Coast to Coast Cooperative Solutions:
Create Once, Use Many

The USET Experience

UNITED SOUTH AND EASTERN TRIBES, INC.
Established 1969
United South and Eastern Tribes: USET

- Consortium of 26 Tribes in the south and eastern U.S.
- Environmental Liaison Office
  - Environmental, natural resources, energy and emergency aid programs
26 Tribes = 26 Different ways of managing data
- Excel, Access, other database systems
- Desired an option that unifies data management
- Received 2010 Exchange Network grant to move forward with NWIFC and Windsor Solutions
Partnering with the NWIFC

- Northwest Indian Fisheries Commission
  - Consortium of 20 Tribes
- Previously worked with Windsor Solutions
- Developed
  - Tribal Water Quality Database (TWQD)
  - Water Quality Exchange (WQX) Super Node infrastructure
- Signed a sharing agreement stating that all enhancements and material created would be traded freely back and forth between organizations and Tribes
Enhancements to TWQD

- Rebranding
- Miner adjustments to Front End appearance
- Security implementation
### Enhancements to WQX: Search Capabilities

This form allows a user to view and explore WQX data which was provided from Exchange Network partners, that is managed within TWQD, or that will be provided to Exchange Network Partners via the WQX Client.

#### Results

**Activities started between** 03/02/2009 and 03/14/2011

<table>
<thead>
<tr>
<th>Organization</th>
<th>Project</th>
<th>Location</th>
<th>Media</th>
<th>Start Date</th>
<th>Characteristic</th>
<th>Result</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>United South and Eastern Tribes</td>
<td>USET Test Project</td>
<td></td>
<td>Water</td>
<td>2010-12-15</td>
<td>Candida albicans</td>
<td>0.369</td>
<td>µg/100ml</td>
</tr>
<tr>
<td>United South and Eastern Tribes</td>
<td>USET Test Project</td>
<td></td>
<td>Water</td>
<td>2010-11-16</td>
<td>Flavobacterium</td>
<td>63</td>
<td>µg/100ml</td>
</tr>
<tr>
<td>United South and Eastern Tribes</td>
<td>Training Data 1b</td>
<td>Test Lake 2b</td>
<td>Water</td>
<td>2010-12-03</td>
<td>Escherichia coli</td>
<td>6.2</td>
<td>µg/100ml</td>
</tr>
<tr>
<td>United South and Eastern Tribes</td>
<td>Training Data 1b</td>
<td>Test Lake 2b</td>
<td>Water</td>
<td>2009-10-08</td>
<td>Temperature, water</td>
<td>11.3</td>
<td>deg C</td>
</tr>
<tr>
<td>United South and Eastern Tribes</td>
<td>Training Data 1b</td>
<td>Test Creek 1b</td>
<td>Water</td>
<td>2009-12-10</td>
<td>Turbidity</td>
<td>0.646</td>
<td>NTU</td>
</tr>
<tr>
<td>United South and Eastern Tribes</td>
<td>Training Data 1b</td>
<td>Test Creek 1b</td>
<td>Water</td>
<td>2009-12-10</td>
<td>Dissolved oxygen (DO)</td>
<td>7.9</td>
<td>mg/l</td>
</tr>
<tr>
<td>United South and Eastern Tribes</td>
<td>Training Data 1b</td>
<td>Test Creek 1b</td>
<td>Water</td>
<td>2009-12-10</td>
<td>Dissolved oxygen (DO)</td>
<td>11.6</td>
<td>mg/l</td>
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<tr>
<td>United South and Eastern Tribes</td>
<td>Training Data 1b</td>
<td>Test Creek 1b</td>
<td>Water</td>
<td>2009-12-10</td>
<td>pH</td>
<td>6.56</td>
<td>None</td>
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<tr>
<td>United South and Eastern Tribes</td>
<td>Training Data 1b</td>
<td>Test Creek 1b</td>
<td>Water</td>
<td>2009-12-10</td>
<td>Escherichia coli</td>
<td>15.7</td>
<td>µg/100ml</td>
</tr>
<tr>
<td>United South and Eastern Tribes</td>
<td>Training Data 1b</td>
<td>Test Creek 1</td>
<td>Water</td>
<td>2009-12-10</td>
<td>pH</td>
<td>6.05</td>
<td>None</td>
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<tr>
<td>United South and Eastern Tribes</td>
<td>Training Data 1b</td>
<td>Test Creek 1</td>
<td>Water</td>
<td>2009-10-08</td>
<td>Dissolved oxygen (DO)</td>
<td>10.45</td>
<td>mg/l</td>
</tr>
</tbody>
</table>

25 Results, 17 Activities, 7 Projects, 12 Locations, 1 Organization

Developed by Windsor Solutions, Inc. For the United South and Eastern Tribes, Inc. and its member tribes.
## Review Data

This form allows a user to view and explore WQX data which was provided from Exchange Network partners, that is managed within TWQD, or that will be provided to Exchange Network Partners via the WQX Client.

### Results

Activities started between [ ] and [ ] and [ ]

<table>
<thead>
<tr>
<th>Organization</th>
<th>Location</th>
<th>Media</th>
<th>Start Date</th>
<th>Characteristic</th>
<th>Result</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>United South and Eastern Tribes</td>
<td>Test Location 1284</td>
<td>Water</td>
<td>2010-11-02</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United South and Eastern Tribes</td>
<td>Test Location 1284_5</td>
<td>Water</td>
<td>2010-11-02</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>United South and Eastern Tribes</td>
<td>The Big Lake</td>
<td>Water</td>
<td>2010-11-16</td>
<td>Phenanthrene</td>
<td></td>
<td></td>
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<tr>
<td>United South and Eastern Tribes</td>
<td>Testing Location 1284_3</td>
<td>Water</td>
<td>2010-11-02</td>
<td>Escherichia coli</td>
<td>0.2</td>
<td>#/l</td>
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<td>Test Location 1284_2</td>
<td>Water</td>
<td>2010-11-02</td>
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<td>Water</td>
<td>2010-11-02</td>
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</tr>
</tbody>
</table>

2 Results, 5 Activities, 1 Project, 5 Locations, 1 Organization

### Project: Training Data 1

6 Results, 2 Activities, 1 Project, 1 Location, 1 Organization

25 Results, 17 Activities, 7 Projects, 12 Locations, 1 Organization
Spatial Viewer

- **Link**
  - [http://node.usetinc.net/wqxViewer/](http://node.usetinc.net/wqxViewer/)

- Partnered with Seldovia
  - Combined funds to get more out of the project
Benefits of TWQD/WQX

- Free to Tribes database to manage and store data
- Increased control on Tribal data management and sharing
- Spatial viewer use
- Provides Tribes with an option outside of WQXWeb
- TWQD Front End provides increased business rule checks to ensure proper data recording
Current and Future Goals

- Currently have 1 fully functional Node client submitting data
- Working with 3 additional Tribes
- Continue partnership with NWIFC to further improve the software programs
  - Update TWQD Front End
  - Increase data entering speed
  - Better file search capabilities in TWQD

Create Once, Use Many
Questions?

Lindy Colombini
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WQX Spatial Viewer

- Uses latitude and longitudinal data
- Maps location of monitoring location
- Easily access, search, and sort data from one or more locations
### Search Results (1 Organization, 3 Projects, 6 Locations, 6,347 Activities, 20,590 Results)

#### Search Results:

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Organization</th>
<th>Project</th>
<th>Location</th>
<th>Media</th>
<th>Start Date</th>
<th>Value</th>
<th>Unit</th>
<th>Logger</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>USET</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>USET</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Characteristic: % undercut bank</td>
<td>USET</td>
<td>Fish Creek Monitoring</td>
<td>Habitat</td>
<td>6/10/2009</td>
<td>90</td>
<td>%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Characteristic: Active channel height (Continued on the next page)</td>
<td>USET</td>
<td>Fish Creek Monitoring</td>
<td>Habitat</td>
<td>9/8/2009</td>
<td>90</td>
<td>%</td>
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<td></td>
<td>USET</td>
<td>Fish Creek Monitoring</td>
<td>Habitat</td>
<td>7/23/2009</td>
<td>90</td>
<td>%</td>
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<tr>
<td></td>
<td>USET</td>
<td>Fish Creek Monitoring</td>
<td>Habitat</td>
<td>8/14/2009</td>
<td>90</td>
<td>%</td>
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</tbody>
</table>

Page 1 of 2065 (20644 items) [1] 2 3 4 5 6 7 ... 2063 2064 2065 [2] Records per page: 10
Easily Plot Data

WQX Spatial Viewer - United South & Eastern Tribes, Inc.

Locations:
All

Characteristics:
All

Chart Type:
Default

Graph showing conductivity values from June to September 2009 for different locations, including Casco Bay 1, Upper Androscoggin, Casco Bay 4, Lower Androscoggin, Casco Bay 3, and Casco Bay 2.