

Lake Pontchartrain

SUMMARY

Lake Pontchartrain is characterized by high chlorophyll-a and a low dissolved oxygen and toxic/nuisance bloom symptom expression. Chlorophyll-a expression has increased since 1999, at which time a moderate rating was assigned. Macroalgae has a moderate symptom expression, with the most extreme conditions occurring when the Bonnet Carre is open.

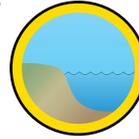
Influencing Factors

Moderate to high nitrogen input and moderate to high susceptibility (low ability for dilution and flushing of nutrients).



Eutrophic Conditions *

Primary symptoms high but problems with more serious secondary symptoms still not being expressed.



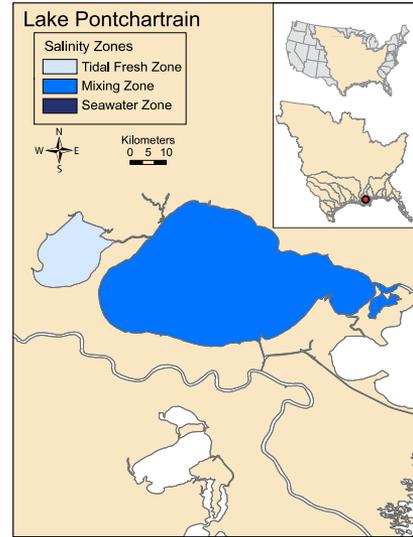
Future Outlook

Nutrient related symptoms observed in the estuary are likely to substantially worsen.



ASSETS Rating

Assessment of Estuarine Trophic Status based on the three factors evaluated in NEEA.



Influence/eutro/future

Unknown

Low

Mod Low

Moderate

Mod High

High

Reliability and Confidence

ASSETS

Unknown

High

Good

Moderate

Poor

Bad

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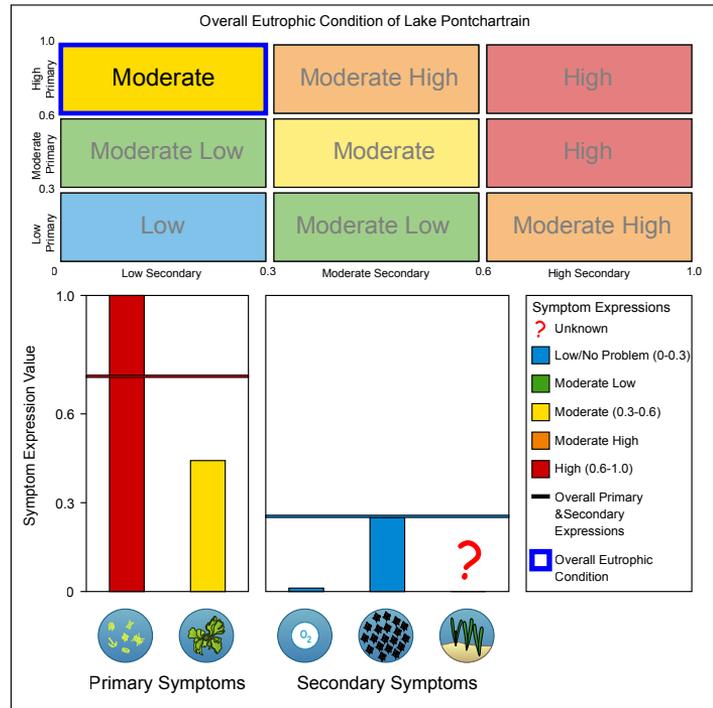
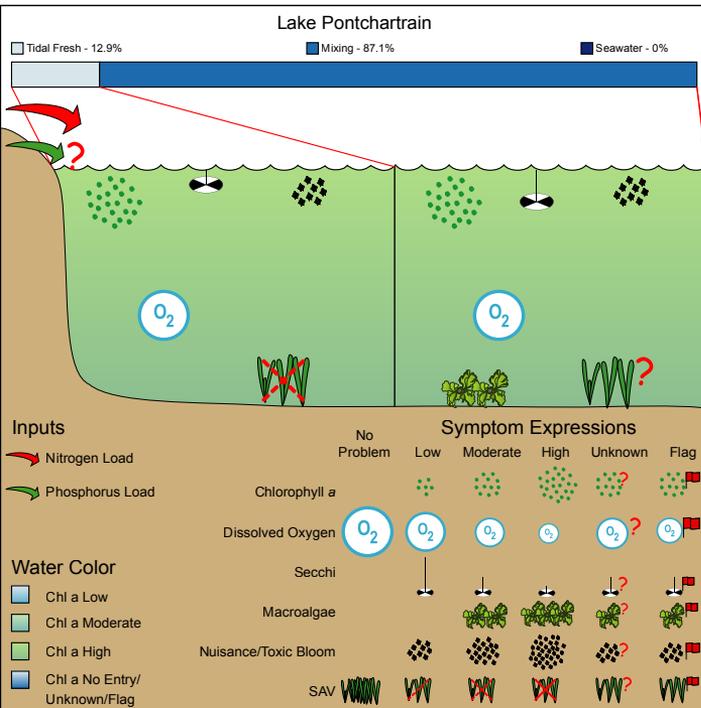
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High

EUTROPHIC CONDITION



WATERSHED AND ESTUARY CHARACTERISTICS

Estuary	Landuse / Population	Watershed Details / Input Loads
Area (km ²)	1,879	Area (km ²) 12,179
Tidal fresh zone area (km ²)	242	Mean elevation (m) 43
Mixing zone area (km ²)	1,637	Max. elevation (m) 158
Saltwater zone area (km ²)	0	Watershed: estuary ratio 6.5
Volume (1,000 x m ³)	6,576,500	TSS (tonne y ⁻¹) 3,120,000
Depth (m)	3.50	TN (kg y ⁻¹) 10,900,000
Tide Height (m)	0.27	TP (kg y ⁻¹) Unknown
Residence Time (d)	125	TSS/est. area (tonne km ⁻² y ⁻¹) 1,661
		TN/est. area (kg km ⁻² y ⁻¹) 5,801
		TP/est. area (kg km ⁻² y ⁻¹) Unknown
	Urban (km ²) 1,207 (10%)	
	Agriculture (km ²) 3,250 (26.8%)	
	Forest (km ²) 6,177 (51%)	
	Wetland (km ²) 1,466 (12.1%)	
	Range (km ²) 8 (0.1%)	
	Barren (km ²) 0 (0%)	
	Total (km ²) 12,108 (0%)	
	Population 714,036	
	Popn: est. area ratio 380	