



Kicking Off Mississippi's Science Assessment

Gulf of Mexico Hypoxia Task Force Meeting
February 4, 2020 Washington D.C.
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Mississippi's Approach: Nutrient Trends and Reductions from Conservation

- Undertaking two separate analysis efforts in the next 12-24 months
- Analyze existing water quality and stream flow data to establish nutrient loads, yields, and concentrations
- Identify core conservation practices and use conservation tracking framework to determine Nitrogen and Phosphorus loss reduction practice efficiencies that are appropriate for use in Mississippi and calculate reductions achieved for those practices

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Trends Analysis: Concentrations, yields, and Loads for TN and TP

- Work collaboratively with the USGS to perform analysis
- Utilize a combination of ambient monitoring data collected monthly by MDEQ from 20 locations statewide in combination with 2 USGS stations
- All stations have flow data in addition to WQ data
- Analysis covers a 12 year period (2007-2018). The dataset will be split between 2 periods: 2007-2013 as older record and 2014-2018 to represent current condition
- Loads, yields and concentrations will be summarized by site, major basin, and landuse category
- Results will be made available via data visualization tools

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Capturing Conservation Efforts

- Mississippi ranks in the top 5 states in the nation for the amount of conservation dollars put into practice
- Building on the work of the Task Force an other states, MDEQ will work with MSU to implement the Conservation Tracking Framework in MS
- Identify core practices (used in MS) that reduce nitrogen and phosphorus inputs into receiving streams
- Update reduction efficiencies for those practices as needed to represent conditions in MS
- Using established efficiencies calculate nitrogen and phosphorus reductions achieved through implementation of those practices

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Future of Science Assessments

- Build on what works and what other states have produced
- By using the same methodologies and metrics, we can build tools that are comparable
- By building on the work of other states and researchers working with the HTF, analyses can be expanded and strengthened
- Develop tools and metrics that better track nutrient reduction efforts on multiple fronts (point source and nonpoint source, concentrations and loads)
- Cooperation, collaboration, and partnerships are critical