

### Initial Pre-Fieldwork Data Processing

#### HP/GIS Specialist

- Gather existing cultural resource GIS data from State/Tribal/Federal and local sources
- Gather existing oil observation GIS data from incident command

Product: paper map or collection of waypoints showing existing cultural resource locations; paper map showing cultural resources in relationship to oil observed oil events and RAT target survey areas

### Rapid Assessment Team (RAT) Cultural Resource Field Survey Performed

### Initial Transfer of Incoming RAT Field Survey GPS Data

#### RAT Archaeologist

- Data downloaded from GPS receivers
- Data exported into shapefiles
- Data emailed to HP/GIS Specialist

Product: shapefiles containing cultural resources identified daily

OR

#### HP/GIS Specialist

- Data downloaded from GPS receivers
- Data exported into shapefiles
- Data emailed to HP/GIS Specialist

Product: shapefiles containing cultural resources identified daily

### Initial Data Processing of RAT Field Survey GPS Data and Consultation

#### HP/GIS Specialist

- Combine all RAT field survey shapefiles into daily shapefile
- Data loaded into RAT feature classes in Cultural Resource GeoDatabase

Product: updated GeoDatabase containing all identified cultural resource in RAT target areas

#### Cultural Resource Specialists, SHPO/THPO/Federal Representatives

- Examine locations and information collected regarding identified cultural resources in RAT survey areas
- Make recommendations for treatment of resources in clean up

Product: agreed upon decisions regarding significance and integrity of resources and proposed clean up procedures

#### HP/GIS Specialist

- Records decisions made by all consulting parties in RAT feature classes in Cultural Resource GeoDatabase
- Records suggested clean up procedure for each resource in RAT feature classes in GeoDatabase
- Waypoints of cultural resources uploaded into GPS receivers for clean up teams to help in relocating sites
- Paper maps created showing locations of cultural resources for clean up teams to help in relocating sites

Product: updated GeoDatabase documenting consultation decisions and recommendations for clean up procedures

Product: Waypoint file for use by clean up team archaeologists; paper maps for use by clean up team archaeologists to relocate sites and record data

### Clean Up Team Preparations

*HP/GIS Specialist, Incident Command GIS Specialist*

- Load cultural resource RAT feature classes into incident command GIS
- Overlay cultural resource RAT data with other RAT data
- Digitize Clean Up team planned survey areas
- Spreadsheet indicating cultural resource treatment recommendation for each resource in target clean up area

Product: polygon feature class of target clean up team activities; paper map identifying target cultural resources within survey areas; tabular description of cultural resource treatment options

Clean Up Team Cultural Resource Field Survey Performed

### Final Data Processing of RAT Cultural Resource Survey Data Conducted while Clean Up Team Survey is Ongoing During Daylight Hours

*HP/GIS Specialist*

- Cultural Resource, locational and survey GUIDs assigned to each feature in RAT feature classes
- Feature level metadata entered for each geographic feature in RAT feature classes

Product: updated GeoDatabase with GUIDs and feature level metadata, suitable for data transfer within incident command

*HP/GIS Technician*

- Attribute information compared to fieldnotes, basic QA/QC conducted to identify errors in geography or attribute information
- Field photograph digital files linked to resource locations in RAT feature classes
- Spreadsheets created to track number of resources identified, new resources identified and treatment procedures agreed to by consulting parties

Product: updated GeoDatabase with corrected geography and attribute information, suitable for data transfer within incident command; updated feature classes with links to field photos; tables reporting progress of RAT team cultural resource identification efforts

### Initial Transfer of Incoming Clean Up Team Field Survey GPS Data Conducted Upon Return of Overnight and Daylight Hour Clean Up Teams Data, Processed During Daylight Hours

*Clean Up Team Archaeologist*

- Data downloaded from GPS receivers
- Data exported into shapefiles
- Data emailed to HP/GIS Specialist

Product: shapefiles containing relocated cultural resources locations and attributes

OR

*HP/GIS Specialist*

- Data downloaded from GPS receivers
- Data exported into shapefiles
- Data emailed to HP/GIS Specialist

Product: shapefiles containing relocated cultural resources locations and attributes

### Initial Data Processing of Clean Up Field Survey GPS Data and Treatment Analysis

#### *HP/GIS Specialist*

- Combine all Clean Up field survey shapefiles into daily cultural resource data sets
- Data loaded into appropriate resource type feature classes in Cultural Resource GeoDatabase
- Spreadsheet produced comparing recommended clean up treatment to treatment actually performed to document and determine further actions if necessary

Product: updated GeoDatabase containing more detailed locational and attribute information for each cultural resource identified during RAT survey, as well as new discoveries identified during clean up activities



### Coordinated Final Data Processing

#### *HP/GIS Specialist*

- Overlay RAT cultural resource locations with Clean Up team cultural resource locations to identify relocated sites and new discoveries made during clean up
- Assign appropriate Cultural Resource GUID to relocated sites and new Cultural Resource GUIDs to new discoveries
- Assign locational GUIDs to all resources identified during clean up
- Assign survey GUIDs as appropriate per survey day/team/effort
- Feature level metadata entered for each geographic feature in all resource type feature classes, as generated by clean up team collection

Product: updated GeoDatabase with appropriate and reconciled GUIDs as well as feature level metadata, suitable for data transfer within incident command

#### *HP/GIS Technician*

- Attribute information compared to fieldnotes, basic QA/QC conducted to identify errors in geography or attribute information
- Field photograph digital files linked to resource locations in resource type feature classes
- Spreadsheets created to track number of resources identified, new resources identified and treatment procedures carried out

Product: updated GeoDatabase with corrected geography and attribute information, suitable for data transfer within incident command; updated feature classes with links to field photos; tables reporting progress of Clean Up team cultural resource identification and site monitoring efforts



### Subsequent Data Processing of the CR\_Link Table to Establish Connections to Exterior Data Sources

#### *HP/GIS Technician*

- Load all assigned GUIDs from all feature classes (RAT and resource type) into CR\_Link table, along with ancillary data needed (site name, date surveyed, original data file, etc.)
- Examine CR\_Link table and locational data to find matches for surveyed resources to external SHPO/THPO/Federal databases
- Manually enter matching ID numbers from external databases into appropriate record in the CR\_Link table

Product: updated GeoDatabase with updated CR\_Link table containing links from surveyed resources to external data sources and attributes, suitable for data transfer inside and outside incident command



### Data Transfer and Distribution

#### *HP/GIS Technician*

- Preparation of GeoDatabase subsets/shapefiles for distribution to SHPO/THPO/Federal stakeholders
- Preparation of consultation documentation, determinations of significance, integrity and clean up recommendations in GeoDatabase/shapefiles
- Documentation of final treatment activities
- Preparation of data transfer agreements with SHPO/THPO/Federal stakeholders

Product: GeoDatabase or series of shapefiles tailored to stakeholder data needs and documenting the Section 106 inventory and consultation phases; development of a GIS tool for use in Section 106 mitigation phases; formal data transfer memorandum of agreement among stakeholders