

NEPA AND PRIVATE AIDS TO NAVIGATION

By

Andrew Engle
United States Coast Guard
Miami, Florida
September 26, 2012

Capstone paper submitted in partial fulfillment of the

Requirements for the Certificate in NEPA

Duke Environmental Leadership Program

Nicholas School of the Environment at

Duke University

2012

The United States Coast Guard administers the U. S. Aids to Navigation system. The system consists of Federal aids to navigation operated by the U. S. Coast Guard, aids to navigation operated by the other armed services, and private aids to navigation operated by other persons.

Aids to navigation (ATON), is vital to guide commercial mariners in and out of U. S. ports to ensure commerce, as well as people, can move safely in and out of those ports. In addition to our commercial vessels, recreational boaters also depend on ATON for safe navigation throughout all the waterways of the United States.

Private Aids to Navigation (PATON) are those aids to navigation which are used to guide mariners into public marinas, private associations, county and state facilities and, they are used to regulate private anchorages or mooring fields. Simply put, PATON includes all marine aids to navigation operated in the navigable waters of the United States other than those operated by the Federal Government.

Title 33 Code of Federal Regulations Part 66 provides basic provisions and grants delegation authority to U. S. Coast Guard District Commanders. The authorization of PATON does not authorize any invasion of private rights, nor grant any exclusive privileges, nor does it obviate the necessity of complying with any other Federal, State or local laws and regulations.

To apply for a U. S. Coast Guard PATON permit, an application must be completed and submitted to the appropriate U. S. Coast Guard District describing the nature of the project, position of the proposed aids, characteristics of the aids, and include a copy of all required permits issued by any pertinent agency.

Up until recently, when conducting federal ATON or processing PATON, the U. S. Coast Guard often assumed that these actions were covered under a Categorical Exclusion (CATEX) which covered ATON operations. In the past whenever a PATON application was received, it

was reviewed for accuracy in regards to making “navigational sense”, and that the U. S. Army Corps of Engineers were on board by authorizing any construction/dredging related to this application. CATEX 23 was assumed to be the norm for all projects. This particular CATEX also did not require any type of documentation to verify that the decision to issue a CATEX actually applied.

But a federal ATON incident prompted the U. S. Coast Guard Seventh District to examine and take a closer look on how it was implementing its NEPA policies in regards to any ATON missions. Presently when we review PATON applications we ensure that the project is being conducted in accordance with the National Environmental Policy Act, the Endangered Species Act, the Coastal Zone Management Act, U. S. Coast Guard policy and a myriad of other environmental laws. This procedure has led to a more complex and time consuming process but one that is necessary to ensure we are issuing permits that are in compliance with NEPA and U.S. Coast Guard policies.

Current U. S. Coast Guard policy regarding NEPA is contained in COMDTINST M16475.1D titled National Environmental Policy Act Implementing Procedures. In this policy it states”...this instruction applies to all U. S. Coast Guard actions including the decision to promulgate regulations; grant permits...” It also describes certain situations whereby the use of CATEX may not be appropriate and further environmental review is necessary. Some of these situations which could pertain to PATON are:

“3. The quality of the human environment that is likely to be highly controversial in terms of scientific validity or public opinion...”

6. Are the actions impacts individually insignificant, but cumulatively significant impact exists when considered along with other past, present, and reasonably foreseeable future actions...

8. Proposed action has a significant impact on species or habitats protected by the Endangered Species Act...”

The COMDTINST goes on to state that the existence of these situations is not necessarily a reason to prepare a Environmental Assessment (EA) or Environmental Impact Statement (EIS) although that decision is based on the potential significance of the proposed action’s effects on the environment. If a CATEX is not appropriate, an EA or an EIS must be prepared and all Coast Guard EA’s prepared at the unit level, shall contain an environmental review by a member of what is now called the Shore Infrastructure Logistics Command.

After reviewing all of the laws and policies, the Seventh Coast Guard District revised their Standing Operating Procedures (SOP) in regards to environmental protection and compliance. The Seventh Coast Guard District contains a vast array of endangered and threatened plants and animals. In particular, Florida, Puerto Rico, and the U. S. Virgin Islands have some of the most environmental sensitive areas in the world. Given these sensitive areas the revised SOP was implemented to ensure our ATON operations comply with the numerous Federal, State, and local environmental laws and regulations. In fact, ATON operations are essential for protecting the environment in addition to promoting safety to maritime traffic.

One such project to use ATON to protect a sensitive area by placement of private aids, took place in St. Thomas, U. S. VI. Located on the eastern end of St. Thomas, the St. Thomas East End Reserve (STEER) is an area designed to protect the system of coastal resources including mangroves, sea grass beds, coral reefs and other critical marine habitat.

STEER is a new territorial marine protected area that combines several protected areas and compiles them into one comprehensive management unit. Due to the importance of area habitats and the threats to them, this plan was thought necessary. The purpose and need of this plan is to install eight delineation marker buoys offshore to indicate the marine protected area of STEER. Although public exposure to and the enjoyment of STEER are positive components of the USVI territory's industry and local lifestyle, a limited footprint of human usage is element to maintain the high level of diversity and productivity that exists in the STEER ecosystem. By the use of these markers it would thereby greatly benefit management and enforcement of an area which is currently used for boating and recreational activities. By making these markers lighted buoys they will indicate to boaters that they have entered or exited a no-take marine protected area that contains specific rules and regulations within. So, the Department of Planning and Natural Resources, Division of Fish and Wildlife (DFW) decided to spearhead this project. These buoys are considered regulatory type and would have to be approved by the U. S. Coast Guard as PATON.

In order to get this project started, an Environmental Assessment (EA) was prepared by the requesting agency in order to install the moorings for the buoys and to provide sufficient analysis to determine if an Environmental Impact Statement (EIS) would be needed or a Finding of No Significant Impact (FONSI) determined. With PATON the U. S. Coast Guard acts as a reviewing agency prior to authorizing any project to include review of all documents to ensure compliance with NEPA, and all laws and regulations are adhered to.

The prepared EA took a look at the probable impacts on the environment and determined that a minimal impact would occur during the installation of these buoys. STEER contains a variety of marine habitats including sea grass meadows, coral and rocky reefs, colonized hard-bottom

and sand flats. These habitats are used by a variety of commercially and ecologically important species including several endangered species such as Green and Hawksbill turtles, Elkhorn and Stag horn corals and Brown Pelicans. These are just some of the targeted resources located in STEER that this plan aims to protect, enhance, and restore. The installation of these buoys will aid in the regulation and enforcement so these resources can sustain minimal damage from boats and humans.

Turbidity was another concern during installation of the buoys but it was determined that the method used to install the anchors to the bottom would have a footprint of less than one square foot. It was determined that no channels or waterways would be impacted by this project due to the buoys being installed on publicly submerged lands offshore to designate the Marine Protected Area (MPA) of STEER and that in itself was a benefit in the management and enforcement of this MPA. Due to the project being located offshore, no terrestrial or wetlands impacts will occur.

Even in this sensitive area, it was determined that the work involved to install these buoys would have no impact to threatened or endangered federally listed species under the Endangered Species Act.

Various weather, tidal, and climate conditions were studied and it was determined that this project would have no impact on them.

The EA also took a look at the impacts on the Human Environment. Again, with the project being located offshore, the project would not impact utilities, public services and have negligible visual impacts. The impacts felt socially and economically would be positive due to the buoys greatly enhancing the management and enforcement of this MPA. STEER is heavily used by private boats, ferries, tour boats, jet skis, and small dinghies. By the boundaries set forth with

these buoys, it will allow enforcement agencies to implement existing rules and regulations with easier distinction.

The installation of the buoys could provide a positive cumulative effect by assisting in the regulation of illegal takes of certain species thereby seeing increases in their population. DFW intends to monitor populations to certain species and relaying those results to the public.

After DFW completed their EA a finding of no significant impact (FONSI) was determined by the installation of the delineation buoys. Although a FONSI document was never prepared, all environmental findings were included in the EA submitted to the U. S. Army Corps of Engineers (COE) and to CGDSeven. At this point I am unable to determine if a FONSI was ever prepared. It may be due to the many elements of the STEER Management Plan, and the fact that it was still ongoing at the time the request for the delineation buoys was requested. The determination to deploy the buoys was based on the findings of the EA which stated all of the environmental findings along with the statement that their installation would have no significant impact. Included in the EA were dive surveys and photos of the ocean floor for every buoy location which aided our decision to permit these buoys to be installed in the locations requested.

Discussing alternative actions, the EA addressed the fact that there were no other alternatives, other than no action at all. No action could be taken and further degradation of STEER's resources would continue to occur. By not installing the buoys the area would continue to be subject to careless boating in regards to controlling the speeds, routes and determining if they were located within the STEER boundaries. With the boundary buoys in place it may make boaters more aware of their location and inspire them to adhere to the regulations already in place inside the STEER.

In recognition of the importance of area habitats and imminent threats to them, a collaborative planning process between the STEER community and Virgin Islands Department of Planning and Natural Resources, University of the Virgin Islands, and The Nature Conservancy was initiated to develop a management plan for STEER. This brought everyone who was a stakeholder in the STEER for a chance to voice concerns and ideas. Public stakeholder meetings were held monthly to identify any issues and come up with a set of objectives and strategies over five years. Most of the concerns were identified as issues pertaining to pollution and storm water runoff into the STEER. The feedback pertaining to the installation of the buoys was positive due to the fact that the boundary set by these buoys would help reduce damage caused by boat traffic, and prevent illegal takes of resources.

All items that were addressed in these public meetings were addressed by DFW and approved in the final EA which was submitted to the COE for approval. A U. S. Coast Guard PATON application was completed and forward to CGDSeven for approval. When the PATON application and all pertinent documents were received, our first line of business was to ensure a thorough waterways analysis was conducted. The analysis entails ensuring compliance with applicable Federal private aid requirements, uniform aid marking requirements and environmental compliance, along with determining possible impact to waterway safety. If necessary we will contact the applicant to request any additional information such as a benthic study so environmental impact can be fully understood prior to making a permit decision. We then wait on our decision until after we review the COE permit to ensure they are in agreement.

In this case the COE determined that the installation of the eight buoys would not have a significant impact on listed species and habitat as per the Endangered Species Act. This project falls under the criteria for a Nationwide Permit 1 (NWP1) being issued to the DFW. In addition

to the NWP1, the permittee would have to comply with special conditions in order to prevent and minimize potential project related impacts to benthic habitats and federally protected species throughout various locations within the STEER.

Due to the reoccurrence of ATON projects such as this, the COE and NOAA/NMFS has developed best management practices for the contractors to adhere to when carrying out work within critical habitats and areas where endangered species are common.

These instructions consist of knowing how to react when sighting Sea Turtles, Manatees, and Right Whales. Crews conducting work in known areas of these and other species must be well versed in protected species identification. Other measures consist of vessel strike avoidance, reporting injured or dead protected species, and knowing what to do if unexpected cultural resources are encountered at any time within the project area that was not the subject of a previous cultural resource assessment survey.

Based on the information provided by DFW, COE, and NOAA, CGDSeven determined that the nature of this proposed project warranted approval. The addition of the delineation buoys greatly protects the sensitive marine and terrestrial resources found within STEER thereby enhancing recreational and educational opportunities to increase public awareness of the importance of conservation. Another direct impact of these buoys is to protect and conserve ecologically significant resource areas for their contribution to marine productivity and value as wildlife habitats and preserve the function and integrity of reefs, marine meadows, salt ponds, mangroves, and other significant resources. The choice to anchor these buoys utilizing the Halas mooring system vice the traditional heavy concrete block and chain which can often damage the surrounding sea bottom is another alternative beneficial for the protection of the sensitive coral

and sea grass. The Halas system uses an anchor which is drilled into the sea floor and the rest of the assembly never comes in contact with the bottom.

After reviewing all of the above The U. S. Coast Guard reviews all of the above information and based on these findings determines if the placement of PATON is warranted and necessary. As per CGDSeven policy, a NEPA checklist is prepared for PATON as well as federal ATON projects. It ensures we review all documentation made available and assists us in making the appropriate decision.

This particular project, although located in a sensitive area, greatly benefits from the installation of lighted buoys marking the boundaries of the STEER to protect valuable resources and was issued a permit from CGDSeven.

With PATON we do not initiate EA's as we do when working with our own federal aid projects and servicing those aids. We rely on NOAA, USFWS, and COE to guide us in making the best decision of placing aids to navigation in our waterways.

The NEPA process is vital in determining our decision and the value of the training received at the Nicholas School of the Environment at Duke University has been a great help to our process. Prior to the U. S. Coast Guard becoming more vigilant in regards to the NEPA process we mistakenly grouped every PATON project into CATEX 23.

Nemeth, Richard S. & Elizabeth Kadison. (2008). Environmental marine survey of Christmas Cove, St. James Island, St. Thomas, U.S. V.I. Center for Marine and Environmental Studies, University of the Virgin Islands.

U. S. Government Printing Office. (July 1, 2009). Code of Federal Regulations

U. S. Coast Guard Commandant Instruction. (May 27, 2005). Protected Living Marine Resources Program

Unknown. (May 23, 2011). Group Unveils Plan to Protect East End Marine Reserve. Retrieved from <http://stthomassource.com>

Unknown (May 17, 2011). St. Thomas East End Reserves Develops Management Plan, Holds Open House. Retrieved from <http://stthomassource.com>