

# Clarence Cannon Dam & Mark Twain Lake Dissolved Oxygen Update

USACE St. Louis District

Clarence Cannon Dam &  
Mark Twain Lake

23 June 2016



US Army Corps of Engineers  
**BUILDING STRONG**®



# Operational Objective

- Maintain D.O. concentrations in the re-regulation pool at 5 milligrams per liter or greater as much as possible.
- D.O. monitoring program and plan is a cooperative effort between MVS, Missouri Dept. of Conservation, Missouri Dept. Natural Resources and SWPA



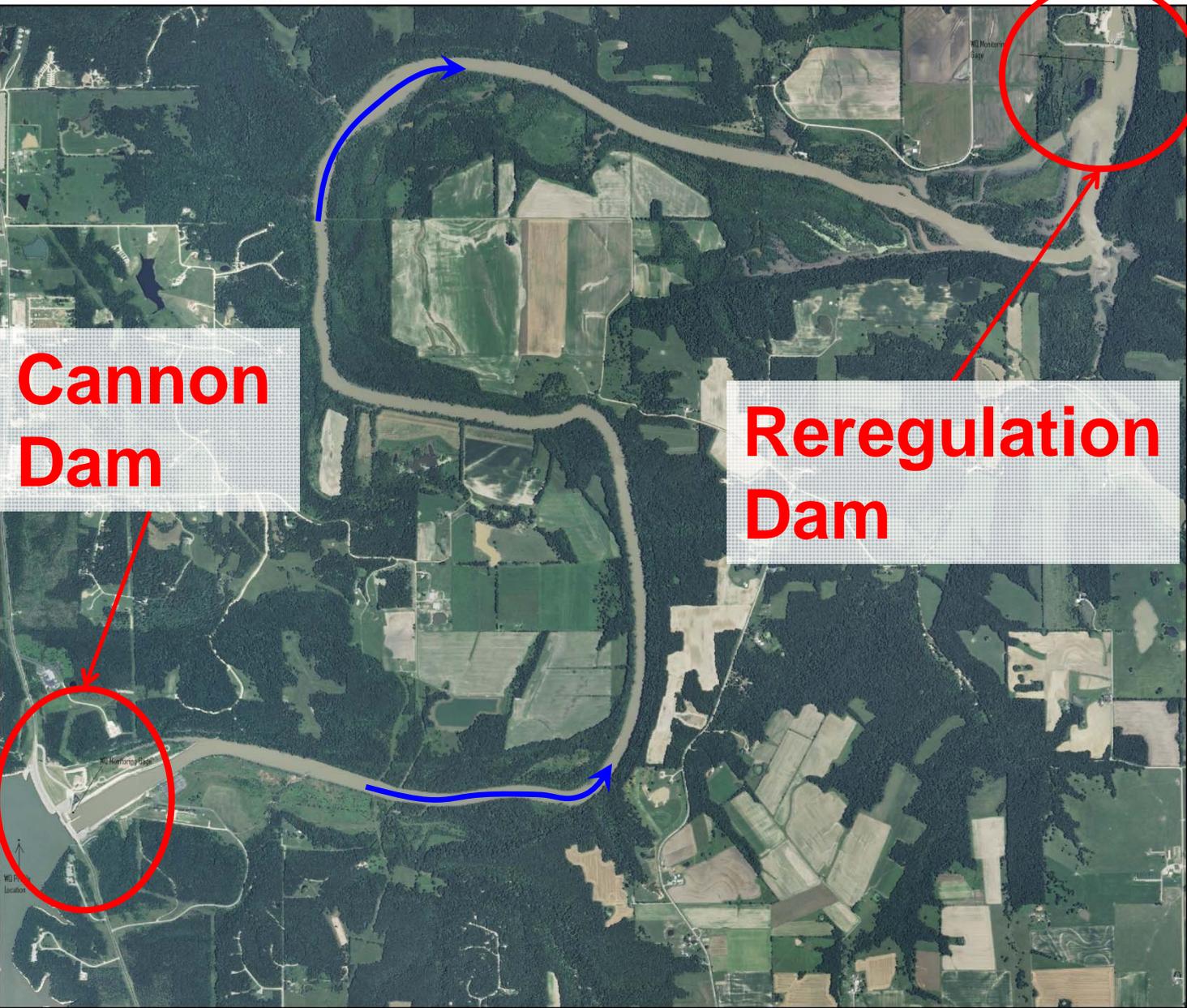
# Operational Objective

- D.O. issues arise when hydropower releases are low, during warm conditions, generally June through October.
- Other factors; lake level, water temperature, air temperature, quality of water, algae blooms.



# Salt River Re-Reg Pool

Location Map



**Cannon  
Dam**

**Reregulation  
Dam**

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# Cannon Dam TW WQ Monitoring



**Turbine Bay  
WQ gage**

# Reregulation Dam WQ Monitoring

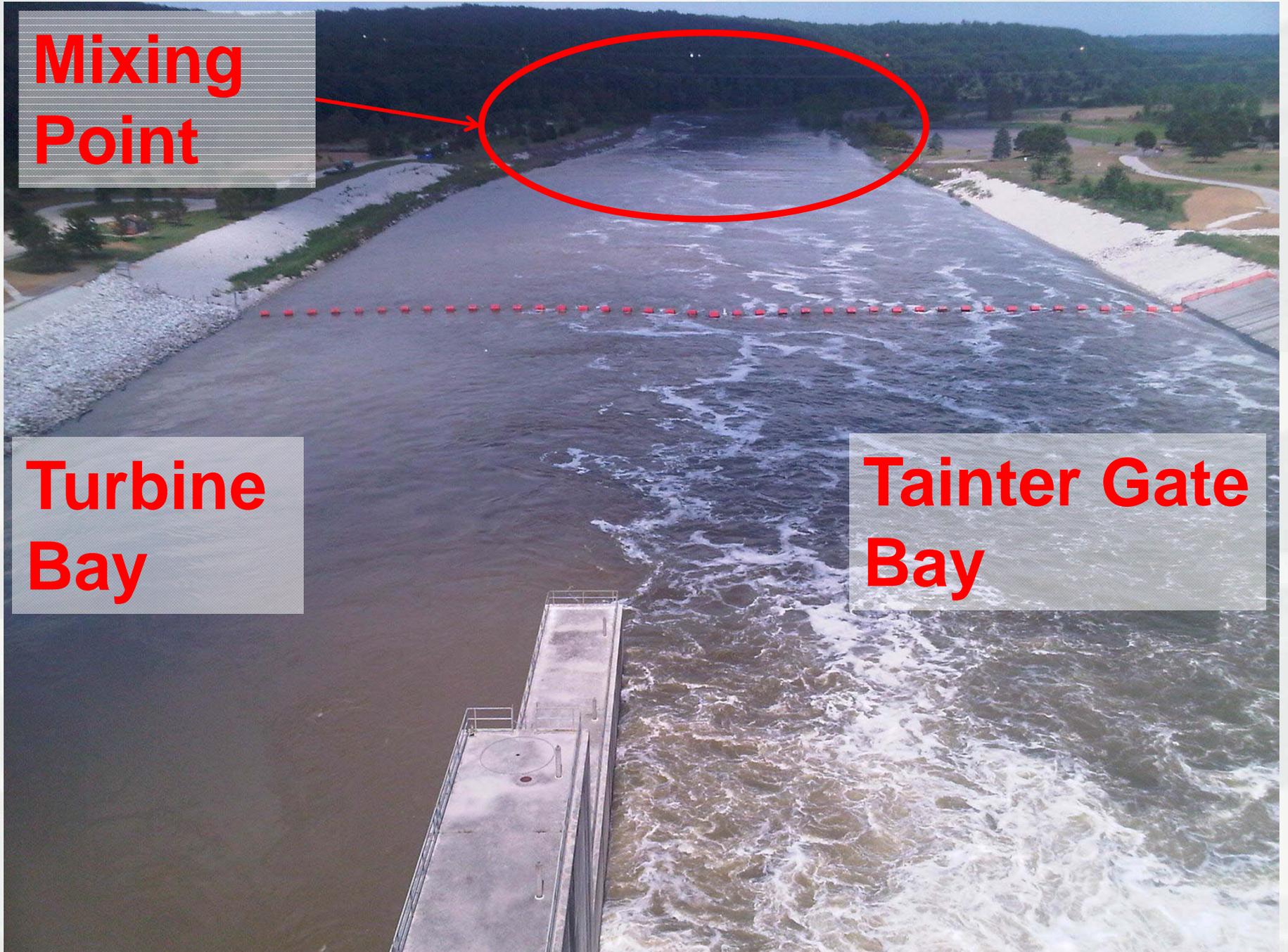
**Rereg Pool  
WQ gage**



**Mixing  
Point**

**Turbine  
Bay**

**Tainter Gate  
Bay**



# 2016 update

- Priority is to continue exploring alternatives to minimize low D.O.
- MDNR and MDC have expressed interest in partnering in a CAP Section 1135 study.
- Currently waiting on a response from the state.



# Feasibility Study

- Continuing Authorities Program (CAP)
- Initial budget request is \$50-100K, 100% Federal cost
- Feasibility Study is estimated at \$250-500K cost shared 50/50
- Construction Phase, cost share 75/25



**? ? ? Questions ? ? ?**

