United States Department of the Interior

BUREAU OF LAND MANAGEMENT
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Whiting Harbor Research
DOI-BLM-AK-A020-2015-0004-EA

Applicant: The State of Alaska Department of Fish and Game and the Smithsonian Environmental Research Center

FINDING OF NO SIGNIFICANT IMPACT

Background

In January 2015, the Bureau of Land Management (BLM) prepared an Environmental Assessment (EA) (DOI-BLM-AK-A020-2015-0004-EA) analyzing the effects of testing equipment and measuring the concentration and duration of biocide compounds needed to cause mortality of the invasive tunicate *Didemnum vexillum (D. vexillum).*

Rock salt (block or granular), chlorine (granular or puck), cement dust, dye, and chlorine-salt combination treatments will be delivered into dome-enclosures (1.25 m in diameter and 0.5 m in height), via a 3/4" hose. The project will occur either before or after the subsistence and commercial herring egg fishery. This project will identify proven and cost-effective eradication methods to determine if a bay-wide control treatment is a feasible means to attempt to eradicate invasive *D. vexillum* from Whiting Harbor.

Finding of No Significant Impact

This action and its effects have been evaluated consistent with the Council on Environmental Quality regulations for determining *significance*. Per 40 CFR § 1508.27, a determination of *significance* requires consideration of both context and intensity. The former refers to the relative context in which the action would occur such as society as a whole, affected region, affected interests, etc. The latter refers to the severity of the impact.

Context

The project would occur on BLM federally managed intertidal and filled submerged lands within Whiting Harbor. The authorization would allow for treatments to occur within approximately 717,725 $m^2$of bottom surface area under Federal jurisdiction within the harbor. The project will affect no more than 200 m^2 out of a total bottom surface area of 717,725 m^2, or approximately .028 percent of bottom surface area in Whiting Harbor.

The volume of water in Whiting harbor is 6,986,441 m^3. The treatment dome volumes will contain 27.2 m^3 of salt, chlorine, cement, or chlorine-salt combination. This is approximately .00038 percent of the volume of water within Whiting Harbor. Treatment volumes are extremely small relative to the large volume of water and tidal circulation in Whiting Harbor and Sitka Sound. Any escaped treatments would be quickly diluted and disperse by strong tidal and current circulation in Whiting Harbor.

Intensity

1. *Impacts that may be both beneficial and adverse.*

The EA considered and disclosed potential beneficial and adverse effects of the alternatives. For example, the EA discloses that the Proposed Action Alternative could cause temporary loss of all benthic flora and fauna inside the dome, but they are expected to recolonize quickly (EA, p. 13). Conversely within the Proposed Action Alternative the EA acknowledges Smithsonian Environmental Research Center lab experiments, which concluded that 62 parts per thousand of rock salt in solution proved fatal to the invasive tunicates (*D. vexillum*) (EA, p. 13). The EA also discloses that in the No Action Alternative the consequence of no action on the distribution and persistence of *Didemnum vexillum* is largely unknown, though it is likely that it will persist within Whiting Harbor and a risk of spread from this site to others in Alaska will remain (EA, p. 12).

2. *The degree to which the proposed action affects public health and safety.*

The identification of effective treatments to control or eliminate *D. vexillum* would reduce potential health and safety issues for individuals participating in activities within Whiting Harbor. Treatment concentrations will be diluted and dispersed rapidly; therefore pose no harm to public health and safety.

3. *Unique characteristics of the geographic area such as proximity of historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.*

No unique characteristics would be affected by the Proposed Action. Project activities will take place in intertidal and filled submerged lands within Whiting Harbor. While historic resources are located within the project area the Proposed Action will have no effect on these resources. Further the marine environment in Whiting Harbor is not considered unique within the context of Sitka Sound.

4. *The degree to which the effects on the quality of the human environment are likely to be highly controversial.*

There is no known controversy concerning the effects of this Proposed Action on the quality of the human environment. A summary of the proposed project was posted to the BLM's national NEPA register website. Comments were solicited through the Daily Sitka Sentinel Record newspaper. A Notice of the Proposed Action and solicitation of comments was published on the What's Up Alaska list server, and mailed to interested Native organizations. Eighty-three stakeholders with previously demonstrated interest also received a notice. A public service radio announcement was placed on the regional radio station. Public service announcement flyers

were also posted in prominent Sitka locations. The deadline for comments was Monday December 8, 2014. A total of five comments were received. All commenters were supportive of the project. One comment questioned what chemical compounds are in the treatment dye and could they have negative effects. The EA analyzed this potential issue and found that the dye is an inert and non-toxic dye and will have no effect on any organisms (EA, p. 8) Other comments identified the importance of the subsistence and commercial herring fishery in Sitka Sound. No in-water work will be performed during subsistence and/or the commercial herring egg fishery to eliminate any potential conflicts.

5. *The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.*

There are no unique or unknown risks associated with the Proposed Action. Specialized tasks and treatment procedures would be performed by the Alaska Department of Fish and Game and the Smithsonian Environmental Research Center employees with previous experience conducting projects similar in nature to the Proposed Action. All treatments have been previously performed in lab experiments.

6. *The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.*

This decision would not set a precedent for future actions with significant effects. No significant effects were revealed in the EA and future projects similar in nature would be individually analyzed in separate NEPA documents.

7. *Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.*

No cumulatively significant impacts were identified within the EA.

8. *The degree to which the action may adversely affect districts, sites, highways, structures, or objects 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.*

The project will take place on submerged lands that are part of the Fort Rousseau site (SIT-0732), which contain a variety of historic artifacts dumped in the harbor and along neighboring beaches by the military (Pullnow 2014). However, the proposed project is designed to minimally disturb the seafloor due to the project's goal of minimizing the spread of the invasive D. vexillum; therefore there will be no foreseeable disturbance of any associated underwater historic resources. Additionally, the project's underwater treatments using chlorine, salt and cement dust will have no adverse chemical effects on submerged cultural resources, which are constructed of steel, lead, ceramic and concrete, during the short period of time that the treatment solutions are applied. Treatments will be quickly diluted and dispersed by strong current circulation.

9. *The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.*

Humpback whales are the only T&E species thought to inhabit the area. Humpback whales congregate in Sitka Sound and near Whiting Harbor in the late winter to early spring to feed on pre-spawn Pacific herring, and then disperse in April, presumably following the herring. Through the T&E evaluation a determination of no effect to threatened or endangered species was determined.

10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

The Proposed Action does not threaten to violate any law. The Ring of Fire Record of Decision (ROD 2008) provides the overall long-term management direction for lands encompassed by the Proposed Action (EA, p. 6)

Conclusion

Therefore, on the basis of the information contained in the EA, and all other information available to me, it is my determination that:

1. None of the environmental effects identified meet the definition of significance as defined by context and intensity considerations at 40 CFR § 1508.27;
2. The alternatives are in conformance with Ring of Fire ROD (2008); and
3. The Proposed Action and alternatives do not constitute a major federal action having a significant effect on the human environment.

Therefore, neither an Environmental Impact Statement nor a supplement to the existing EA is necessary and neither will be prepared.

/s/ Dennis C. Teitzel *1/27/2015*

Dennis C. Teitzel
Glennallen Field Manager

Date

Attachments

BLM 2015. Environmental Assessment: Whiting Harbor Research DOI-BLM-AK-A020-2015-0004-EA