# RENDEVOUS 2010
## TVA AGENDA
## September 17, 2010

- **Evolution of the 1:24K Map Series at TVA**
  - When TVA was created, few detailed maps of the region existed.  Mapping the region using standard field surveying methods of the time would take decades.  TVA, along with a number of USGS employees working in Chattanooga, developed a production process to map the region from aerial photographs.  Using this new planimetric mapping process, the region was mapped in just a few short years. That original map series was then updated with topographic mapping.  All these map series were part of the 1:24K National Mapping Series.
  - 60 minutes
  - Speaker: Alan W. Voss
    Mr. Voss graduated from the University of Wisconsin at Madison with degrees (B.S. 1970 and M.S. 1971) in Civil Engineering with a Surveying and Mapping Specialty.  He also has three years post graduate experience at the University.  He then worked at the Tennessee Valley Authority in various positions in the Maps and Surveys Branch.  He retired in 2006 as the Manager, Special Projects in the Geographic Information and Engineering department.  Mr. Voss has been an active member of the American Society for Photogrammetry and Remote Sensing (ASPRS) throughout his career serving in many positions including eight years on the National Board of Directors.  He is currently the Co-Chairman of the ASPRS Films Committee.
  - Speaker: Major McCollough
    Dr. Major McCollough is a 34-year career employee of TVA, serving as Chief Cartographer in Geographic Information and Engineering and as Director of External Archaeological Services.  He is a certified GIS professional and earned Ph.D. and M.A. degrees in Anthropology at the University of Pennsylvania and a B.S. degree in Chemistry at Grove City College.  He has taught and conducted research at Ohio State University, the University of Tennessee, Knoxville, and the University of the South.  He is best known in Chattanooga for his long term research and advocacy that led to the creation of Moccasin Bend National Park and Williams Island State Archaeological Park—1500 acres of historical parkland inside the city that preserves the most comprehensive sample of Native American, Early Spanish Contact, Trail of Tears, and Civil War archaeological resources in the United States.

- **Surveying and Mapping Procedures Circa 1940s**
  - Due to TVA's great success in the 1930's and 1940s, foreign countries often came to TVA for assistance so they could replicate these best practices. TVA created a video documenting current surveying and mapping procedures for Pan American counties as part of this knowledge and technology transfer effort.
  - 45 minutes
  - Speaker: Roy Teal

- o Mr. Teal is the Senior Manager of Geographic Information & Engineering for the Tennessee Valley Authority.  He has 30 years of mapping, photogrammetry, GIS, and surveying experience including working for a private surveying firm in Massachusetts and Alabama Power Company. He graduated in 1980 from the University of Maine with a B.S. degree in Surveying Engineering. He has served on the National Board of Directors for the American Society for Photogrammetry and Remote Sensing.  He is a Professional Land Surveyor in Alabama and a Certified Photogrammetrist.

- **Original Reservoir Property Mapping at TVA**
  - o In the course of building numerous hydroelectric and flood control dams, TVA has to acquire a lot property that would eventually be flooded.  Most of that surveying work was completed using plane table surveys, and resulted in the Land Acquisition Map Series.
  - o 30 minutes
  - o Speaker TBD

- **TVA's Role in Mapping for the Department of Defense**
  - o TVA was called on during World War II to assist the Department of Defense in mapping enemy territories. TVA mapped parts of 11 foreign countries, including Germany and Japan.  It was a huge process involving some 500 men and women, who worked nearly 1.5 million hours over the course of the war.
  - o 30 minutes
  - o Speaker Ray Mitchell
    Mr. Mitchell has over 30 years with the Tennessee Valley Authority and currently is a Project Specialist with Geographic Information and Engineering.  He is a graduate of the Georgia Military College with a B.S. in Environmental Geology from the University of Tennessee at Chattanooga.  He is certified by the American Society of Photogrammetry and Remote Sensing and is licensed as a Professional Geologist in the State of Tennessee.  Mr. Mitchell is a retired Lieutenant Colonel from the U.S. Army Reserves with over 28 years of service where he participated in several oversees campaigns and received a number of awards and decorations.

- **The Geospatial Revolution Project**
  - o "The location of anything is becoming everything." Penn State Public Broadcasting is developing the Geospatial Revolution Project, an integrated public media and outreach initiative about the world of digital mapping and how it is changing the way we think, behave, and interact.  The project will feature a web-based serial release of video episodes—each telling an intriguing geospatial story.
  - o 15 minutes
  - o Speaker Uwe Zitzow
    Mr. Zitzow holds a B.S. in Mechanical Engineering from the University of Miami and a M.S. in Mechanical Engineering from the Tennessee Tech University. He is retired form TVA, having served 25 years in the engineering and management of

power-related research and development programs including advanced power cycles, coal gasification, coal pyrolysis and energy recovery from waste. He is co-owner of a technology development company that is introducing an improved method for recycling tires. He has a keen interest in the history of map making and is currently involved with the ASPRS effort to acquire historical information and materials on the evolution of mapping technology.

After Lunch:

- **History of TVA Video**
  - A video documentary history of TVA that was created by the TVA Retirees Resource Corporation in celebration of TVA's 75th anniversary.
  - 40 minutes

- **Nickajack Cave Survey and Rescue Video**
  - 40 minutes

Equipment Needed:
- Overhead project that connects to laptop & DVD player
- DVD player
- 2 standard 6' or 8' tables
- A way to hang about 6 to 8 maps that are about 4'x5' each