

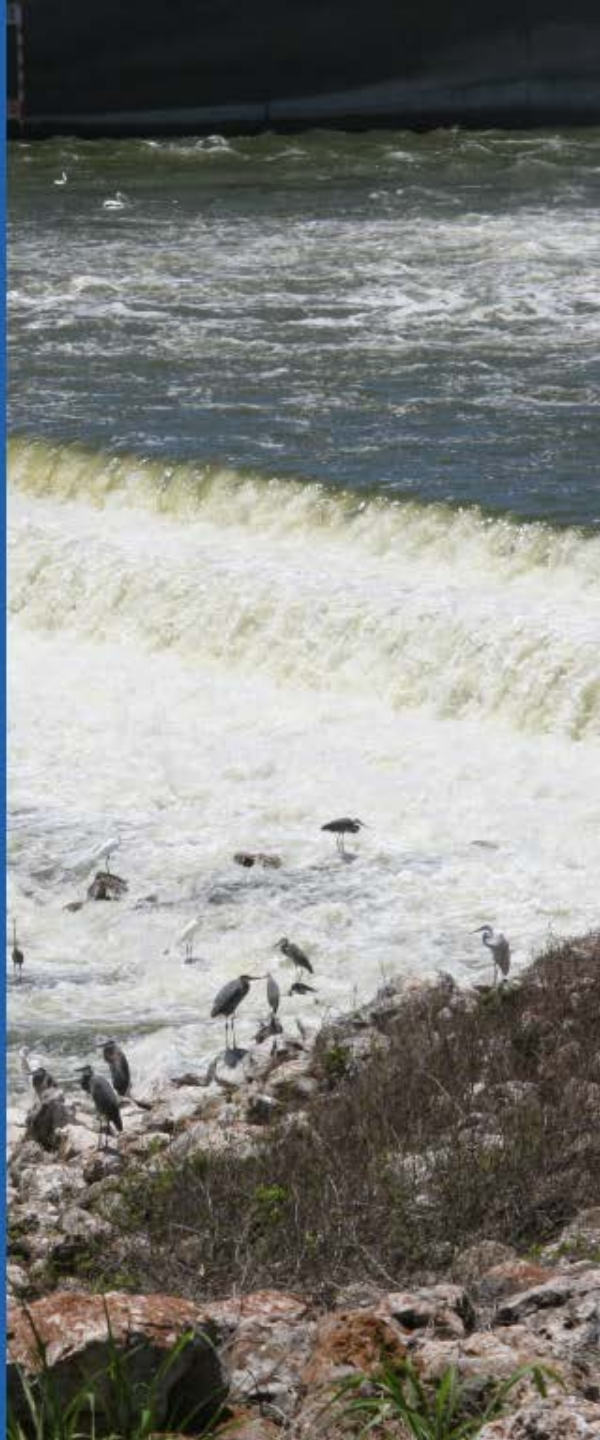


Trinity River Authority of Texas
Enriching the Trinity basin as a resource for Texans

Society of American Military Engineers

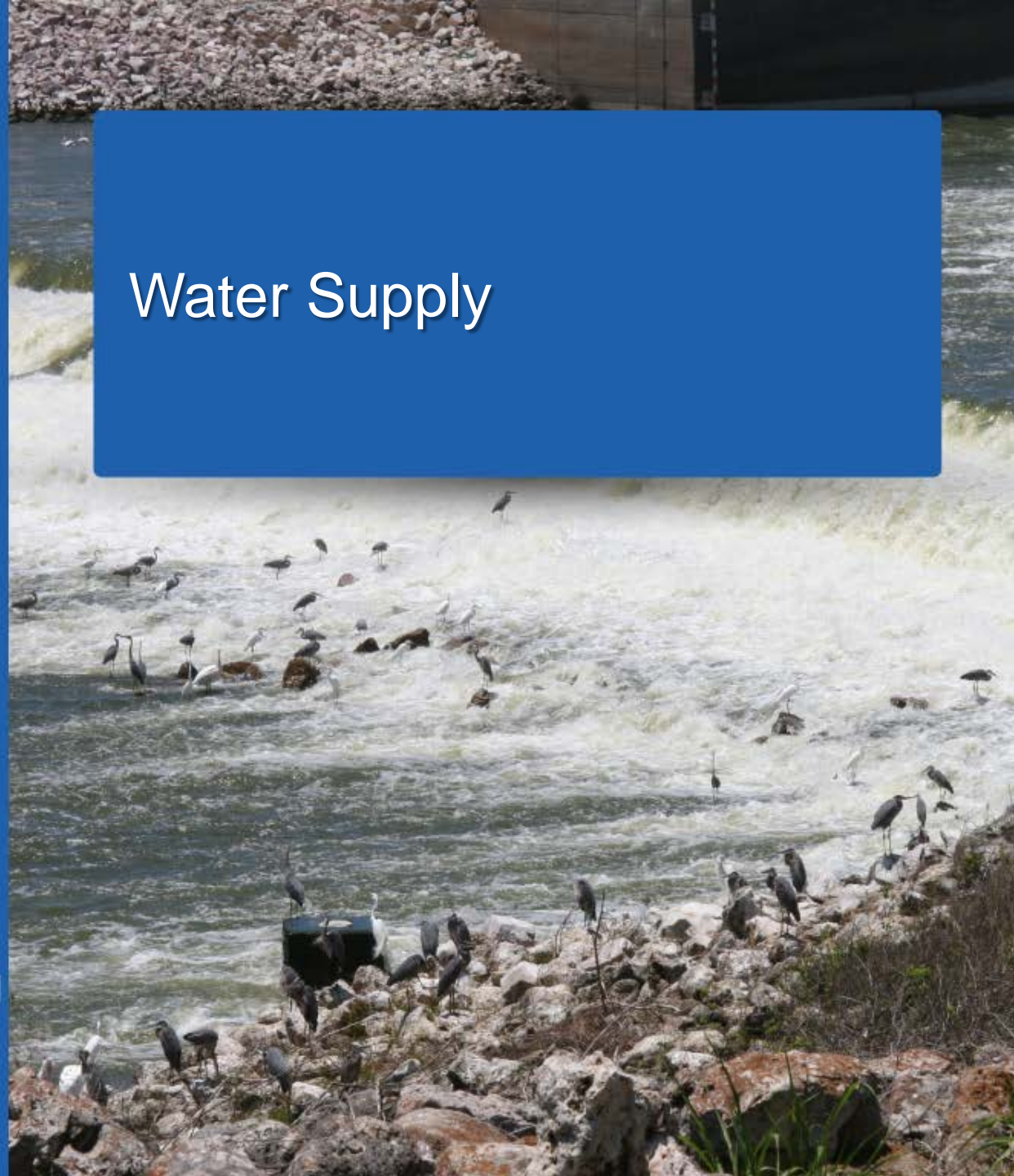
Joe Pool Lake as a Regional Water Supply

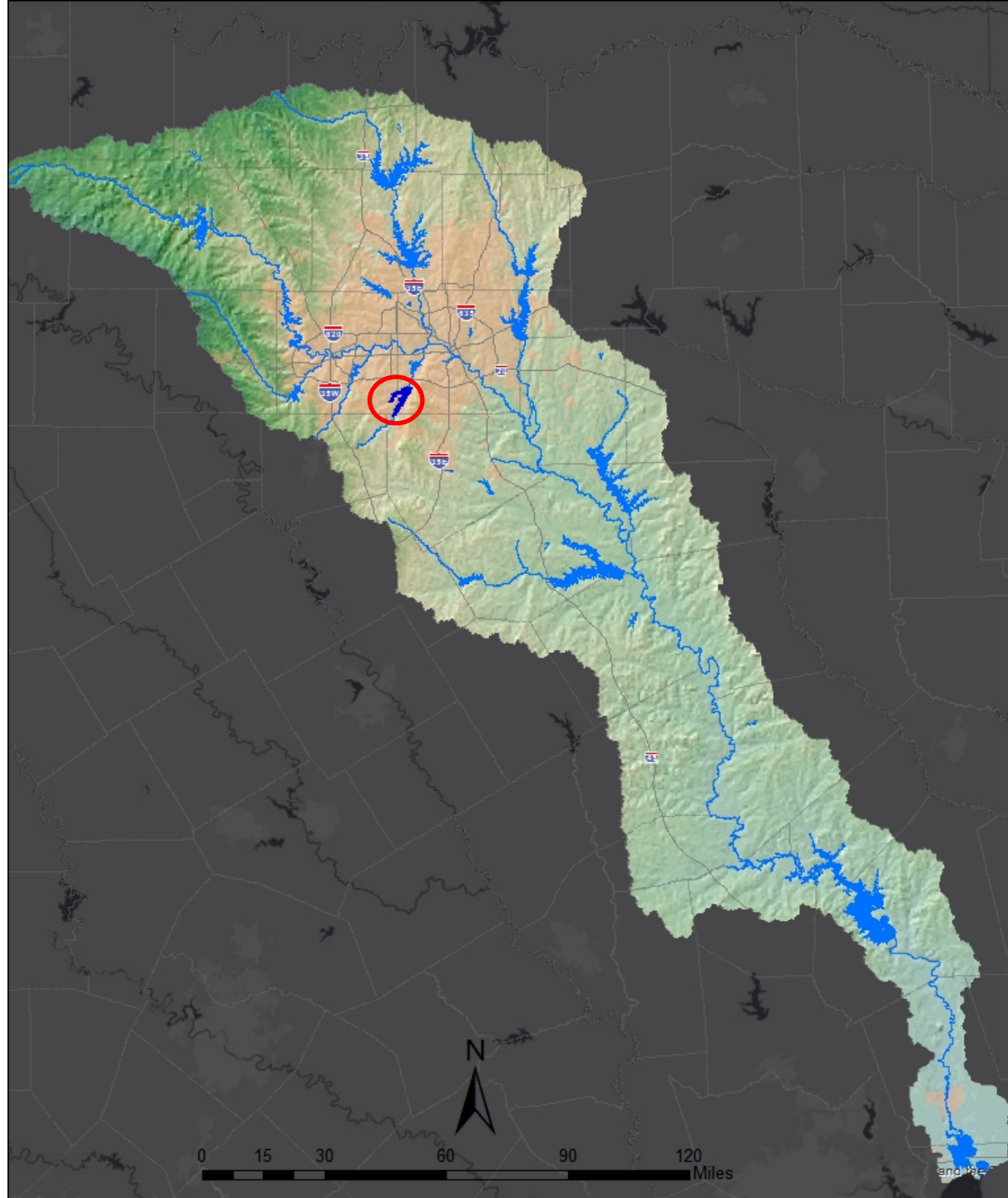
Wastewater Treatment • Water Treatment • Water Storage • Lake Livingston • Recreation



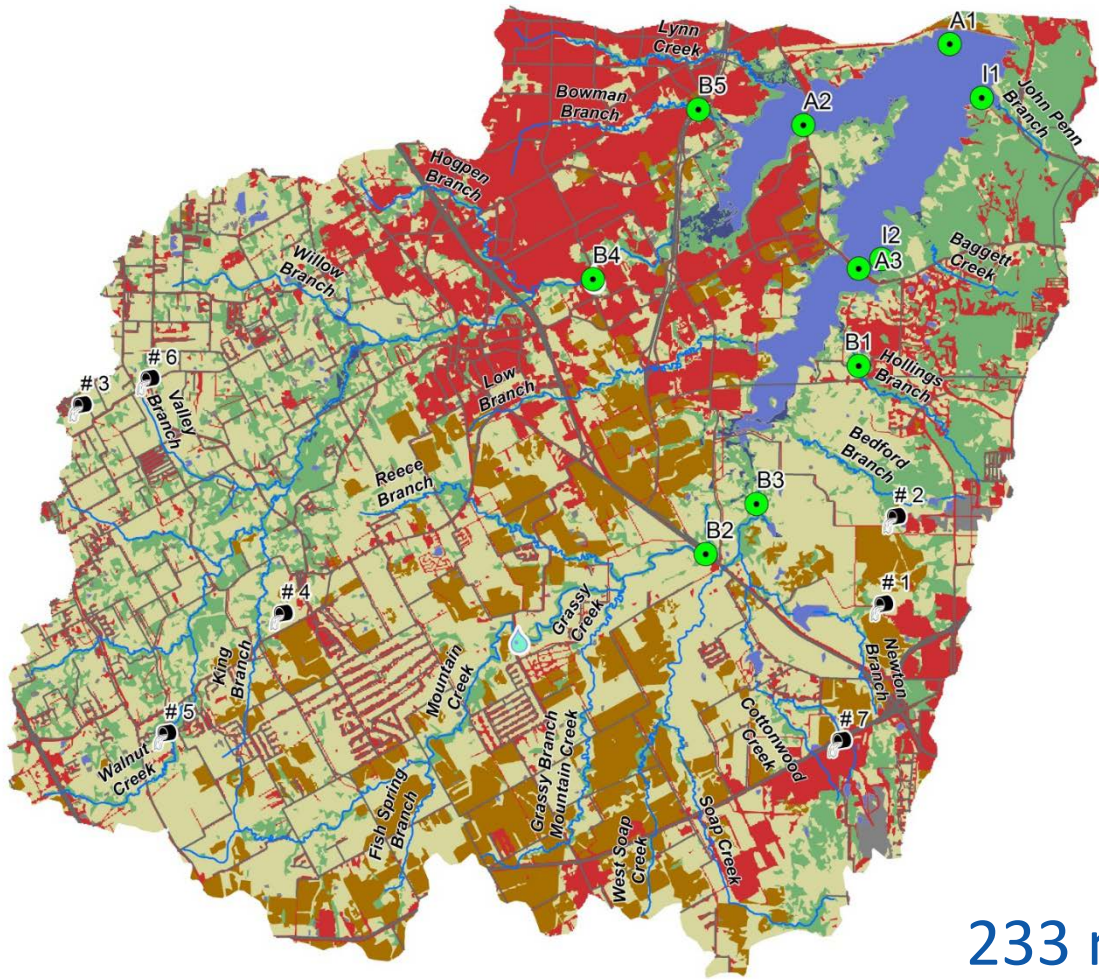


Water Supply





Joe Pool Lake Stats



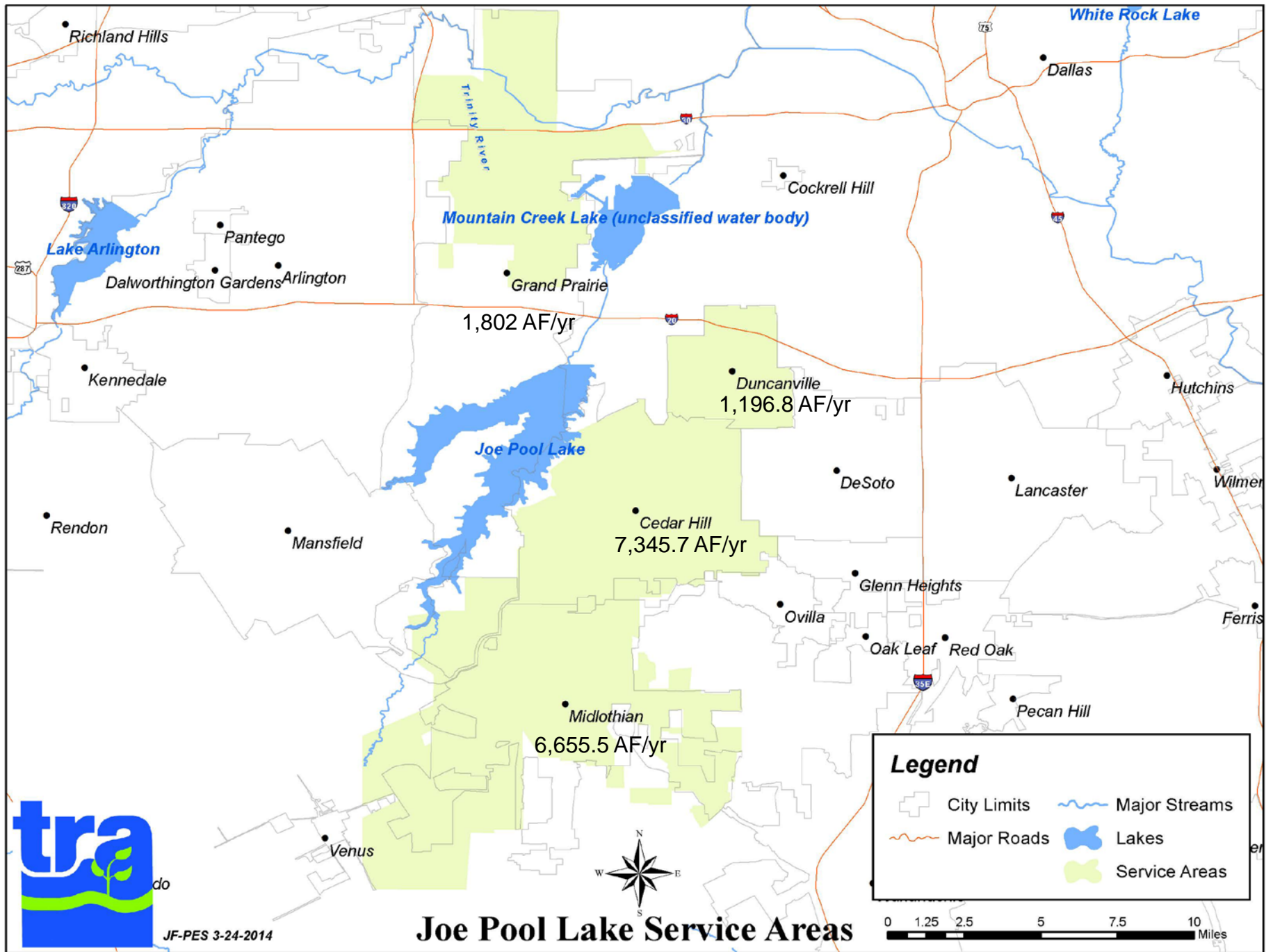
7,740 surface acres

Conservation storage =
176,900 AF/yr

TRA permit =
17,000 AF/yr

Joe Pool Firm Yield =
15,170 AF/yr

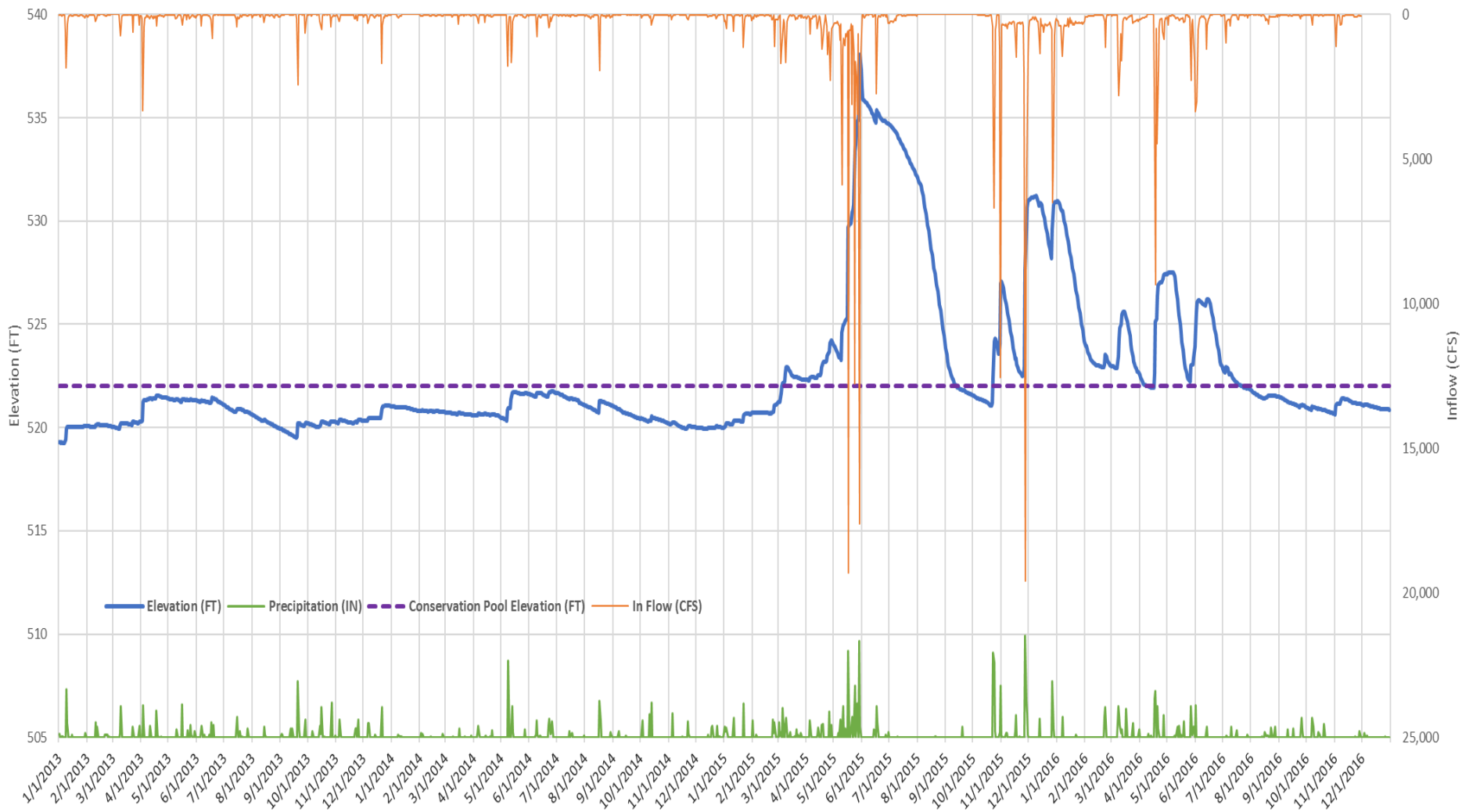
233 mi² Watershed



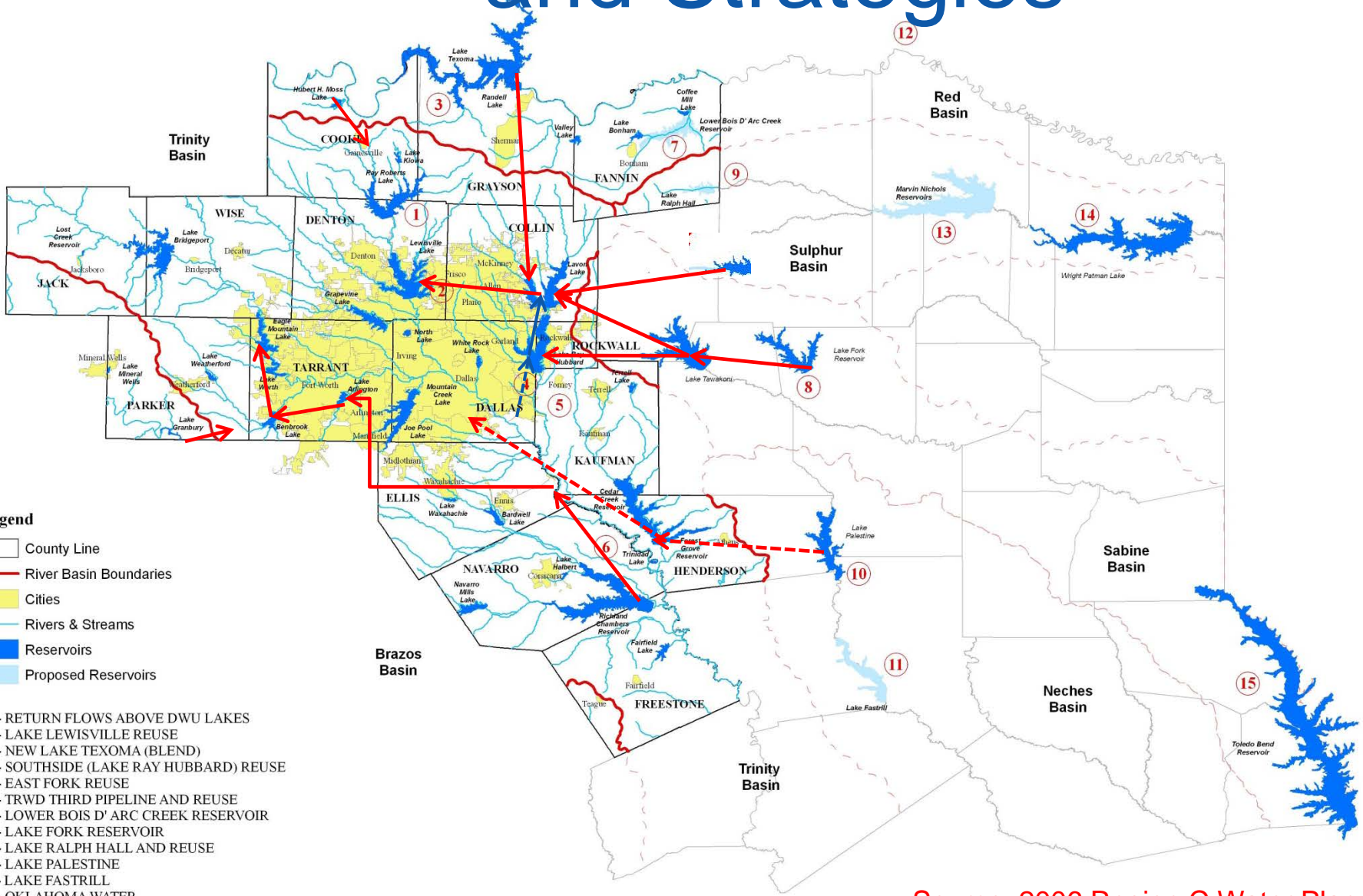
Lakeview Water Supply Project



Joe Pool Lake Hydrology, 2013 to 2016

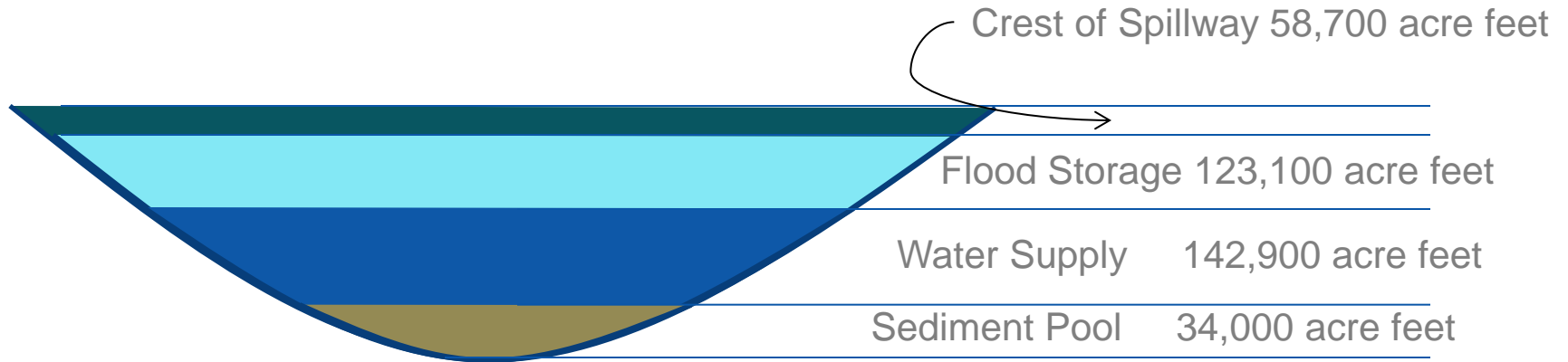


Region C Water Supplies and Strategies



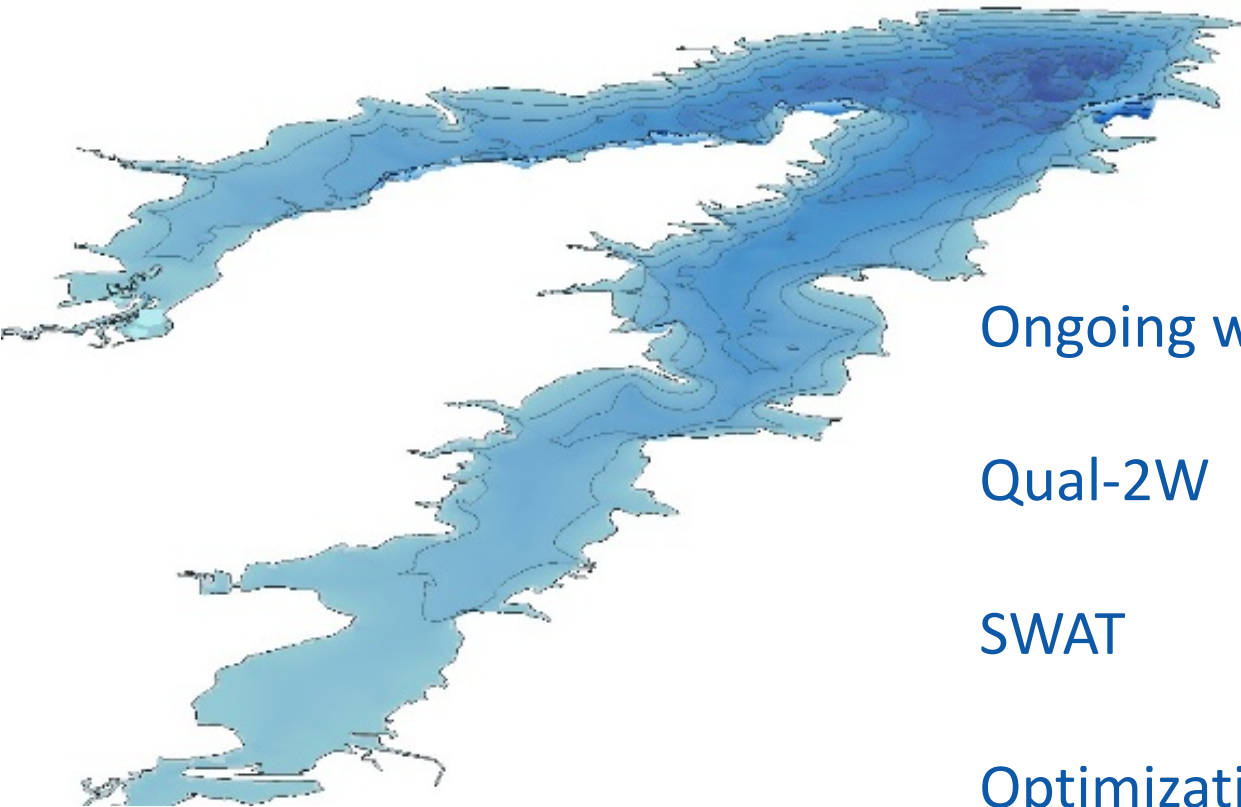
Source: 2006 Region C Water Plan

JPL Storage and Uses



Total Storage:	362,700
Water Supply:	142,900
	39%

Current Efforts



Ongoing water quality Monitoring

Qual-2W

SWAT

Optimization Model

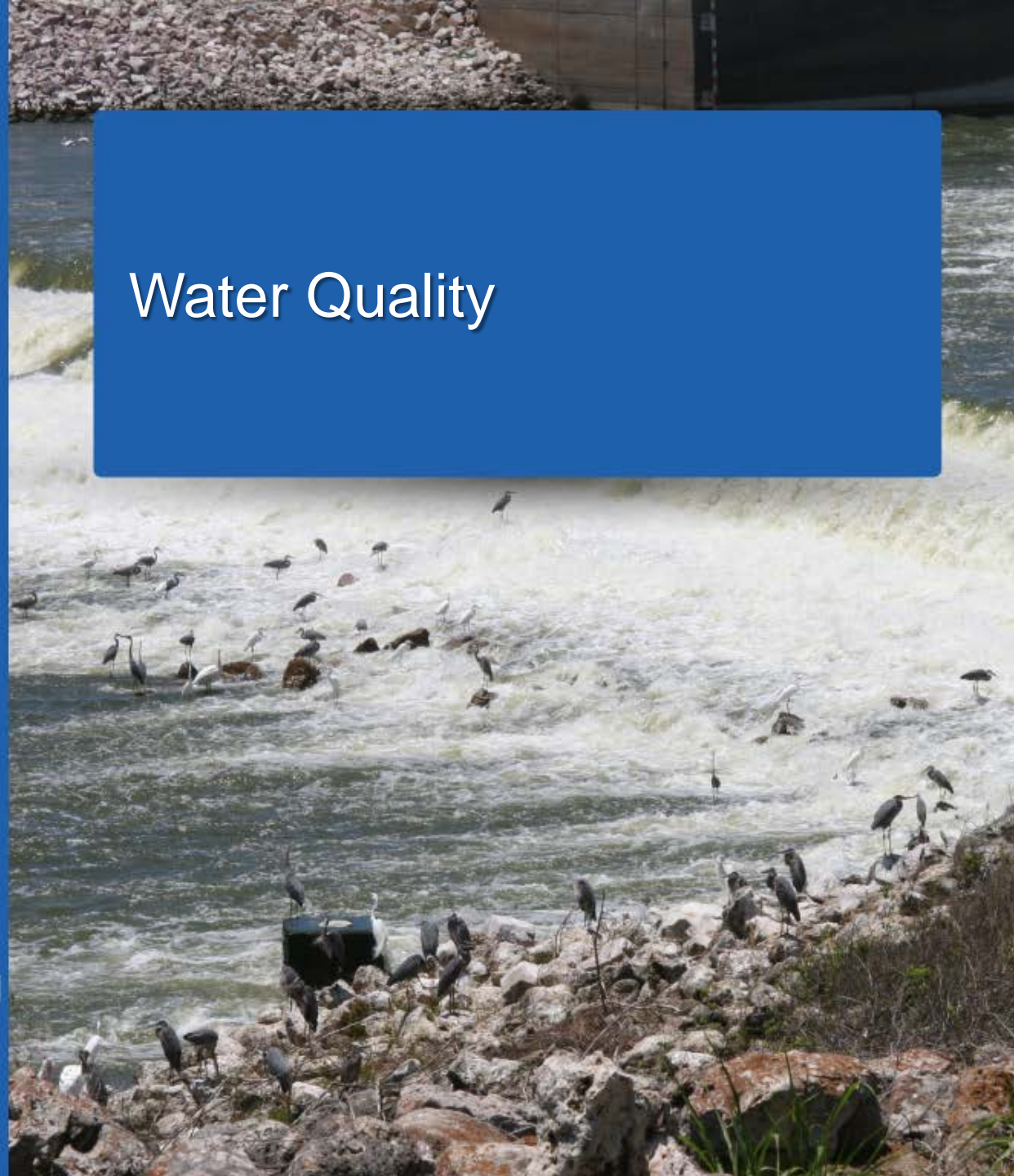
Watershed Characterization

Questions?

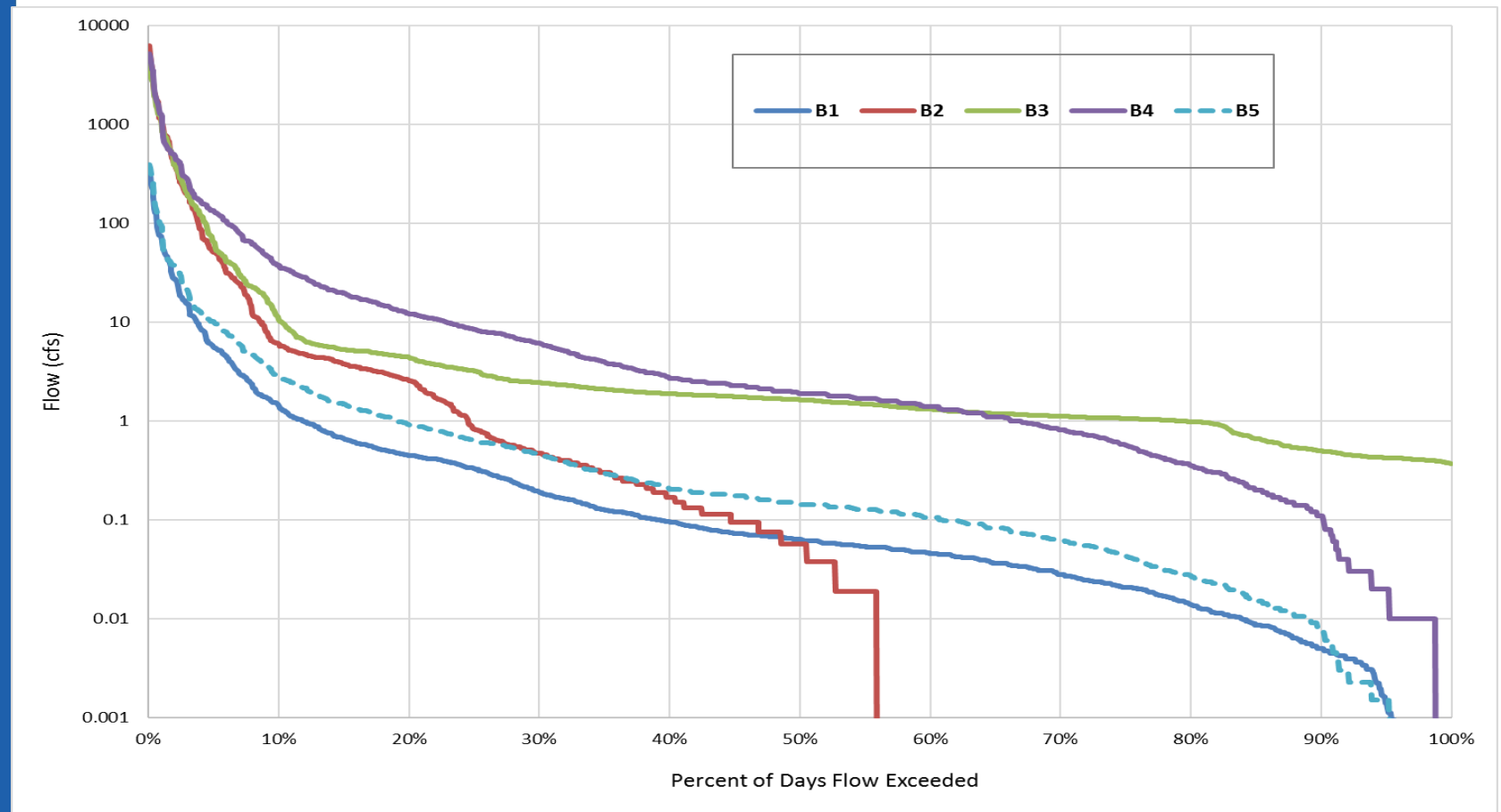




Water Quality



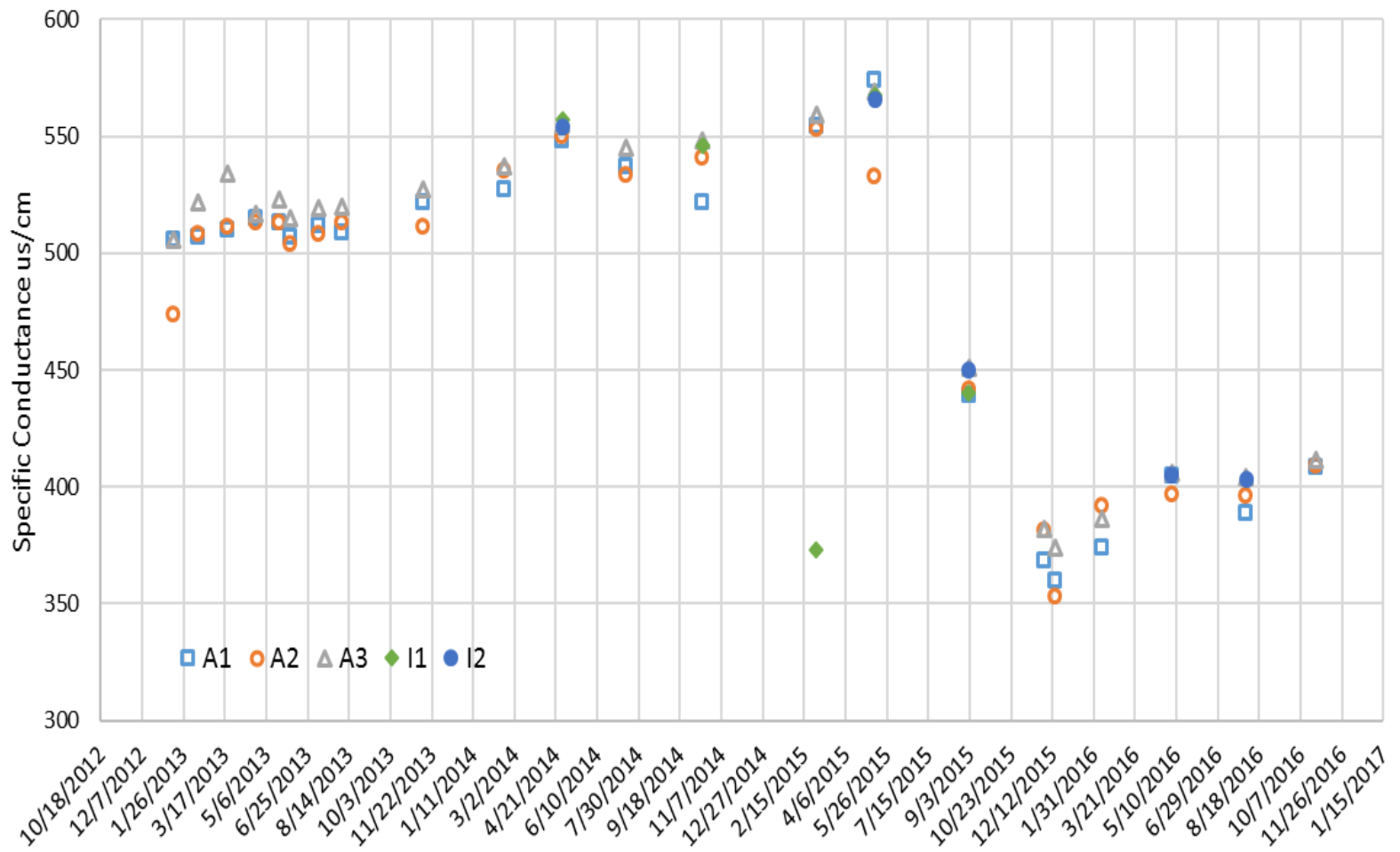
Flow Duration Curves



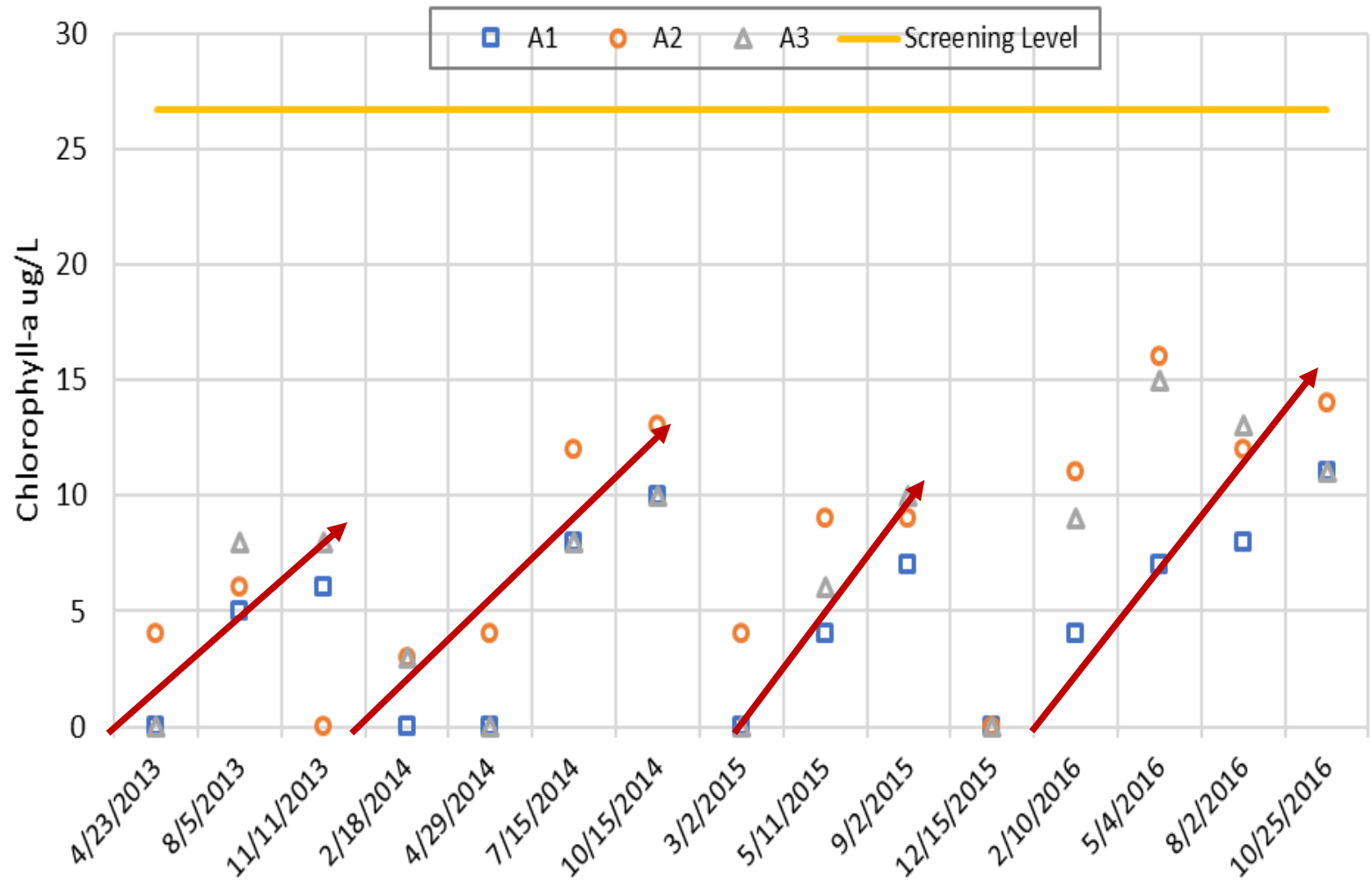
50% of the time collective flow is < 4cfs.

Only 10% of the time is it > 100 cfs

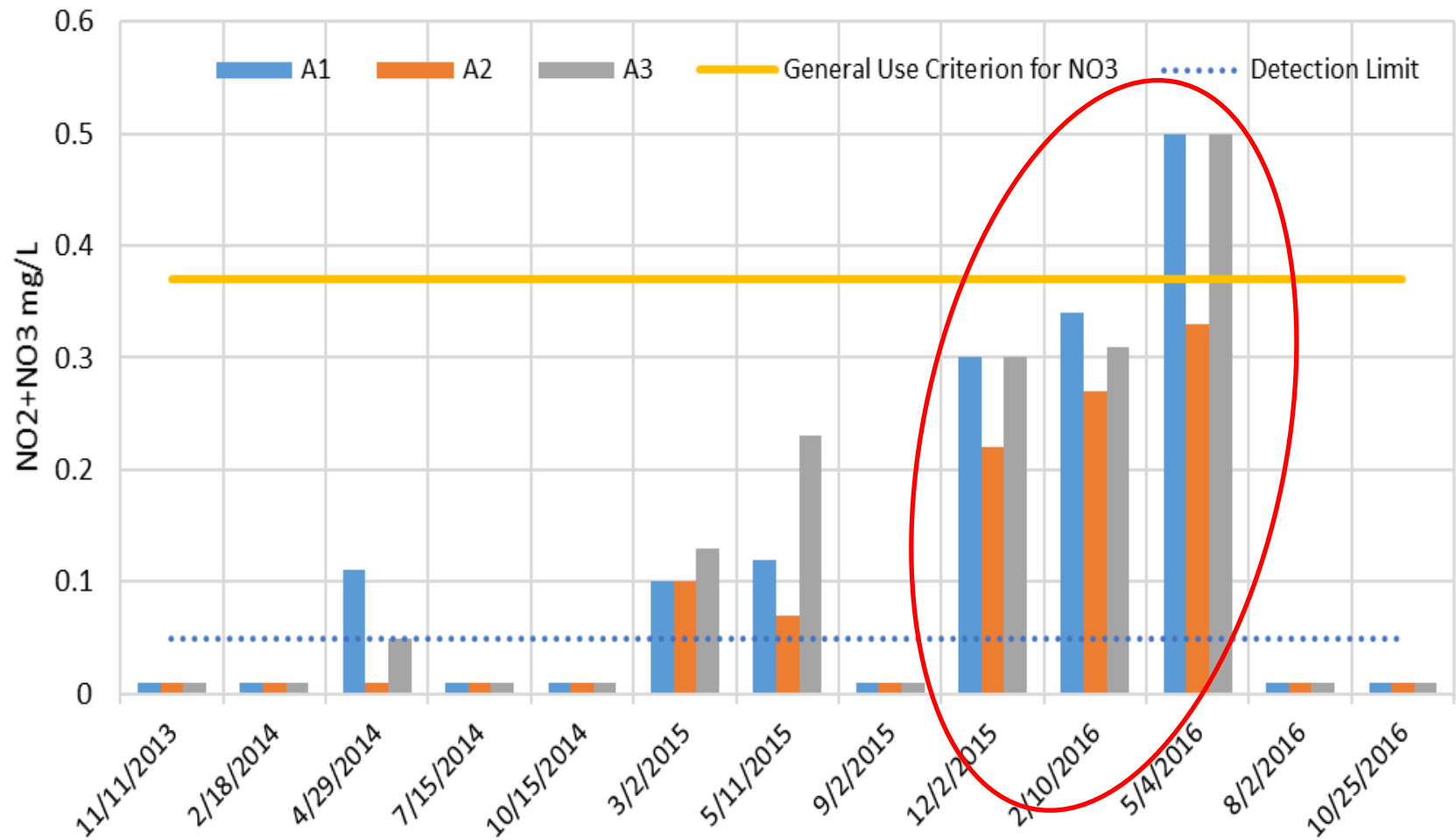
Specific Conductivity



Algae (Chlorophyll-a), 2013-2016



Nitrogen (NO₂+NO₃), Lake Sites



Bacteria (E. coli) in Tributaries, 2008-2016

