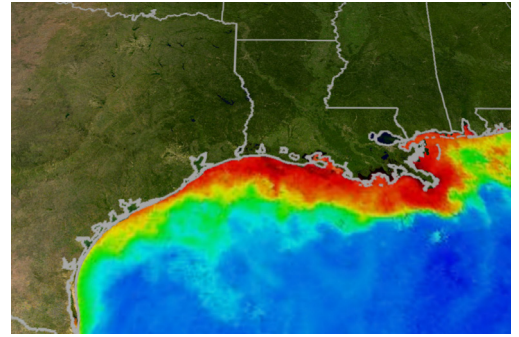


The DEAD Zone Research Questions

You and your partner will be researching a condition called Hypoxia that creates a location called the “Dead Zone”. You will use the following links to conduct your research and your search for answers. The Articles are on the website as well.



- <http://news.nationalgeographic.com/news/2013/06/130621-dead-zone-biggest-gulf-of-mexico-science-environment/>
- <http://science.time.com/2013/06/19/this-years-gulf-of-mexico-dead-zone-could-be-the-biggest-on-record/>
- http://www.classzone.com/books/earth_science/terc/content/investigations/es2206/es2206page01.cfm?chapter_no=investigation

PART ONE - What is it?

1. What is the “Dead Zone”?
2. How does it form?
3. When is it the worst and why?
4. How are the Zumbro River Watershed and the “Dead Zone” related? Use the following link to find out information about the Zumbro River Watershed: <http://www.pca.state.mn.us/index.php/water/water-types-and-programs/minnesotas-impaired-waters-and-tmdls/maps-of-minnesotas-impaired-waters-and-tmdls.html>
5. In a couple of paragraphs explain how this is a classic example of the Snowball Effect.
6. What is the main limiting factor that contributes to the Dead Zone?
7. Does this happen anywhere else on Earth?

PART TWO- The Search for Solutions

Using the 2 links provided below, develop an answer for question 8.

- <http://www.scientificamerican.com/article.cfm?id=fertilizer-runoff-overwhelms-streams>
- <http://ga.water.usgs.gov/edu/nitrogen.html>

Student solutions: How do we stop it?

8. With your teammate explain in detail one way you could help reduce or eliminate the Dead Zone in the Gulf of Mexico.

When everyone is finished you will be sharing your information.

Enrichment Information:

The Zumbro River Watershed Assessment Document provides in depth information on the watershed, including: land use, miles of streams, health of waterways, and more. The document can be found here: http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_023178.pdf

