

Environmental Studies Program: Studies Development Plan | FY 2019–2021

Title	BOEM Graduate Student Award for Applied Scientific Research
Administered by	Headquarters Office
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Procurement Type(s)	Cooperative Agreement
Approx. Cost	\$25 (in thousands)
Performance Period	FY 2019
Date Revised	February 26, 2018
PICOC Summary	
<i><u>Problem</u></i>	BOEM relies on data from its scientific research to inform its policies and permitting actions. There are many types of data and information that would assist BOEM, but scientific research is often constrained by available personnel and resources.
<i><u>Intervention</u></i>	A graduate student working toward their Master’s or Doctoral degree will be chosen to receive research and tuition funding by BOEM, and the student’s thesis or dissertation will be used by the Bureau to make informed management decisions.
<i><u>Comparison</u></i>	Data collected from this study will be used to fill one of BOEM’s current information needs. The specific research topic will be chosen by BOEM’s management and will be based on the immediacy of an information need among the Bureau’s research disciplines.
<i><u>Outcome</u></i>	The research conducted by the chosen graduate student funding recipient will address one of BOEM’s current information needs. In turn, the student will learn how their hypothesis-driven research will be applied toward BOEM’s decision-making.
<i><u>Context</u></i>	The graduate student chosen to receive funding from BOEM will be from an academic institution that is a member of one of the same Cooperative Ecosystem Study Units (CESUs) as BOEM.

BOEM Information Need(s): BOEM needs to enhance its current knowledge of the various natural, socio-economic, and cultural resources and systems that it stewards. The BOEM Graduate Student Award for Applied Scientific Research will financially support a graduate student who is performing innovative marine science research, allow the use of the student’s data to fill a Bureau information need, and demonstrate how scientific results may be applied to inform Federal management decisions.

Background: BOEM relies on the best available data to inform its decisions. These data inform the development of impact assessment documents and also ensure that BOEM adheres to its diverse Federal mandates to protect marine, coastal, and human environments and to preserve natural and cultural resources that may be adversely impacted by its decisions. BOEM supports a variety of scientific research disciplines and continuously seeks innovative methodologies to receive the best available data to

support its policies. The agency also supports the career development of the next generation of marine science researchers. The financial support of a graduate student during their academic career will have the reciprocal value of providing BOEM with needed data to fill a current information need in one of its supported research disciplines and allow the student to learn how their results may be utilized in the agency's decisions for managing energy and mineral resources along the Outer Continental Shelf (OCS). BOEM, however, does not have the authority to issue grants to academic institutions. The BOEM Graduate Student Award for Applied Scientific Research, therefore, will be created as cooperative agreement between the Bureau and an appropriate institution in an affected State in which both entities are members of the same Cooperative Ecosystem Studies Unit (CESU).

Objectives:

- 1) To receive necessary data to fill current information needs for one of BOEM's research disciplines.
- 2) To support innovative research methodologies by engaging the next generation of marine scientists.

Methods: BOEM will choose a study topic based on an important information need from one of its supported research disciplines. The Chairs of appropriate departments at academic institutions in which that institution and BOEM are both members of the same CESU will then nominate one graduate student (Master's or Doctoral degree track) to submit a research proposal to BOEM for the academic institution. The proposal must correspond to the research topic indicated by BOEM, and research will be conducted in an area that may be impacted by BOEM's decisions. All received proposals will be evaluated in regards to the student's understanding of how BOEM will apply their data, the scientific integrity of the research methodology, and the cost-effectiveness and innovativeness of the student's overall research design. BOEM will then choose a single student as the recipient of the BOEM Graduate Student Award for Applied Scientific Research in the amount of \$25,000.

The total awarded amount is to be transferred solely to the recipient graduate student and is to be used for their respective tuition- and research-related costs. The student, who will be serving as a representative for their respective academic institution, will be required to submit a report to BOEM detailing their research. The report will be submitted within a mutually-agreed time-frame and may be later adapted to serve as a chapter or the complete basis of the student's thesis or dissertation.