

Presentation 19: Brandi Carrier

Paleolandforms, Paleocultural Landscapes, and BOEM's Section 106 Process

In performing Section 106 review, BOEM is required to identify National Register-eligible historic properties within the areas potentially affected by an undertaking; assess effects to historic properties; and then resolve any adverse effects through avoidance, minimization, and mitigation. BOEM's preferred approach to managing underwater cultural heritage resources in the Gulf of Mexico Region is avoidance of adverse effects by applying protective buffers to possible resources, while permitting development to occur outside of those buffers. For many years, this management model has worked successfully to protect small, discrete archaeological sites – like shipwrecks and downed aircrafts – without having to trouble with costly National Register eligibility determinations. This is especially efficient and effective in the context of oil and gas developments, where activities can be easily microsited around these protective avoidance buffers.

By contrast, addressing BOEM's Section 106 review responsibilities for *paleolandforms* is far more difficult. Paleolandforms, which may contain precontact period archaeological sites and form paleocultural landscapes of deep importance to descendent Native American tribes, are more challenging to identify, characterize, and assess for National Register eligibility than discrete historic period archaeological sites. This is because (1) they require costly and extensive direct sampling programs and (2) clear agreement has not been reached on how to determine National Register eligibility for paleolandforms that do not exhibit the properties of an archaeological site, but still are valued paleolandscapes. Total avoidance of paleolandforms in order to avoid performing National Register eligibility determinations is impracticable due to their size / extent and less discrete boundaries. Additionally, the size and nature of some energy development activities – such as the construction of windfarms – renders avoidance of these expansive landforms within an already constrained Wind Energy Area truly infeasible. The same is likely for dredging activities, where demand for beach renourishment sands is increasing; availability is limited; and modern re-worked sands are situated superimposed atop sensitive paleolandforms. Insofar as the Gulf of Mexico Region is considering renewable energy development and increased dredging for beach renourishment, these issues will continue to challenge effective and efficient underwater cultural heritage management practices. Thus, a new approach is warranted.

This presentation will underscore the challenges of implementing the old model of BOEM's underwater cultural heritage management in the context of Section 106 review for paleolandscapes, and will introduce discussion of a new Section 106 regulatory approach for the Gulf of Mexico region.

Abridged Abstract

BOEM's preferred approach to managing underwater cultural heritage resources in the Gulf of Mexico Region is avoidance of adverse effects by applying protective buffers to possible resources, while permitting development to occur outside of those buffers. For many years, this management model has worked successfully to protect small, discrete historic period archaeological sites, such as shipwrecks and downed aircrafts. Such an approach is especially efficient and effective in the context of oil and gas developments, where activities can be easily microsited around these protective avoidance buffers.

By contrast, addressing BOEM's Section 106 review responsibilities for *paleolandforms* is far more difficult. Paleolandforms, which may contain precontact period archaeological sites and form paleocultural landscapes of deep importance to descendent Native American tribes, are more challenging to identify, characterize, and assess for National Register eligibility than discrete historic period archaeological sites. Moreover, total avoidance of paleolandforms is neither feasible nor appropriate. Insofar as the Gulf of Mexico Region is considering renewable energy development and increased dredging for beach renourishment, these issues will continue to challenge effective and efficient underwater cultural heritage management practices. Thus, a new approach is warranted.

This presentation will underscore the challenges of implementing the old model of BOEM's underwater cultural heritage management in the context of Section 106 review for paleolandscapes, and will introduce discussion of a new Section 106 regulatory approach for the Gulf of Mexico region.