





# EXPLORE WATER QUALTIY IN OKALOOSA COUNTY, FLORIDA

# Okaloosa Waterwatch

**ANNUAL SUMMARY | 2024** 

MID-BAY BRIDGE WATER QUALITY - NICEVILLE, OKALOOSA COUNTY, FL

30.436100 -86.425300

#### 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 the **Mid-bay Bridge**, **coordinates 30.436100 -86.425300**.

# Salinity and Temperature

# Average in 2024

20 31
Salinity (ppt) Salinity (ppt)
@ Surface @ Bottom

75 73
Temperature (F) Temperature (F)
@ Surface @ Bottom

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 ( $\mu$ g/L).

#### Total Nitrogen

An essential nutrient for aquatic plants and animals and Total Nitrogen (TN) measures all forms of phosphorus in water, reported in micrograms per liter ( $\mu g/L$ ).

#### Chlorophyll

Chlorophyll (CHL) is a pigment used to estimate algae in water, reported in micrograms per liter ( $\mu g/L$ ).

#### 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

12 209

Total Total Nitrogen (μg/L)

Chlorophyll (µg/L)

8

(µg/L)

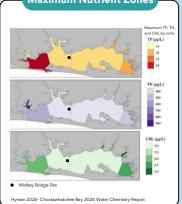
Dissolved Oxygen

Dissolved Oxygen Dissolved Oxyger
Surface Bottom
(mg/L) (mg/L)

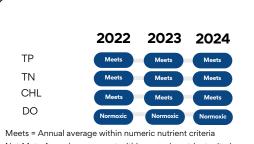
#### **Numeric Nutrient Criteria**

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

#### **Maximum Nutrient Zones**



#### Water Quality Summary



Meets = Annual average within numeric nutrient criteria

Not Met= Annual average not within numeric nutrient criteria

Normoxic= Annual average within normal limits

Hypoxic= Annual average of concern for aquatic life (below 2 mg/L)