

Upper Laguna Madre

SUMMARY

Upper Laguna Madre estuary is characterized by moderate symptom expressions for chlorophyll-a and nuisance/toxic blooms. These ratings have both decreased from 1999 expressions of high. Nitrogen load has also decreased while phosphorous loads remain unknown. Additional data are needed for an accurate evaluation of this system.

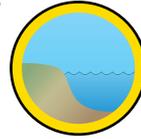
Influencing Factors

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



Eutrophic Conditions *

Level of expression of eutrophic conditions is substantial.



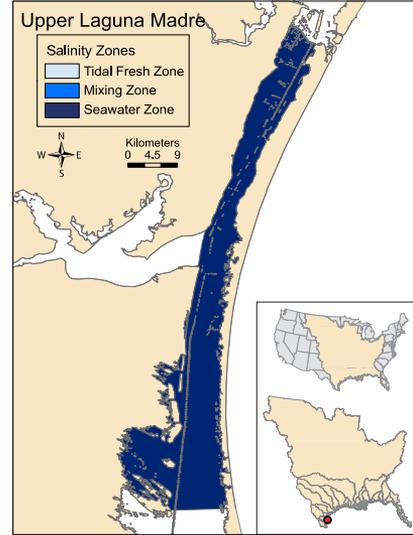
Future Outlook

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

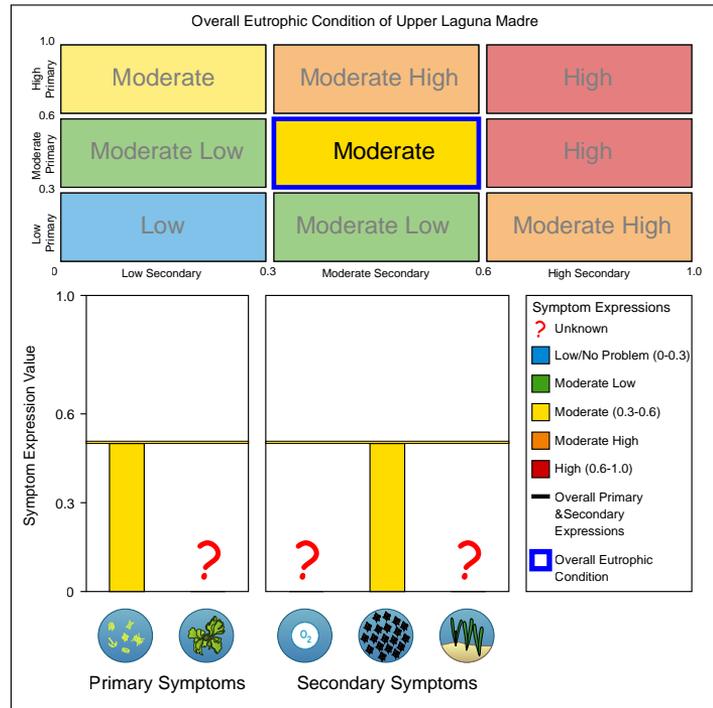
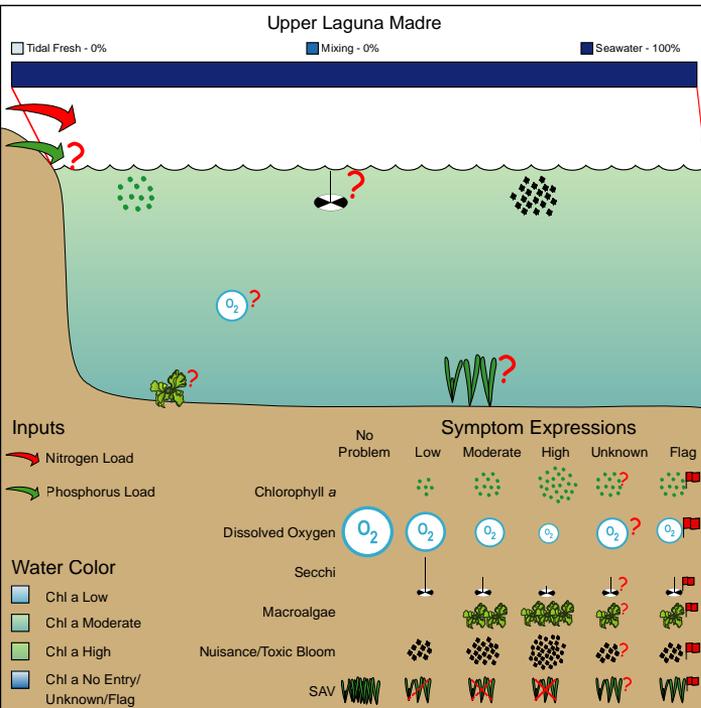
?

*

**

High

EUTROPHIC CONDITION



WATERSHED AND ESTUARY CHARACTERISTICS

Estuary		Landuse / Population		Watershed Details / Input Loads	
Area (km ²)	591	Urban (km ²)	290 (2.8%)	Area (km ²)	2,047
Tidal fresh zone area (km ²)	0	Agriculture (km ²)	2,766 (26.3%)	Mean elevation (m)	10
Mixing zone area (km ²)	0	Forest (km ²)	373 (3.5%)	Max. elevation (m)	72
Saltwater zone area (km ²)	591	Wetland (km ²)	282 (2.7%)	Watershed: estuary ratio	3.5
Volume (1,000 x m ³)	200,940	Range (km ²)	6,822 (64.8%)	TSS (tonne y ⁻¹)	60,200
Depth (m)	0.34	Barren (km ²)	0 (0%)	TN (kg y ⁻¹)	3,440,000
Tide Height (m)	0.15	Total (km ²)	10,533 (0%)	DIP (kg y ⁻¹)	Unknown
Residence Time (d)	5	Population	2,128	TSS/est. area (tonne km ⁻² y ⁻¹)	102
		Popn: est. area ratio	4	TN/est. area (kg km ⁻² y ⁻¹)	5,821
				DIP/est. area (kg km ⁻² y ⁻¹)	Unknown