Human Resources (continued)

Archaeological/Historic

Visual

Hazardous Waste
Assessing Impacts to Cultural Resources

- Historical
- Archaeological
- Architectural

- Identify Source of Potential Impacts
  - Changes in Land Use (Inundation, Destruction, Damage)
  - Indirect Impacts (Treasure Hunting, Vandalism)
  - Changes in Access

- Determine Study Area
  - Generally the area of direct impact or adjacent properties

- Determine Existing Conditions
  - SHPO (State/County/Municipality Data)
  - Local Museums/Historical and Archaeological Societies
  - Native American Tribes
  - Colleges/Universities
  - Field Reconnaissance/Surveys
Cultural Resources (cont.)

- **Identify Standard**
  - Eligible for National Register

- **Impact Prediction**
  - Direct Damage/Destruction/Vibrations
  - Change Character of Setting

- **Assess Significance of Impacts**
  - No Effect
  - No Adverse Effect
  - Adverse Effect

- **Mitigation**
  - Limit Magnitude of Project
  - Redesign Project
  - Repair
  - Documentation of Structures
  - Relocation of Properties
  - Salvage of Archaeological Materials
Recovery as Mitigation
Assessing Impacts to Visual Resources

- Aesthetic
- Visual

- Identify Source of Potential Impacts
  - Changes in Land Use (Inundation, Destruction, Damage)
  - New Physical Facilities
    - Obstruct views
    - Out of character in built environment
    - Visual intrusions
    - Lighting
    - Removal of buffers
    - Isolate historic resource

- Determine Study Area
  - View shed to and/or from project

- Determine Existing Conditions
  - Define Study Area
  - Field Reconnaissance
  - Public Participation
Visual Resources (cont.)

- **Identify Standard**
  - Federal/ State/ Local Statutes
  - Zoning Policies
- **Impact Prediction**
  - Descriptive Approach (photomontage)
  - Use Scale Models
  - Photographic/Computer Simulations
  - Scoring Methods
- **Assess Significance of Impacts**
  - Violate Statute/Policies
  - Scoring Methods
- **Mitigation**
- **Modify Project (location, height)**
  - Screening
  - Selection of Color/Materials
  - Underground Utilities
Stimulation
Stimulation/Mitigation
Assessing Impacts to Hazardous Materials

- Waste Sites
- Spill Sites
- Storage Sites

- Identify Source of Potential Impacts
  - Changes in Land Use
  - Crossing or Construction Near Sites

- Determine Study Area
  - Generally the area of direct impact

- Determine Existing Conditions
  - Federal Agencies (EPA)
  - State Agencies (DEQ)
  - County/Municipal Data (Fire/Police Dept.)
  - Historic Land Use Maps (Sanborn Fire Insurance Maps)
  - Historic Aerial Photographs
  - Field Reconnaissance/Testing
Hazardous Materials (cont.)

- **Identify Standard**
  - Discharge Multi-Media Environmental Goals (DMEGs)
  - Ambient Multi-Media Environmental Goals (AMEGs)
  - State Clean-Up Standards
- **Impact Prediction**
  - Direct Effects
    - Construction Phase
    - Operation Phase
- **Assess Significance of Impacts**
  - Any Disturbance of Site
  - Exceed DMEGs/AMEGs
- **Mitigation**
  - Avoid Sites
  - Minimize Impacts to Sites
  - Clean Up Site
  - Containment