BUILDING A GIS ENTERPRISE SERVER

BISHOP PAIUTE TRIBE

BryAnna Vaughan
About the Bishop Paiute Tribe

• Federally Recognized Sovereign Tribal Nation
• Tribal Members:
• Reservation Population:
• Reservation Area: 894 acres
• Employees:
Bishop Paiute Tribal Departments

- Administration
- Human Resources
- Enrollment
- Public Works
- Historic Preservation
- Child Welfare
- Public Safety
- Community Development
- Development Corporation
BISHOP PAIUTE TRIBAL PROGRAMS

- Education
- Elders
- Environmental Management
- Headstart
Tribal Collaborators

- City of Bishop
- Inyo County
- USFS
- BLM
- LADWP
- NPS
- Local law enforcement/emergency responders
- Neighboring tribes
Who Are Our GIS Users?

- BryAnna Vaughan – Water Quality Coordinator
- Brian Adkins – Environmental Director
- Thomas Gustie – Hazardous Fuels Reduction Manager
OUR GIS MAKEOVER

• We started with a messy system
  – Used by many, structured by none
  – Staff turnover
• Something needed to be done
  – Sharing with partners was difficult
  – What’s metadata?
  – Lack of organization was getting out of hand
• Talk turned into money and we formed a plan
Our Enterprise Server Plan
OUR GIS MAKEOVER STRATEGY

• Bring other departments on board
  – We made the pitch
  – And they said...
    • Another software package?
    • We’ve got some money to help!
• Moving forward, taking action
• Initiating the GIS Task Force
• ...more turnover 😞
Putting Our Project Out To Bid

- Determine our main goals
- Figure out our funding
- Translate our goals into GIS jargon
MAIN PROJECT GOALS

• Clean up our data
  – Organize & fill in the gaps
• Convert new CAD survey data into GIS data
  – Assignments, lots & boundaries
• Set up tribal Enterprise Server
  – Assist tribal IT staff in setup
• Provide and train staff with new GIS standards and software
  – SOPs, ArcGIS10 and ArcGIS Server
PROJECT FUNDS

• GAP funds
• Public Works funds
• NEIEN funds
TRANSLATING OUR GOALS

• Remember, we are not GIS guru’s
• GIS jargon may be considered its own dialect of the English language
• We learned a lot about ourselves creating the bid for this project
SELECTING A CONTRACTOR

• Big contractor?
• Small contractor?
• Tribal contractor?
• Non-tribal contractor?
• Local contractor?
• Distant contractor?
SERVER REQUIREMENTS

• Server vs. Super Computer vs. Cloud
  • Super Computer
    – Pros: save a couple bucks
    – Cons: not meant to run 24/7, user limitations
  • Server
    – Pros: built to run 24/7, less user limitations
    – Cons: maintenance requirements
  • Cloud
    – Pros: little to no maintenance requirements
    – Cons: we live at the end of a thread
EVERYONE HAS AN OPINION...

• One IT staff member, with no GIS experience
• Talked to the GIS Task Force, NGRC help desk and contractors and we all had different ideas/opinions
• Conference call!
TRAINING

• ArcGIS 10
  – Self-paced training modules through NGRC
  – Private refresher courses
  – ESRI User Conference

• ArcGIS Enterprise Server
  – Contractor
  – ESRI User Conference

• Bishop Paiute Tribe GIS Database
  – Contractor tutorials (live trainings & documents)
PROJECT PROGRESS

• ~80% of data cleaned up
• Software for ArcGIS 10 ordered and installed
• Software for ArcGIS Enterprise Server ordered
• Hardware for server selected and ordered
• Deadlines:
  – Contractual agreement
  – Grant cycles ending soon!
EXPECTED OUTCOMES

• Well-trained staff
• GIS data management protocols
• Smooth data workflows with organized data 😊
• GIS benefiting more tribal departments
• Ability to share our data with public and collaborating entities