

**WASTEWATER BUDGET 2012
CAPITAL PROJECT PHOTO CAPTIONS**



Photo ID: WW-01-2011Budget; WW-02-2011Budget
Capital Project: Annual Large Main Rehab

Broken sanitary sewer mains, viewed via closed-circuit television inspection apparatus, demonstrate locations where sanitary sewer mains are broken and in need of rehabilitation.



Photo ID: WW-03-2011Budget
Capital Project: WRF Electrical Upgrade

Photo of a transformer terminal connector from the Water Reclamation Facility that was replaced due to significant electrical arcing



Photo ID: WW-04-2011Budget
Capital Project: WRF Electrical Upgrade

Photo of a damaged circuit breaker from the 480-volt electrical system at the Water Reclamation Facility. The breaker failed because of corrosion that caused electrical arcing.



Photo ID: WW-05-2011Budget
Capital Project: Trailer Mounted Generator

Photo of a trailer-mounted electrical generator. The existing generator lacks sufficient power to operate the pumps at the lift stations serving the Airport Industrial Park. A new trailer with sufficient power to operated the largest lift station pumps provides needed backup capability, and complies with a recommendation from the Colorado Department of Public Health and Environment.



Photo ID: WW-06-2011Budget, WW-07-2011Budget
Capital Project: Nutrient Master Plan for the Water Reclamation Facility

The U.S. EPA is pushing Colorado to adopt water quality criteria for nutrients. Excessive nutrients can cause algae blooms in water bodies. Depending on the numbers adopted, attaining compliance could require another multi-million dollar upgrade to the Water Reclamation Facility.



Photo ID: WW-08-2011Budget, WW-09-2011Budget
Capital Project: Laundry Covers

Algae grows in the final clarifiers of wastewater treatment plants, feeding on the nutrients in the wastewater (left). Over time, algal growth sloughs off, creating particulates that decrease the efficiency of disinfection. Laundry covers (right) reduce algal growth by shading the launders, increasing the efficiency of disinfection.