



# “Lakespert” – Old School Edition – 1975 NES Data

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I love it when people call me “old school” and this is nothing new. I just gave up my flip phone last year, I still go to the bank, and I use all-weather paper to record my lake profile data. For 2026, get ready for “old school” edition *Lakespert*.

U.S. EPA has been conducting nationwide surveys of our lakes and reservoirs going back to the 1970s. With 2030 quickly approaching, the '70s seem *soooper* old.

Here is why I cherish 1975. Thanks to U.S. EPA efforts, that is the summer where I have historical water quality data for the two reservoirs I look after (Figure 1). The 1975 National Eutrophication Survey or NES included the use of Army Huey helicopters, retro-fitted with a pontoon landing system, landing directly on the water to collect samples. Talk about old school. Can you imagine sampling a lake from a war-era helicopter three times a summer? They did have some hi-tech, remote monitoring equipment on board to help with the surveys. Dial up on America Online (AOL) and take a look for yourself.

Thanks to U.S. EPA, I have total phosphorus and soluble reactive phosphorus data from 1975 that I can compare to my data spanning 2002 – 2025. I am pleased to say that all trends are going in the right direction when it comes to nutrients (water clarity and chlorophyll-*a* is a different story). The '75 survey revealed how all that laundry soap, used to clean bell bottoms and polyester shirts, really contributed to the high phosphorus levels in lakes. There was almost a milligram per liter of soluble reactive phosphorus in my reservoir in 1975. Today, phosphorus is still elevated but continues to decline

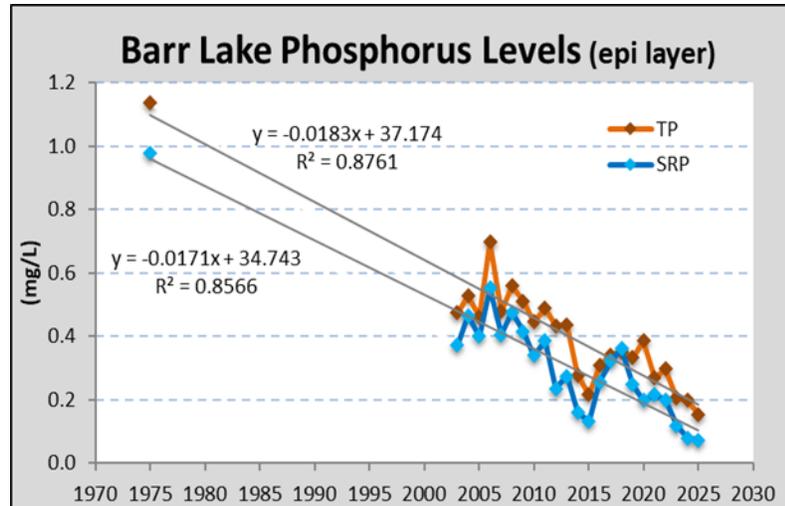


Figure 1. Graph showing trends in Barr Lake (Colorado) phosphorus over time, with original 1975 data from USEPA.

thanks to better policies, wastewater and storm water treatment technology, and overall public awareness.

The more recent U.S. EPA's surveys are key to mapping our lakes health and changes over time. There is overlap between all the surveys going back to 1970s which can help track longer-term changes for many of our lakes and reservoirs. These national surveys provide great data and information for our lakes.

Even though I am old school, what I am excited about is the future in lake monitoring. What will it be like 50 years from now? What national efforts will be going on to monitor our lakes? How will the data be collected? My guess is that we will again sample from the air. This time using drones, robots, and satellites. What I hope is that my 20+ year dataset will be an important part of showing how water quality has improved over the decades and that it helps future generations of *Lakeperts*.

**Steve Lundt**, Certified Lake Manager, has monitored and worked to improve water quality at Barr Lake (Denver, Colorado) for over 20 years. Steve is active with the Colorado Lake & Reservoir Management Association and is a past Region 8 director for NALMS and an active member since 1998. 🌟

