Appendix D

Living Marine Resources Program
Ocean Observing System Notification Procedures

All LMR funded activities must comply with the Ocean Observing System (OOS) Handling Procedures in Enclosure 1 and the OOS Compatibility Memo in Enclosure 2. In order to comply with US Navy guidance, the LMR program requires notification **90 day**s prior to any planned deployment of any OOS device regardless of recording platform, deployment method, or location. This applies to all LMR funded projects and includes related projects if leveraging the same field effort. The notification should include:

1. Latitude / longitude
2. Sampling rate
3. Duty cycle
4. Number of sensors
5. Sensor depth
6. Recording platform
7. Method of deployment and mooring
8. Method of data delivery (archive on hard drive, satellite transmission, etc.)
9. Deployment and recovery dates

Just after deployment and recovery, we require confirmation that the sensor(s) is(are) in/out of the water and final lat /lon, time, and date. All moored or bottom mounted sensors must comply with the OOS Handling Procedures in enclosure 1. If the OOS sensors meet the specifications of potential concern, we will coordinate the notification internally with the appropriate points of contact within Navy for awareness of the deployment.

The procedures within the Navy and outlined in the enclosures are designed to avoid potential conflict with OOS data collection efforts and Navy operations, allowing researchers to record data as planned. If there is a potential conflict of concern, we will contact you with further instructions to mitigate any issues.

Notification Points of Contact:

Anu Kumar
1000 23rd Avenue
Port Hueneme, CA 93043
anurag.kumar@navy.mil
805-982-4853

Mandy Shoemaker
1000 23rd Avenue
Port Hueneme, CA 93043
mandy.shoemaker@navy.mil
805-982-5872

Enclosure 1: U. S. Navy Handling Procedures for Ocean Observing Systems (OOS) Data

U. S. Navy

HANDLING PROCEDURES

for

Ocean Observing Systems (OOS) Data

Used for Navy-funded Marine Mammal Research and Development
and Navy-funded Marine Mammal Monitoring

11 July 2011

1. INTRODUCTION

While Ocean Observing Systems (OOS) used in association with Navy-funded Marine Mammal Research and Development and Navy-funded Marine Mammal Monitoring are intended to record acoustic data related to marine mammals, it is acknowledged that the OOS are also being placed in Navy operating areas where the likelihood of also recording sensitive information is increased.

All acoustic raw data collected during Navy-funded Marine Mammal Research and Development efforts or for Navy-funded Marine Mammal Monitoring collected within Navy sensitive areas such as Navy training ranges shall be considered "Proprietary Data" and is to be controlled in a manner that provides reasonable assurance that unauthorized persons do not gain access.

2. OBJECTIVES

This document sets forth the general control procedures for offboard OOS used in association with Navy-funded Marine Mammal Research and Development and Navy-funded Marine Mammal Monitoring. It implements guidance provided by CNO OPNAV N45 and N87. All participants working with OOS for purposes of marine mammal R&D or monitoring are required to read and comply with the procedures contained herein for data being recorded within Navy sensitive areas.

Participants are encouraged to direct questions or concerns regarding this document to their government sponsor. These procedures will be reviewed on an as needed basis to ensure accuracy of procedures and descriptions. In the event that there is any conflict between the procedures prescribed in this document and those described in other DoD or Program Office directives, the more restrictive requirements will apply until a determination is made by the cognizant government authority.

These control procedures being implemented for the purpose of safeguarding potentially sensitive Navy information captured in the raw data in no way precludes or limits the Principal Investigator (PI) or his research group from publishing the results of information gained with regard to marine mammal vocalizations, ambient acoustic noise or other scientifically relevant information from these data sets. Furthermore, these procedures also do not apply to those datasets taken in open uncontrolled areas where there would be no anticipated sensitivity of the data collected.

3. MATERIAL ACCOUNTABILITY, CONTROL & STORAGE

3.1 General Guidelines

The most fundamental guideline is that there is to be no public access to the OOS raw time series acoustic data collected in Navy sensitive areas. Access to sensitive data is to be restricted and limited to the performing institution and authorized project partners. All data products containing sensitive raw acoustic time series data - whether recorded on hard drives, CD, DVD, or other media - will be marked, controlled and stored as Proprietary Data.

Reasonable steps should be taken to minimize risk of access by unauthorized personnel. Proprietary Data may not be exported nor shared outside the authorized research facilities without specific prior written authorization from the Government sponsor.

Proprietary Data must be stored at a minimum in a locked desk, locked file cabinet, locked room, or similar place.

Proprietary documents and material may be transmitted via first class mail, FedEx, parcel post, or -- for bulk shipments -- fourth class mail.

Fax or e-mail transmission of proprietary information (voice, data or facsimile) should be by encrypted communications systems whenever practical. Proprietary data may not be put on an Internet web site or further distributed UNLESS all of the following conditions are satisfied:

1) government sponsor authorization is obtained,
2) access to the website is actively limited to a specific target audience which is password protected, and
3) Any proprietary data >75 seconds must be encrypted,
4) data control instructions and markings are distributed with the information.

Proprietary Data on recordable media may be erased through reformatting the media unless circumstances suggest a need for more careful protection.

3.2 Marking of Proprietary Data

Unclassified acoustic recording media containing Proprietary Data shall be clearly marked in a manner that alerts the holder that the media contains sensitive data that must be controlled. The marking must also refer the holder to an appropriate Point of Contact at the facility (or facilities) responsible for the acoustic recording media for control procedures. An example of an acceptable marking is provided below. This marking may be tailored to meet the performing institution facility control procedures.

Example marking:

UNCLASSIFIED

THIS ACOUSTIC MONITORING DEVICE HARD DRIVE IS UNCLASSIFIED BUT MAY CONTAIN PROPRIETARY ACOUSTIC DATA THAT IS CONTROLLED. CONTACT {Insert Name, Title, Facility, Telephone number, Email Address} FOR APPROPRIATE CONTROL PROCEDURES.

3.3 Control At-Sea

The PI is responsible for controlling recordable media containing sensitive but unclassified data (controlled items) while underway. This responsibility may be delegated to appropriately briefed PI's staff personnel.

Accountability of controlled items in the field will occur daily and upon rotation of responsible personnel. Custody Logs will be used to track and account for controlled items while in the field. See Appendix A for a sample custody log.

During mobilization, a Material Custody Log is prepared for each courier case that is used to transport controlled hard drives or other controlled recordable media to/from the field site. This expedites rapid inventory before, during, and upon completion of the trip.

If the instruments are to be turned-around at sea, data logger recordable media containing sensitive data should be:

- Removed and placed in sealed antistatic bag ,
- Unique identification numbers associated with each drive recorded on a custody log, and
- Stored in an appropriate water-resistant storage container in a location that restricts access by unauthorized personnel.

Upon returning to port, the PI or assigned delegate will account for all recordable media containing sensitive data. An inventory will be compiled before the material is transferred offboard and transported to the processing facility by a briefed courier if not being transported by PI or his staff. The custody log will be maintained and any material transfers between couriers will be recorded until controlled items are checked in at the receiving facility.

OOS instruments that are recovered, but not redeployed, may be returned to the research institution without removal of the recordable media provided that the instruments remain in the custody of designated courier personnel or PI's staff until the media can be properly secured.

3.4 Courier Transmission of Proprietary Data

Courier transmission of controlled items will be the norm if not being transported by PI or PI's staff. Couriers will be provided a briefing on an annual basis that covers the requirements for transporting sensitive but unclassified data. Information to be covered in that briefing is provided by Appendix B.

Couriers not part of the Principal Investigator's staff or that of the research facility will be provided a letter that lists the performing facility and address, appropriate points of contact with phone numbers, and any special instructions as necessary.

Upon receipt of controlled items, couriers will inspect and verify that they have not been tampered with or altered in an unauthorized manner. Custody logs will be used to maintain an audit trail. While performing as a courier, interactions with outside personnel will use a common sense approach that does not draw attention to the controlled items being transferred.

3.5 Control at Research Facility

Proprietary Data should be handled in a manner that provides reasonable assurance that unauthorized persons do not gain access. Principal Investigators shall establish control procedures tailored to their research facility that document procedures for the receipt, archiving, and storage of sensitive recorded acoustic data. These tailored procedures should address the items listed in Table 1.

Working data disks with Proprietary Data are to be stored in locked files cabinets in a controlled space. These disks must be checked out and returned by person doing the analysis. All working data disks with Proprietary Data must be returned to data control file cabinets when not in active use.

Any computers used to analyze raw, acoustic timseries data must be properly configured to ensure that no unauthorized access to the data is possible. Computer connections to the research facility network are allowed provided that the following measures are taken to ensure data security:

- Access to computer is restricted to authorized personnel only, and network security policies are configured such that there is no "global" or "everyone" access to the computer.

- Computers are not configured as FTP or web servers, or otherwise serving information to external, unauthorized users.

- Computers shall have a software firewall installed to further restrict network port access to authorized users/computers only.

- Authorized user passwords should use at least 6 characters — although 7 are preferable, maximums and minimums vary with applications, do not use names or words of more than 4 letters found in the dictionary, substitute numbers for vowels if your password is identified as a dictionary word, avoid strings of numbers such as a birth date, social security number, or phone number, mix upper- and lower-case letters, include symbols in addition to letters and numbers, and avoid consecutive numbers or letters from the alphabet or keyboard.

- During extended processing tasks (when the computer / storage media is unattended, not under direct custody control), the computer space (office, lab, etc.) must be properly secured to prevent unauthorized personnel from having direct access to either the storage media or computer.

If the above security measures are not possible, a computer may be disconnected from the network while raw, acoustic timseries data is loaded. Controlled items will be logged and inventoried annually.

TABLE 1. Topics to be addressed in Tailored Control Procedures
Description of Equipment Used
Fixed Autonomous Acoustic Recorders
Processing Equipment
Scope of Field Activities
Schedule
Locations
Personnel
Activity Description
Method of Protection
Transfer
Handling
Markings
Courier Briefings
Storage
Contigency Plans
Risk Assessment

4. GOVERNMENT REVIEWS AND SELF REVIEWS

The cognizant government sponsor has the authority to conduct periodic inspections to ensure compliance with these control procedures. Organizations accepting Navy funding for the use of these recording devices are encouraged to conduct self-reviews before and after major field activities. The intent of these reviews is to identify weaknesses, enhance control procedures where necessary, and ensure compliance with this control procedure. Reports of self-reviews will be maintained on file.

5. EMERGENCY PLANS AND PROCEDURES

Any loss or known unauthorized removal of controlled data shall be reported to the Government sponsor as soon as possible.

IMPORTANT! Personal safety always takes precedence over security of equipment and material.

APPENDIX A: MATERIAL CUSTODY LOG

We accept custody of the below listed material and will ensure its proper safeguarding until we return it to an authorized representative of the Principal Investigator. In the event we cannot maintain control, we will immediately notify the Principal Investigator or his/her representative.

DATE	CONTROL NO.	DESCRIPTION	CUSTODIAN	TRANSFERRED TO

APPENDIX B: DESIGNATION AND COURIER BRIEFING

To the maximum extent practical:

A. Always complete custody log entries for the controlled items at the point of departure and point or origin.

B. Maintain constant custody of the controlled material from receipt until delivery.

C. Place all controlled items out-of-sight in a closed case of normal appearance or other closed carry-on bag. Based on the volume of material, use additional couriers as necessary.

D. Be cautious to ensure that your case containing controlled items is not switched or stolen while enroute. If traveling by aircraft, keep the case in a location where you can easily monitor it, preferably under the seat in front of you.

E. Pre-plan travel routes. Include alternate routes. In unfamiliar areas, mark and use maps. Do not schedule unnecessary overnight stops.

F. In event of vehicle mishap or if you are forced to abandon a trip because of failure to make connections, sickness, etc., keep the controlled items in constant personal contact or make reasonable arrangements to restrict unauthorized access. If a motel is required, contact the Hotel Manager for possible locations where the controlled items may be taken and securely deposited.

G. If you arrive at your destination after normal working hours, do not leave the controlled items with unauthorized personnel. Keep the items within your control until you can make arrangements to transfer them to authorized personnel.

H. Do not consume alcoholic beverages when transporting controlled items.

I. In event of any of the following emergency situations, notify the Principal Investigator or Government sponsor as soon as practical. After receiving such notification, your PI must contact the cognizant Government Sponsor.

   1) Any loss or unauthorized access to controlled items.

   2) In event of any situation where officials insist on taking possession of the controlled items, attempt to obtain the names, agency, and telephone numbers of the individuals involved.

   3) In event of any situation where unauthorized personnel threaten violence and insist on taking possession of the controlled items, do not argue or physically attempt to stop them. Also, do not attempt to hide the controlled material or otherwise dispose of it.

Enclosure 2: Ocean Observing System Awareness and Compatibility

DEPARTMENT OF THE NAVY
OFFICE OF THE CHIEF OF NAVAL OPERATIONS
2000 NAVY PENTAGON
WASHINGTON, DC 20350-2000

IN REPLY REFER TO:
5090
Ser N45/13U139580
16 January 2013

MEMORANDUM FOR DISTRIBUTION

From: Director, Energy and Environmental Readiness Division
To: Distribution

Subj: OCEAN OBSERVING SYSTEMS AWARENESS AND COMPATIBILITY

Ref: (a) Task Force Compatibility and Readiness Sustainment Meeting of 21 March 2012

Encl: (1) Ocean Observing Systems Compatibility Charts

1. The proliferation of ocean observing systems (OOS) and the public release of the data these systems collect can be incompatible with the safety and security of certain Navy missions at sea. Acoustic and seismic sensors are a primary concern to Navy.

2. Per direction from the Task Force Compatibility and Readiness Sustainment, this memorandum documents decisions made during reference (a) relative to OOS. OPNAV N97 and the Office of the Oceanographer of the Navy (OPNAV N2/N6E) are jointly managing this issue through the OOS Security Group (OOSSG) and the OOS Situational Awareness Office (SAO) being established at the Naval Oceanographic Office. OPNAV N97 is funding the SAO in 2013; beginning in FY14, a program of record and funding for the SAO will be established under N2/N6E to improve Navy awareness of OOS deployment and operations.

3. In support of the SAO mission, all Navy commands and organizations involved in the deployment or collection of an OOS should notify the SAO prior to deployment and collection of the system. Upon notification of the Navy OOS, the SAO will work with the appropriate Navy personnel to acquire information about the OOS such as location(s) of the system, type of system, sensors, and data collected, duration of OOS operation, and plans for public release and distribution of data.

4. In addition, all Navy commands and offices with outreach, inter-agency planning, at-sea range support, and other ocean planning functions should engage with academia, research institutions, ocean observation organizations, and other state, regional, and federal stakeholders to improve Navy awareness of new OOS. Information

5. Compatibility charts for OOS locations (enclosure 1) convey general areas of concern and should be used by Fleets, SYSCOMs, and other Navy stakeholders. The charts can be shared, as appropriate, with external partners to communicate Navy interests related to the placement of acoustic OOS.

6. The SAO points of contact are:

Wayne A. Estabrooks, Ph.D. (PRIMARY POC)
International and Interagency Policy and Agreements
Office of the Oceanographer of the Navy
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Alexandria, VA 22310
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sipr: beth.levy.ctr@navy.smil.mil

Additional points of contact may be distributed upon formal stand up of the SAO.

7. My point of contact for this issue is Mr. Ronald Tickle, OPNAV N453, (703) 695-5185, ronald.tickle@navy.mil.

K. R. SLATES

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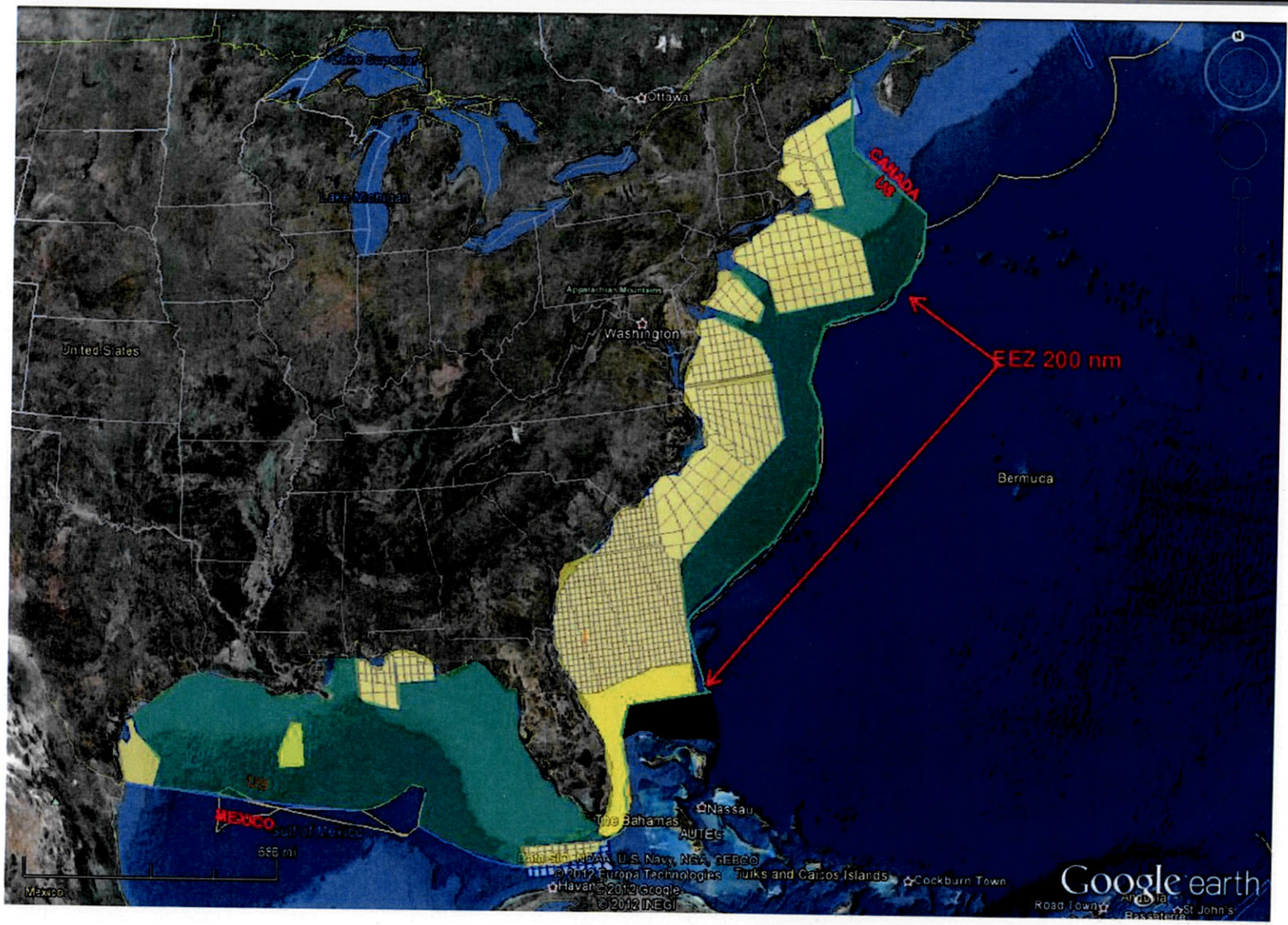
Proposed Concern Zones for

East Coast Operating Area



Red
Navy Operating Area incompatible with acoustic OOS

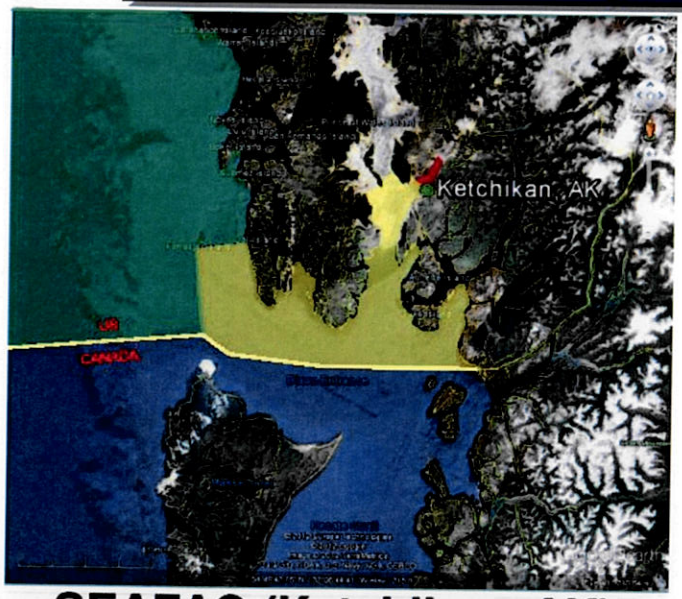
Yellow
Navy Operating area compatible with acoustic OOS, but requires notification and mitigation

Green
Area compatible with acoustic OOS , notification needed

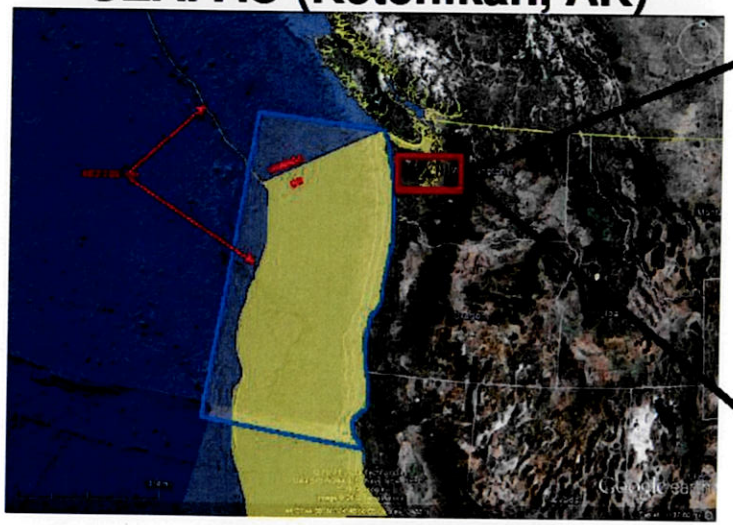
DRAFT PRE-DECISIONAL

Proposed Concern Zones for

Pacific Northwest Operating Area and Alaska



SEAFAC (Ketchikan, AK)



PACNORWEST

Dabob Bay, WA

Red
Navy Operating Area incompatible with acoustic OOS

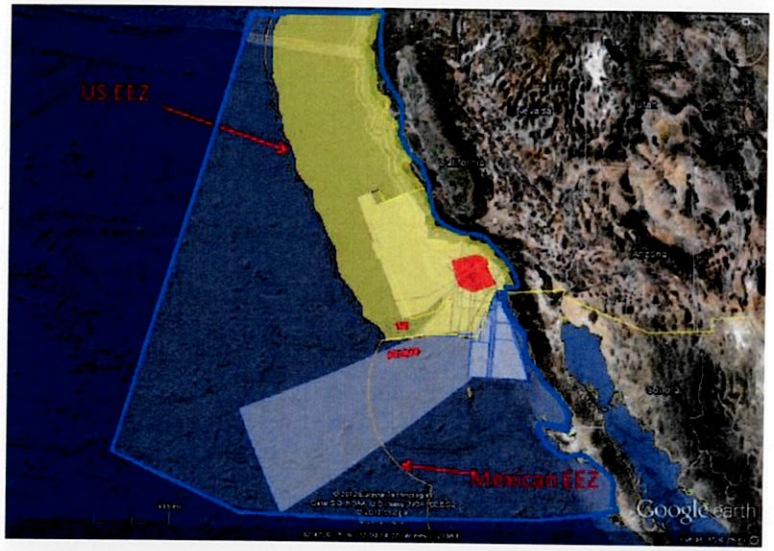
Yellow
Navy Operating area compatible with acoustic OOS, but requires notification and mitigation

Green
Area compatible with acoustic OOS , notification needed

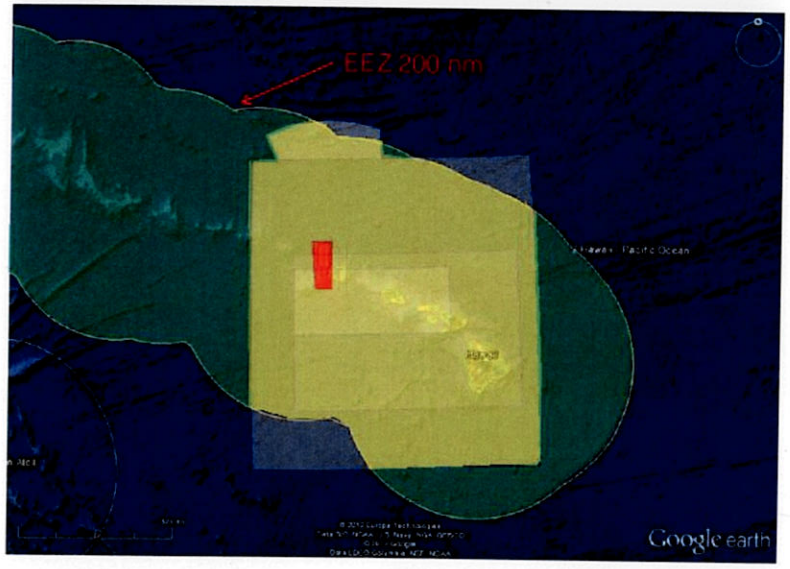
Proposed Concern Zones for

SOCAL and Hawaii Operating Areas

SOCAL OPAREA



Hawaii OPAREA



Red
Navy Operating Area incompatible with acoustic OOS

Yellow
Navy Operating area compatible with acoustic OOS, but requires notification and mitigation

Green
Area compatible with acoustic OOS , notification needed