



Yurok Tribe Environmental Program

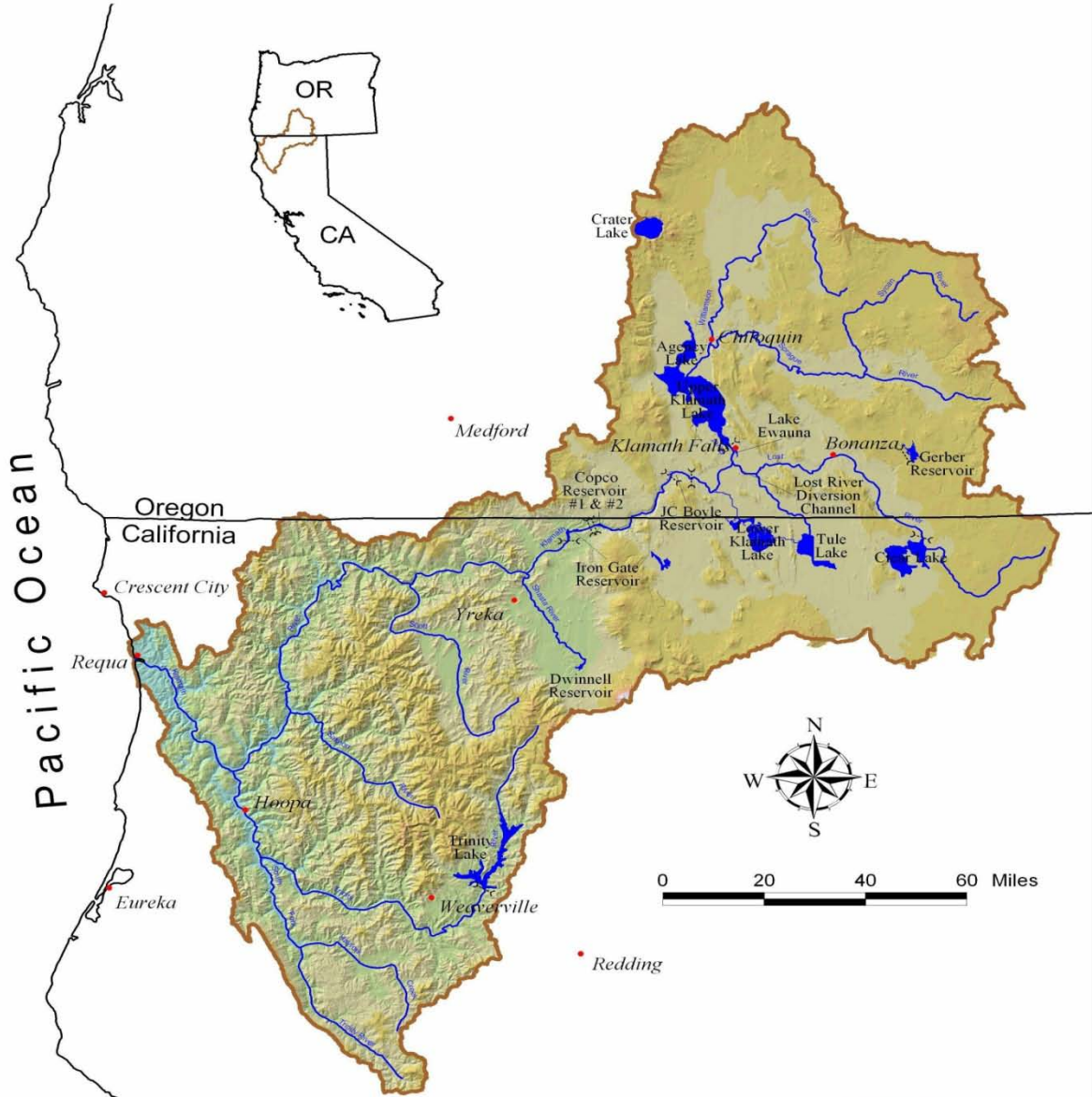
Data Management Development

Ken Fetcho – Yurok Tribe

Region IX WQX/STORET Tribal Workshop

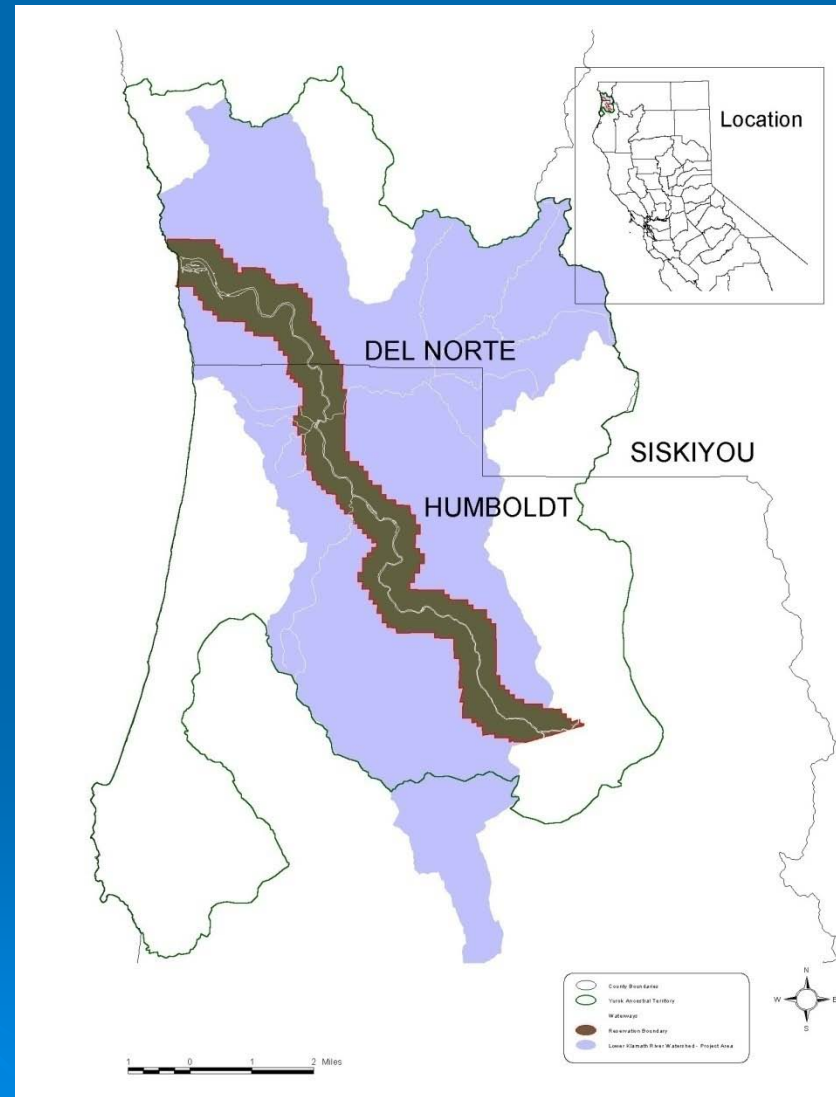
August 24-26, 2010

Klamath River Basin

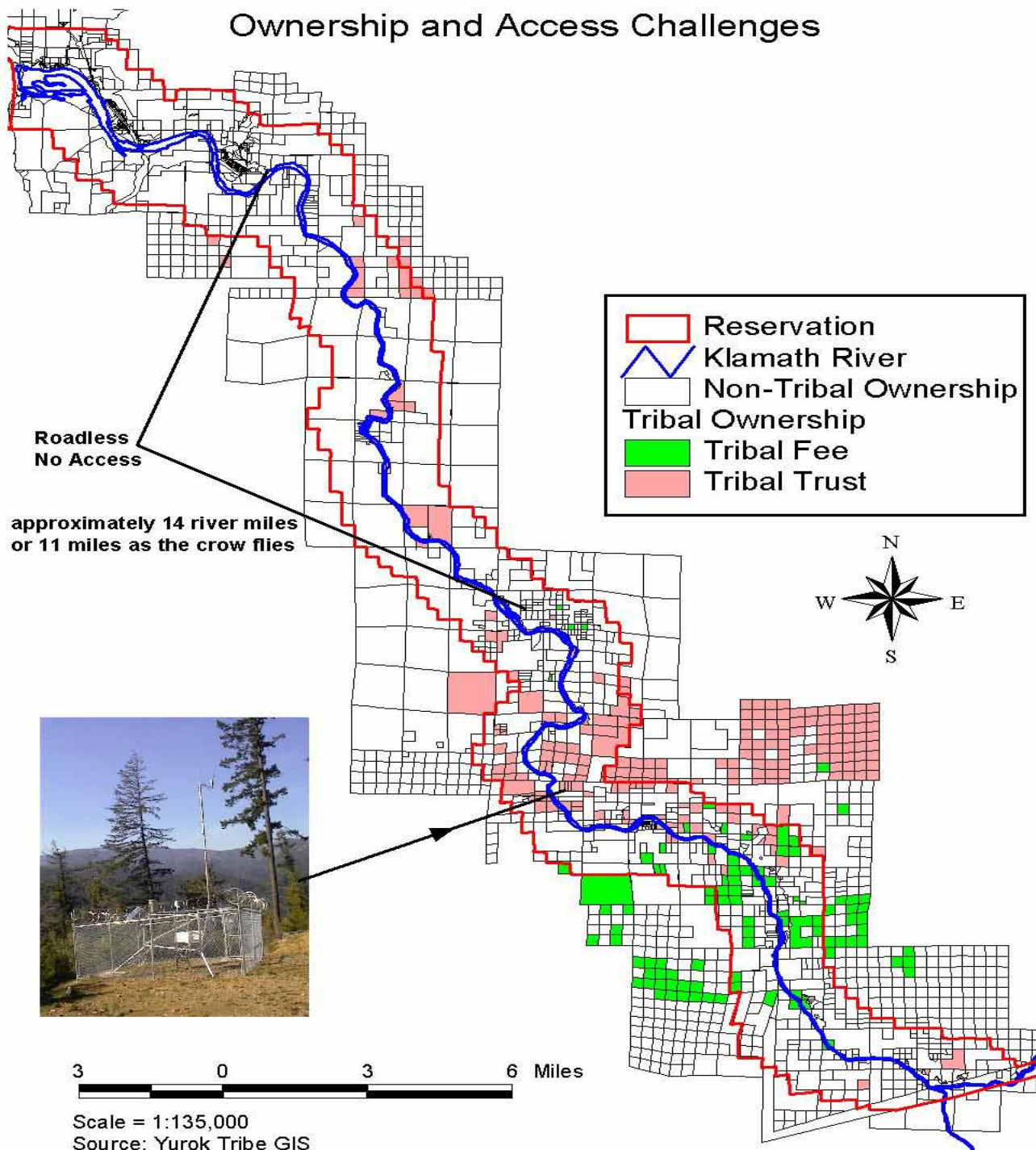


Yurok Tribe

- Located in Northwestern California
- Largest Tribe in California (over 5,000 members)
- Approximately 59,000 acres
- Majority of Reservation is in private ownership (Green Diamond Resource Company)



Ownership and Access Challenges



Primary Issues of Concern



- Water Quality – Klamath River is a nutrient impaired system
 - Tributaries impacted by logging practices
- Air Quality – Wildfires impacts during Summer
- Legacy Contamination Sites – Leaking USTs and UIC

Yurok Tribe Environmental Program (YTEP)

- Team of 9 full-time staff and 2 temporary staff
- Conduct quality-assured environmental monitoring
- Collect over 500,000 data points per year

Environmental Monitoring

- Water Quality: Grab Sampling (bacteria and nutrients), continuous sampling (water temp, DO, pH, turbidity), macroinvertebrates
- Groundwater: LUST Mitigation sampling – chemical constituents (diesel and gas)
- Pesticides Sampling in active forest practice areas (atrazine)
- Special Sampling – Enforcement, Spill Response, and other special monitoring efforts
- EPA STAR Project – emerging contaminants

Why STORET ?

- Funding Requirement
 - want a long term program
- Data Sharing and Availability
 - Leadership wanted our data to be widely available
 - Accurately describes conditions
 - Assists with data requests
- Expand Understanding of the Impacts to Improve Management and Recovery Actions

Lengthy Process – Team Work!

- In 2002 invited Eric Wilson to host training for local tribes and agencies for introduction
- Staff Meetings to discuss monitoring programs internally for descriptions
- Progress was slow.....
- Continued communication with EPA/Eric Wilson
– Developed a spreadsheet and filled it in by project
- Needed to simplify – what could we answer while keeping it easy and make sense

STORET FORMATTING

➤ Monitoring Programs Separated by “Theme”

- Hydrologic Monitoring
- Pesticide Monitoring
- Mainstem Klamath River Water Quality Monitoring
 - Discreet
 - Continuous



Continuous Data Storage & Analysis

➤ Old System:

- Excel-Based
- Required extensive work each year to analyze data and compose reports
- Resulted in numerous duplicate files and no security on unvalidated or validated data
- Data transfer to STORET extremely cumbersome

➤ New System:

- Automates Continuous data validation
- Raw and validated data are segregated and protected
- Secure Storage
- Data Queries
- Pushes data manually to WQX
- Stores metadata, QA data, and photos

Meeting Goals and Objectives

- Motivates to review data annually
- Creates need to be efficient and organized
- Once data is formatted *then* publish reports
- Yurok Goals – Publish reports, process data requests = Get the data out there
- Largely Klamath River focused
- Creates Partnerships – Tribal, Federal and State Agencies - Universities

Tips/Conclusions

- Take your time to think about all your data
- Include all of staff that are involved in collection and management
- Incorporate data management needs into collection efforts and planning of new projects
- Start somewhere
- Don't skimp – Put energy into the front end
- Contact EPA Staff – ask dumb questions

You can Do It!

