

EXPLORE WATER QUALITY IN OKALOOSA COUNTY, FLORIDA

ANNUAL SUMMARY | 2024

Okaloosa Waterwatch

GARNIER BAYOU WATER QUALITY - FWB, OKALOOSA COUNTY, FL

30.446700 -86.588900

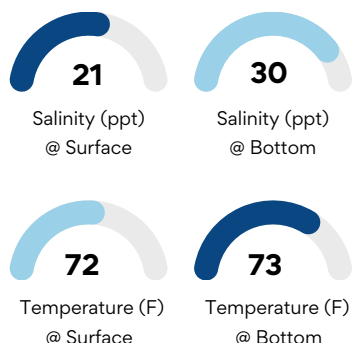
Why, How, What of Water Quality

The quality of water is important for healthy environments, humans, and economies. Monitoring, protecting, and enhancing water quality depends on awareness and understanding of how water connects to your life. Water quality is the condition of water as designated by a particular use and the biological, chemical, and physical components of the water. Measurement of these components provide an opportunity to establish baselines and assess the condition of water now and over time.

Okaloosa Waterwatch highlights water quality data collected at a site in Okaloosa County. Here we review water quality at **Garnier Bayou, coordinates 30.446700 -86.588900**

Salinity and Temperature

Average in 2024



Annual average calculated from monthly samples collected in 2024

Learn More About Water Chemistry

Salinity

The measure of dissolved salts in the water and reported in parts per thousand (ppt) units.

Temperature

The physical quantity of heat present in water and reported in degrees Fahrenheit (F).

Total Phosphorus

An essential nutrient for aquatic plants and animals and total phosphorus (TP) measures all forms of phosphorus in water, reported in micrograms per liter (µg/L).

Total Nitrogen

An essential nutrient for aquatic plants and animals and total nitrogen (TN) measures all forms of nitrogen in water, reported in micrograms per liter (µg/L).

Chlorophyll

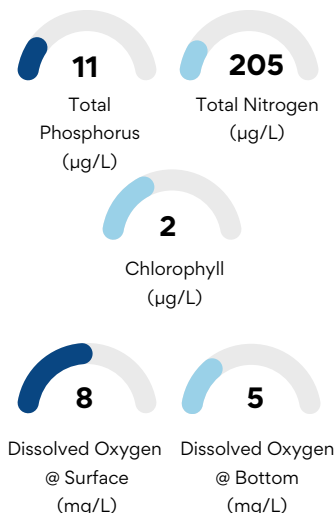
Chlorophyll (CHL-a) is a pigment used to estimate algae in water, reported in micrograms per liter (µg/L).

Dissolved Oxygen

The amount of dissolved oxygen (DO) in the water and reported as milligrams per liter (mg/L).

Nutrients, Dissolved Oxygen, and Chlorophyll

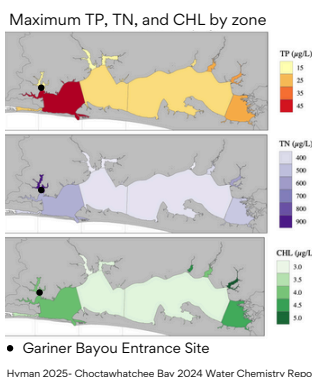
Average in 2024



Numeric Nutrient Criteria

The Department of Environmental Protection (DEP) established numeric nutrient criteria to understand the state of water. Criteria were set for the Choctawhatchee Bay by zones based on water chemistry indicating a healthy ecosystem. The 3-year average TP, TN, and CHL-a at the Garnier Bayou site did not exceed designated numeric nutrient criteria.

Maximum Nutrient Zones



Water Quality Summary

	2022	2023	2024
TP	Meets	Meets	Meets
TN	Meets	Meets	Meets
CHL	Meets	Meets	Meets
DO	Normoxic	Normoxic	Normoxic

Meets = Annual average within numeric nutrient criteria
Normoxic = Annual average within normal limits
Hypoxic = Annual average of concern for aquatic life (below 2 mg/L)