

Lower Laguna Madre

SUMMARY

There is insufficient data to assess eutrophic conditions in Lower Laguna Madre. However, chlorophyll-a data results show a low symptom expression in 2004, an improvement from a high rating in the 1999 assessment. Significant localized seagrass loss is reported to have occurred near the Arroyo Colorado, a muddy, nutrient-rich source of freshwater.

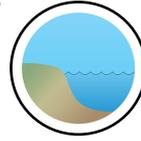
Influencing Factors

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



Eutrophic Conditions *

An Unknown Overall Eutrophic Condition expression will occur if either the Primary or Secondary overall symptom expression is Unknown.



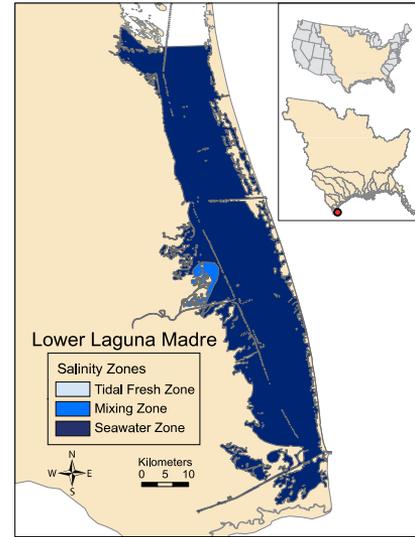
Future Outlook

An Unknown Future Outlook expression will occur if the Expected Changes In Nutrient Load by 2020 is Unknown.



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

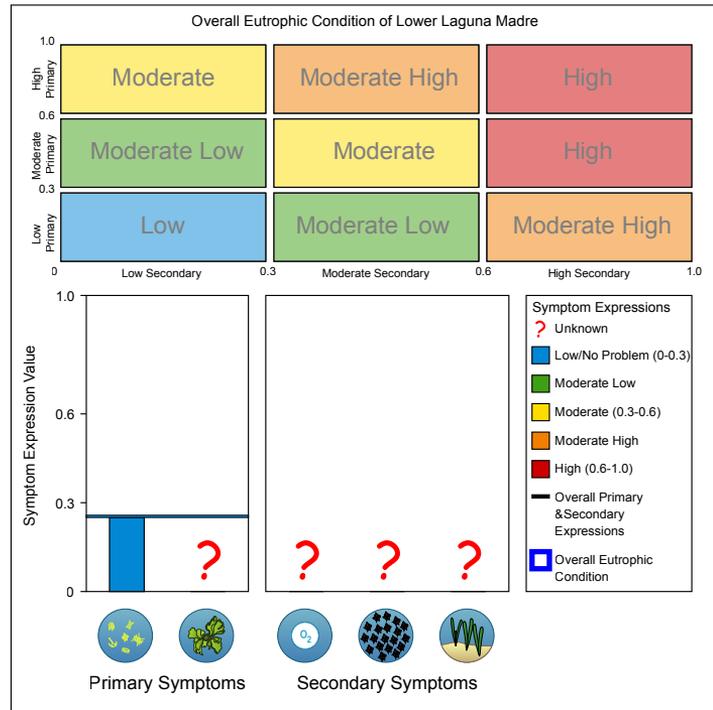
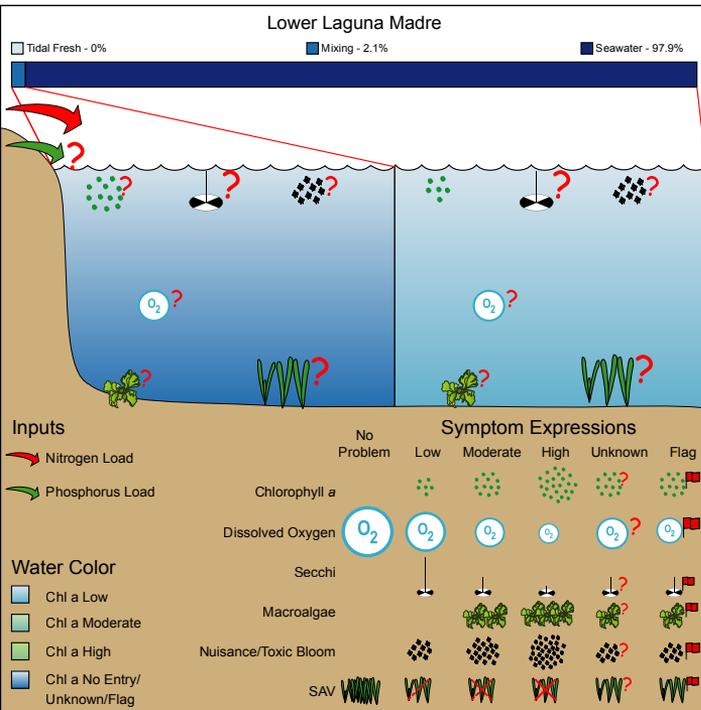
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High

EUTROPHIC CONDITION



WATERSHED AND ESTUARY CHARACTERISTICS

Estuary	Landuse / Population		Watershed Details / Input Loads		
Area (km ²)	1,308	Urban (km ²)	800 (6.1%)	Area (km ²)	13,165
Tidal fresh zone area (km ²)	0	Agriculture (km ²)	4,672 (35.8%)	Mean elevation (m)	43
Mixing zone area (km ²)	27	Forest (km ²)	655 (5%)	Max. elevation (m)	257
Saltwater zone area (km ²)	1,281	Wetland (km ²)	179 (1.4%)	Watershed: estuary ratio	10.1
Volume (1,000 x m ³)	994,080	Range (km ²)	6,742 (51.7%)	TSS (tonne y ⁻¹)	3,180,000
Depth (m)	0.76	Barren (km ²)	0 (0%)	TN (kg y ⁻¹)	12,580,000
Tide Height (m)	0.40	Total (km ²)	13,048 (0%)	DIP (kg y ⁻¹)	Unknown
Residence Time (d)	4	Population	616,541	TSS/est. area (tonne km ⁻² y ⁻¹)	2,431
		Popn: est. area ratio	471	TN/est. area (kg km ⁻² y ⁻¹)	9,618
				DIP/est. area (kg km ⁻² y ⁻¹)	Unknown