



FINDING OF NO SIGNIFICANT IMPACT

The National Centers for Coastal Ocean Science (NCCOS), a division of the National Ocean Service (NOS), National Oceanic and Atmospheric Administration (NOAA) prepared a Programmatic Environmental Assessment (PEA) evaluating the potential environmental impacts of funding activities to prevent, control, and mitigate harmful algal blooms. NCCOS's preferred alternative is the Proposed Action alternative, to fund activities, primarily on a competitive and interagency basis to implement small scale demonstration projects in one of more of the following categories of activities:

1. Physical Control Methods
 - a. Flocculation
 - b. Sediment resuspension, burial, and removal
 - c. Cell harvesting & removal
 - d. Water column mixing

2. Chemical Control Methods
 - a. Native macroalgae & extracts
 - b. Barley straw
 - c. Biosurfactants
 - d. Hydrogen peroxide
 - e. Copper
 - f. Silica
 - g. Extracted/purified algicidal compounds

The Council on Environmental Quality (CEQ) Regulations state that the determination of significance using an analysis of effects requires examination of both context and intensity, and list ten criteria for intensity (40 C.F.R 1508.27). In addition, the NOAA Administrative Order (NAO) 216-6 Section 6.01b.1-11 provides eleven criteria – the same ten as the CEQ Regulations and one additional, for determining whether the impacts of a proposed action are significant. Each criterion is discussed below with respect to the proposed action and considered individually as well as in combination with the others. The analysis in the PEA supports the following findings and determinations.

a. Has the agency considered both beneficial and adverse effects? (A significant effect may exist even if the Federal agency believes on balance the effect will be beneficial.)

The agency has considered both beneficial and adverse effects, and no significant effects are anticipated. The beneficial effects include an increase in knowledge on prevention, control, and mitigation of harmful algal blooms. Since the action is to fund small-scale (an acre or less in size) demonstration projects, the successful techniques will not have a significant beneficial effect on the environment because any improvement would be temporary and localized. Adverse effects could include impacts to a small number of plants and animals in areas where the demonstration projects would occur, but these impacts would be minimal and temporary.

Planned mitigation measures include not conducting research in ecologically sensitive areas (e.g., coral reefs, protected wetlands, marine sanctuaries, submerged aquatic vegetation beds, refuges) or near possibly sensitive species (e.g., nesting birds, marine mammals, and sea turtles). None of the anticipated effects are considered significant individually or cumulatively

b. To what degree would the proposed action affect public health and safety?

None. However, the increased knowledge on the prevention, control, and mitigation of harmful algal blooms, may, after more research and inclusion of other factors, lead to methods to prevent, control, and mitigate harmful algal blooms.

c. To what degree would the proposed action affect unique characteristics of the geographic area in which the proposed action is to take place?

None. Geographic areas which have unique characteristics are excluded from the research areas (e.g., coral reefs, protected wetlands, marine sanctuaries & refuges, etc.).

d. To what degree would the proposed action have effects on the human environment that are likely to be highly controversial?

None. There is no controversy associated with the project. All demonstration projects will collaborate with the surrounding community on what is being tested, how, and why to ensure public engagement and concurrence.

e. What is the degree to which effects are highly uncertain or involve unique or unknown risks?

None. The proposed action presents no unknown risks. Biological control methods were specifically excluded from funding due to the uncertainty of the potential impacts on organisms other than harmful algae. Any adverse impacts would be minimal due to the small-scale of the demonstration projects.

f. What is the degree to which the action establishes a precedent for future actions with significant effects or represents a decision in principle about a future consideration?

None. Future implementation of PCM techniques at a scale likely required to control or eliminate a bloom would require significantly more research and the inclusion of considerations outside the purview of the PCMHAB program (e.g., societal acceptance, regional and local environmental policies, and integration with other mitigation techniques). Assessing the possibility of future actions with significant effects cannot be determined based on likely outcomes from PCMHAB research alone.

g. Does the proposed action have individually insignificant but cumulatively significant impacts?

No. Adverse effects could include impacts to a small number of plants and animals in areas where projects would occur, but these impacts would be minimal and temporary. Considering the small area in which the projects are conducted, individual and cumulative impacts are likely to be insignificant.

h. What is the degree to which the action adversely affects entities listed in or eligible for listing in the National Register of Historic Places, or may cause loss or destruction of significant scientific, cultural, or historic resources?

None. NOAA determined that the proposed action would have no adverse effect on historic Properties as the work would not be conducted in those areas.

i. What is the degree to which endangered or threatened species, or their critical habitat, as defined under the Endangered Species Act of 1973, are adversely affected?

None. The projects will not be conducted in areas that threatened or endangered species protected by the federal government under the Endangered Species Act are known to occur, unless otherwise requested and permitted by the trust Federal agency.

j. Does the proposed action have a potential to violate Federal, state, or local law for environmental protection?

No. All projects must be compliant with all applicable Federal, state, or local laws for environmental protection. The individual project proposals must address these laws and obtain any necessary approvals or permits prior to funding.

k. Will the proposed action result in the introduction or spread of a non-indigenous species?

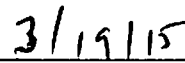
No. Measures will be taken to mitigate the accidental introduction or spread of non-indigenous species (e.g., boat hull cleaning between water bodies, sterilization of materials placed in water bodies, etc.). All PCM techniques involving the introduction of whole or live organisms are explicitly excluded from the program.

DETERMINATION

In view of the information presented in this document and the analysis contained in the supporting PEA prepared for the National Centers for Coastal Ocean Science, it is hereby determined that the proposed action – Prevention, Control, and Mitigation of Harmful Algal Blooms – will not significantly impact the quality of the human environment . In addition, coordination with the National Marine Fisheries Service during the analysis process aided NOS's analysis of potential impacts to living marine resources and with implementation of mitigation measures identified in the PEA, all beneficial and adverse impacts of the proposed action have been addressed to reach the conclusion of no significant impacts. Accordingly, preparation of an environmental impact statement for this action is not necessary.



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Date