

# CASE STUDY

## U.S. ARMY CORP of ENGINEERING, TENNESSEE-TOMBIGBEE WATERWAY, ALABAMA & MISSISSIPPI LIGHTING UPGRADE

Located in both Northwest Alabama and Northeast Mississippi

The Tennessee-Tombigbee (Tenn.-Tom) Waterway encompasses facilities up and down the waterway ranging from Locks & Dams to Parks & Recreation to Office & Management facilities, scattered over 234 miles of waterway. The Tenn.-Tom is a man-made waterway which links the Tennessee River to the Tombigbee and Black Warrior rivers and was completed by the U.S. Army Corp of Engineering in 1984. The project offered the nation's midsection an alternate route to the Port of Mobile and the Gulf of Mexico. The Tenn.-Tom encompasses 110,000 acres of land that is used by more than 3 million people for recreation annually. The project stimulates economic development, provides outdoor recreational opportunities, supports navigation and enhances wildlife habitat.



### THE CLIENT CHALLENGE

The U.S. Army Corp of Engineers was embarking on its first-ever ESPC Project. As with any first-time project there were many challenges to overcome; design consistency, measurement and verification, and installation logistics were major considerations. There was also huge desire to upgrade light levels in the locks and dams sites while reducing maintenance cost and material costs across the board. RTS performed a complete detailed lighting audit for all sites for both interior and exterior. The project included over 40 sites including Visitor Centers, Campgrounds, Locks & Dams, Historical Centers, and Office buildings.

### THE LIGHTING SOLUTION

Retro-Tech performed linear fluorescent upgrades on the interior fluorescent system thus improving efficiency and product consistency. Interior incandescent and compact fluorescent fixture were upgraded to LED and all exterior HID lighting, including the high mast lighting along the Locks & Dams were upgraded to new LED fixtures.

### THE RESULTS

The goals and objectives for the project were met or exceeded. Light levels were enhanced without having to add additional light fixtures. The LED systems have improved lighting while reducing maintenance costs with a 10 year warranty on the LED fixtures.

