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Page #	Break-out	Title	Rank
1	P1		
2	P1		
3	P3		
4	P1		
<p>           **PO = Physical Oceanography      FE = Fate &amp; Effect      BIO = Biology            PS = Protected Species              SE = Social &amp; Economic      OT = Other         </p>			



**BOEM Information Need:**

BOEM will use the GOMR cumulative impacts modeling to support compliance with the OCSLA and CAAA, which will be documented in the NEPA process when preparing Environmental Impact Statements and Assessments

**Date Information is Required:**

August 2015- Multi Sale 2017-2022

**BOEM OCS Region**

**Tentative Ranking: \_\_**

## Background:

### A) Relationship with Previous Work/Efforts

- Under the CAA, USEPA is required to set NAAQS for pollutants considered harmful to public health and environment and required USEPA to periodically review the science and standards
  - USEPA has set NAAQS for six criteria pollutants
  - USEPA has issued two new 1-hour NAAQS and lowered the 8-hour ozone standard
- Under the OCSLA, BOEM is required to comply with the NAAQS so that offshore OCS activities do not significantly impact the air quality of any State
  - Because of changes, a cumulative impacts assessment is needed, including modeling

## Background:

### **B) Relationship with Concurrent/Future Efforts**

- Last published cumulative impacts modeling in the GOMR- Gulf of Mexico Air Quality Study (GMAQs) in 1995
- Past studies- GOADS-2011 emissions
- Concurrent Efforts- Cumulative Impacts Modeling in the GOMR will be used with the Trends Analysis of OCS Emissions in the GOMR to support NEPA documentation whether or not OCS sources impact the NAAQS of any State

**BOEM OCS Region**

**Tentative Ranking:\_\_**

## Study's Objectives:

To determine if the Gulf of Mexico cumulative OCS sources impact the short term and annual NAAQS of any state, in particular non-compliance and Class I areas

**BOEM OCS Region**

**Tentative Ranking: \_\_**

## Study's Methods:

Using USEPA Guidelines in Appendix W:

- To determine the appropriate air quality model
- To set the domain, including nested grids over non-compliance and Class I areas
- To pre-process the onshore (EPA NEI) and OCS emissions (GOADS-2011)
- To pre-process the meteorological data
- To perform air quality modeling
- To assess the results looking at the impact to shoreline, non-attainment and Class I areas

**Addition *Pertinent* Information:**

- Lack of current information is a major weakness in BOEM's GOMR NEPA documents according to USEPA
- Alaska conducting a similar study- consistency between regions for methods





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**BOEM OCS Region**



**BOEM Information Need:**

- BOEM will use the emissions trends analysis and any maps produced to support the NEPA process when preparing Environmental Impact Statements and Assessments
- Intent is that with Cumulative Impacts Modeling that if BOEM emissions are consistent, BOEM would not have to reapply Cumulative Impacts Modeling every time USEPA updates NAAQS

**Date Information is Required:**

August 2015- Multi Sale 2017-2022

**BOEM OCS Region**

**Tentative Ranking:\_\_**

## Background:

### **A) Relationship with Previous Work/Efforts**

- Under OCSLA, BOEM is required to comply with the NAAQS so that offshore OCS activity do not significantly impact the air quality of any State
- Changes to the NAAQS and ongoing needs, require BOEM to re-assess impacts
- BOEM has conducted several GOMR emissions inventories (2000, 2005, 2008, 2011)
- Limited emissions trends analysis has been performed on this data
- Detailed trends analysis is needed for NEPA documentation
- Variables include platform versus non-platform, deep water versus shallow water, time series, and geographical display

**BOEM OCS Region**

**Tentative Ranking: \_\_**

## Background:

### **B) Relationship with Concurrent/Future Efforts**

- Concurrent Efforts- Cumulative Impacts Modeling in the GOMR will be used with the Trends Analysis of OCS Emissions in the GOMR to support NEPA documentation whether or not OCS sources impact the NAAQS of any State

## **Study's Objectives:**

- To perform detailed emissions trends analysis on all GOMR 2000, 2005, 2008, and 2011 emissions data, including platform and non-platform data
- To perform detailed emissions trends analysis of highest contributor of each pollutant, varying depth categories, and drilling versus production emissions
- To conduct geographical trends analysis

## Study's Methods:

- To perform detailed emissions trends analysis on all GOMR emissions data using a statistical package
- To perform emissions trends analysis on variables such as highest contributor, depth location, and type of emissions
- To geographically analyze the emissions data using ArcGIS 10 software

**BOEM OCS Region**

**Tentative Ranking: \_\_**

**Addition *Pertinent* Information:**

- Lack of current information is a major weakness in BOEM's GOMR NEPA documents according to USEPA