

Healing the Hypoxic Gulf



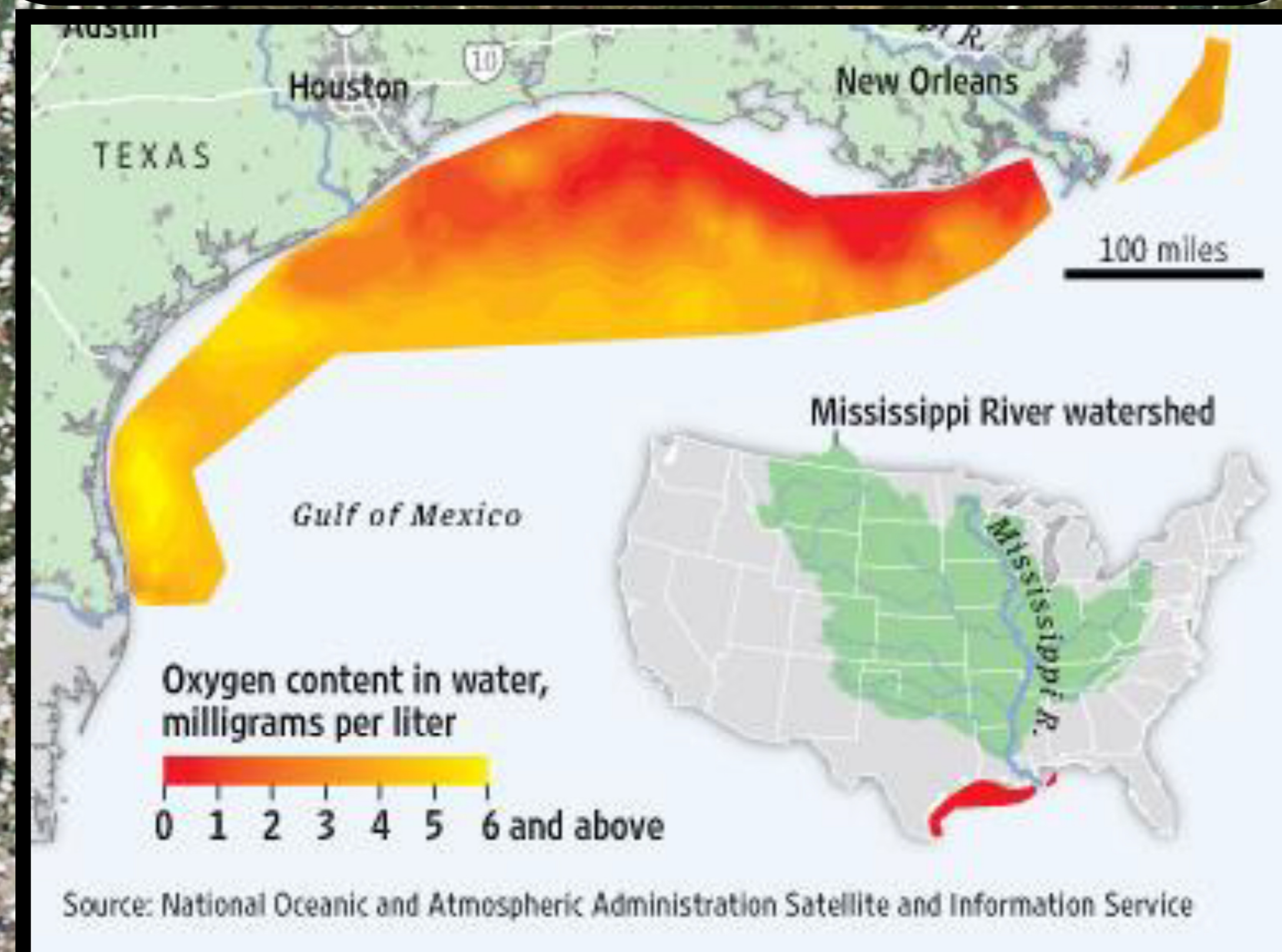
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 GPS: The World's Water

Goal:

We suggest placing floating wetlands in the Mississippi River between its mouth and New Orleans, LA, to filter out pollutants before they reach the Gulf of Mexico. Our priorities for this design are that it is self-sustaining, ecological, and economically stimulating.

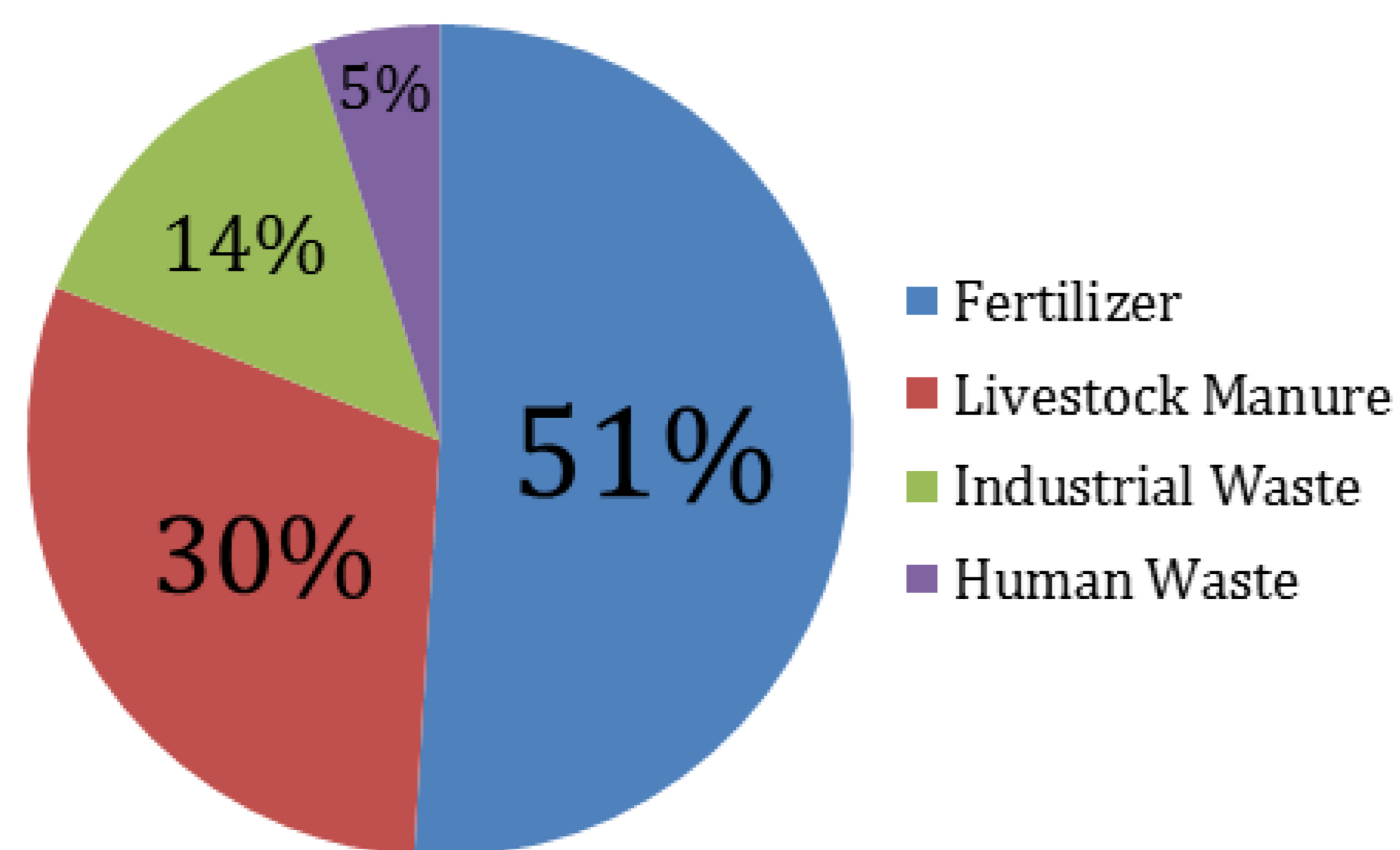
Problem:

Pollution in the MS River Basin flows into the Gulf of Mexico below Louisiana



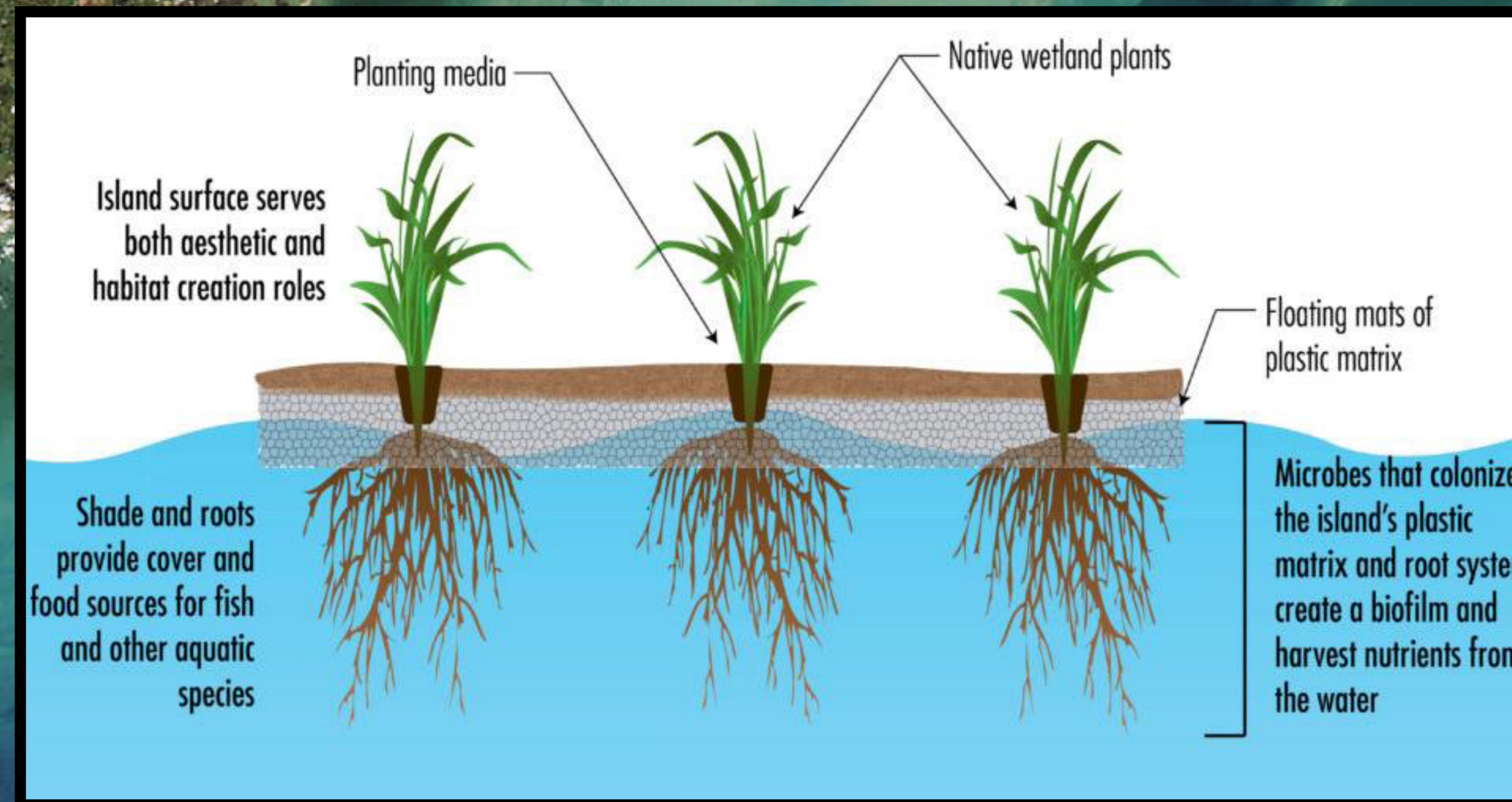
Dead Zone: An area of water with oxygen levels too low for life to exist

The Main Sources of Nitrogen in the MS River



Nitrogen and phosphorus are the most abundant chemicals in the gulf and cause eutrophication (the growth of plants and death of animals from hypoxia).

Solution: Floating Wetlands



A floating wetland is a floating artificial garden that allows denitrifying plants to be placed in bodies of water outside of a dying, preexisting ecosystem.

Pros

- Low Cost
- Environmentally Beneficial
- Low Maintenance
- Aesthetically Pleasing

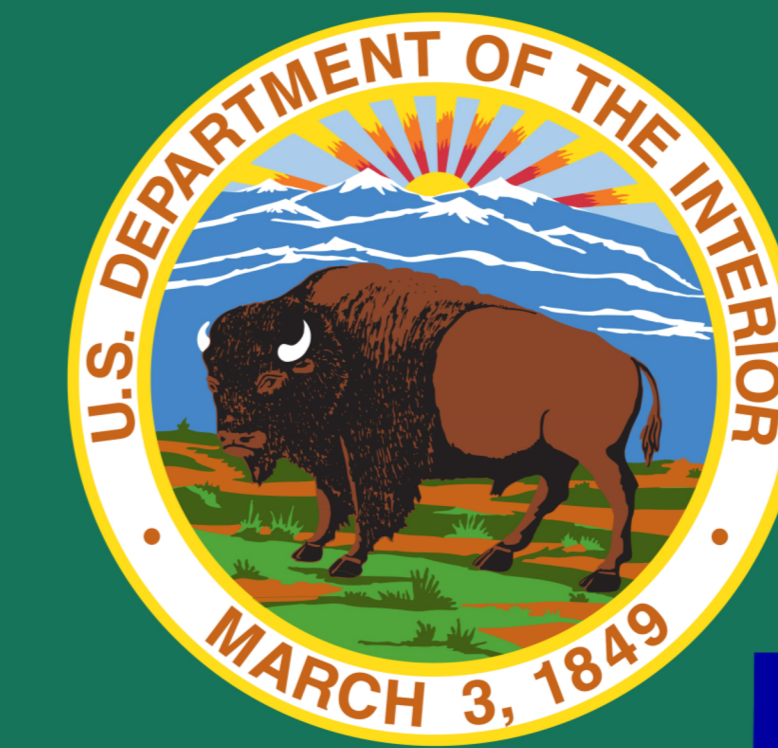


Cons

- Removes Pollution Slowly

Implementation:

The wetlands can be paid for with grants from US government departments such as:



We recommend using many small interconnected islands throughout the lower parts of the Mississippi River. The results can be measured with annual assessments of water pollution.

Acknowledgements:

We would like to thank Professor Stoddard and Professor Rosbach for their support and guidance, and also Kevin Lovell and Dr. Nancy Rabalais for their perspectives on the subject.

References

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