quality</td>
<td>Flagstaff</td>
<td></td>
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<tr>
<td>Feb 7 - 8</td>
<td>Air Quality Planning and Wildland Smoke</td>
<td>TBD</td>
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PROFESSIONAL ASSISTANCE

Pictures of professional assistance activities
PROFESSIONAL ASSISTANCE

• Development of your QAPP
• Assistance with Emissions Inventories
• Technical Assistance with equipment
• Assistance with Data Management
• Program Development
• EPA purchased technical equipment
• Designated for loan to tribes
• Covers multiple air disciplines:
  • Ambient Air Programs (CAA / NAAQS)
  • Indoor Air Programs
EQUIPMENT LOAN PROGRAM

- Monitors
  - MetOne BAM 1020 (PM 2.5)
  - MetOne BAM 1022 (PM 2.5)
  - EBAM (PM 2.5)
  - Teledyne T640 (PM 2.5)
  - Teledyne T100 (SO2)
  - Teledyne T200 (NOX)
  - Teledyne T400 (O3)
  - Partisol 2000i (PM 2.5)
EQUIPMENT LOAN PROGRAM

Flow Calibration equipment

- Mesa Labs Defender 530 (Low and Med)
- Teledyne T703 Calibrator / Standard Ozone
- Teledyne T701H Zero Gas Generator
- Tisch TE-5040A PUF Flow Calibrator
- Teledyne T700 Dilution Calibrator
- Mesa Labs BGI Delta Cal
- Mesa Labs Tri Cal
EQUIPMENT LOAN PROGRAM

• Other Items
  • MetOne GT-526s (PM)
  • TSI Dust Trak II 8530 (PM)
  • Aeroqual Series 500 (PM)
  • 3m EVM 3 (PM)
  • TSI 7575 Q-Trak IAQ Calc (CO2, CO IAQ)
  • TSI 7515 IAQ Calc (CO2 IAQ)
  • TEC Blower Door (IAQ)
  • DG-700 Pressure/Flow (IAQ)
  • Fluke CO Meters (IAQ)
  • Fluke Thermal Imagers (IAQ)
  • Fluke IR Thermometers (IAQ)
  • Extech Digital Psychrometers (IAQ)
  • Delmhorst TechScan Moisture Meter (IAQ)
  • Rad Elec EPERM System (Radon)
  • Saphymo Alphaguard PQ2000 Pro (Radon)
HOW THE LOAN PROGRAM WORKS

Purpose is to assist tribes in completing a specific project or improve/expand their air monitoring program.

- Step 1 – Contact the TAMS program
- Meet to discuss program goals and needs
- Assist in determining most appropriate equipment
- Complete the Equipment Loan Program Agreement
- TAMS will Ship Equipment to the Tribal Representative
- Loan terms are for 1-Year Period (May be extended)
- Maintain contact with TAMS on project/program
- Return equipment in good working order.
• National Tribal Air Association and the TAMS Steering Committee requested ARP funds for the TAMS Center.

• EPA Recognized the value that TAMS has in reaching tribal communities nationwide

• TAMS requested $327,000 in funding to purchase new air monitoring equipment
  • Replacement of old equipment
  • Provide greater capacity of the loan program
  • Increase capacity to provide training on new technology
ARP FUNDING FOR TAMS

• Proposed equipment
  • Mesa Labs Delta Cals and Defender 530s
  • Alicat Flow calibration
  • Thingy AQ
  • AQ Mesh Sensors
  • Meteorological Station
  • GOES Transmitter
  • EBAMs, BAM 1020s, BAM 1022s
  • TSI Dust Trak 8530s
  • CR1000x Data loggers
  • Teledyne T101 H2S Analyzer
  • Hi Vol PUF Sampler
  • Supporting Consumable Items
Challenges

• Supply Chain Issues
• Volume of purchases
• FITARA (Federal Information Technology Acquisition Reform Act)
• Staffing
THANK YOU!

- Co-Directors:
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- Steering Committee members on services offered at the TAMS Center

- https://www7.nau.edu/itep/main/tams/Home/