

Final Technical Evaluation
of the
Northeast Consortium project development award:
**“Pilot project to assess need and initialize a methodology to groundtruth existing
multi-beam and side-scan sonar seafloor charts”**
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Anonymously reviewed
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General Comments:

The stated objective of this project, according to the proposal abstract, was to evaluate the validity of existing USGS seafloor maps of acoustic backscatter using commercial fishermen’s knowledge, with follow-up video sampling in areas where the commercial fishermen’s perception of the seafloor differed from the USGS maps. I think this is a worthwhile idea: it combines the benefits of local knowledge that is gained from years (and sometimes generations) of experience with advanced acoustic remote sensing methods, and potentially provides an additional ‘practical’ layer of information for seafloor maps with the hope of increasing the utility of these maps for ocean resource managers.

I was expecting to see some kind of statistical analysis that showed the agreement (or lack of agreement) between the USGS maps and the fisherman’s knowledge. This seems to be promised but does not materialize in the report. The data required to provide these results appears to have been obtained, and apparently underlies some of the GIS Analysis (which was relegated to an appendix), but nowhere can I find the level of detail (or analysis results) needed in order to determine what the value of adding the commercial fisherman’s knowledge was. I’m left wondering how well the fisherman did (or how well the USGS did). For example, was the agreement good when the substrate was mud and not as good when the substrate was mixed sand and gravel, or cobble, etc.? Did they usually agree? Never agree? This analysis need not be extensive given the minimal project funds allocated for this pilot project, but something needs to be presented in order to evaluate the main idea of the project.

Barring any presentation of results regarding the efficacy of utilizing the fisherman’s local knowledge to interpret the backscatter maps, the project was simply a small scale ground-truth study using video images. This is useful in its own way, to be sure, but does not address the main project objectives.

Specific Evaluation Criteria

Project Success: Based upon the report, the analysis required to reach the stated goals was apparently not conducted. Therefore, I find the project to be unsuccessful.

Certification of Results: There was an adequate description of the methods – I feel like I understood what the researchers did – and the approach seems appropriate enough to me to

warrant testing in a pilot project. However, the report does not sufficiently describe either the data or subsequent analysis in order to determine if the methodology warrants further study.

Dissemination of results: The report is well written and understanding as far as it goes, but appears not to address the main goal of the project.

Project Partnerships: Seemed fine, although difficult to evaluate based on the report alone.

Project Impacts: I don't see that the project has had any impact, but if further developed could increase the efficiency of fishing operations (where to set or not set your nets) and increase the effectiveness of management activities.

End-users: Potential end-users of the kind of information gained from the proposed activity would be both fishermen and managers (e.g., CZM).

Overall rating: Fair to Poor: good idea, incomplete execution.

Future research: A statistical analysis of the data in hand – focusing on the relationship between the fishermen's knowledge and the USGS maps - seems warranted.