

Stellwagen Bank National Marine Sanctuary Draft Management Plan (June 2008)

Comments and Proposal for Maritime Heritage (Diving) Management Programs

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Introduction

The intent of my comments is to provide feedback on the draft management plan (DMP) as presented and at the same time propose a more detailed management construct for diving that is consistent with existing sanctuary regulations, and the overall management structure for the sanctuary. I believe it is important to recognize that Stellwagen Bank National Marine Sanctuary (SBNMS) was created primarily to prevent drilling for oil, mining for sand and gravel and to provide a level of protection for endangered whale species. While the sanctuary is known to contain other resources that require protection, the proposed DMP still favors the original mission of the sanctuary in a very basic fashion, and fails to call for radical change that creates a true marine sanctuary inclusive of protection for all sanctuary resources – including maritime heritage. This is evidenced by the existence of commercial fishing occurring in the sanctuary, and its likely continued existence even under a new management plan. Given that “big picture” perspective, my personal belief is that the greatest success for a managed access program for divers given the small diving community, limited resources and funding for the maritime heritage (MH) program, as well as the overall needs and mission of the sanctuary, is one that promotes community-based leadership and responsibility based on voluntary participation in the sanctuary’s MH program. I hope the following comments present, synthesize and justify this proposal appropriately.

MH.1—Establish a Maritime Heritage Program

The establishment of a Maritime Heritage (MH) Program is something that the author fully supports and knows that many divers and non-divers support as well. Both the likely presence of a significant archeological record from the PaleoIndian period, record of prehistoric human inhabitation of Stellwagen Bank, as well as evidence in the form of shipwrecks of diverse vessel traffic spanning the early 17th century through the modern day indicates that Stellwagen Bank National Marine Sanctuary has a rich historical and cultural content that is worthy of further exploration, documentation and protection.

The Draft Management Plan (DMP) should act as a mandate to establish a vital and expansive Maritime Heritage Program that draws upon available resources, and that designs management programs to appropriately utilize such resources. Given budget and funding constraints, an approach that includes the larger community will result in a program with greater public support and one that ultimately will enhance the value of the overall MH program. The focus of the MH program should be primarily aimed at protecting resources in an ecological-based model, which appears to be the fundamental management concept for SBNMS. Management of the MH program must be consistent with the overall management approach for the entire sanctuary.

There are 18 known shipwreck sites in the sanctuary with only 4 sites having been presented to the public; this speaks to the need for a robust and adequately funded MH program that protects and enhances the overall portfolio of SBNMS. The sanctuary needs an updated management plan that contemplates the management of all maritime heritage resources.

The strategies in sections 1.1 and 1.2 of the MH.1 objectives attempt to identify and address two main issues: appropriate staffing and training, and the need for supplemental funding via external groups. While these are appropriately indicated as high priority, the third strategy – and potentially the one that may be quite integral to a comprehensive MH program – is marked as only a medium priority. Strategy 1.3, the establishment of relationships and partnerships with external entities that may have specialized expertise, capability and resources to supplement and enhance the sanctuary's MH program, should be further expounded upon. It should identify the types of entities that may be considered in this construct. As it is the sanctuary's goal in this strategy to support the documentation and interpretation of the sanctuary's maritime heritage, the priority level for this strategy should be elevated to high.

The diving community can be and should be part of the basic construct of a MH program, as it potentially fits into the objectives outlined in MH.1 in the form of an external entity with specialized capability and expertise. This will be discussed in more detail later, but the basic principle is that the diving community has a place in the MH program as a partnered external entity with specialized

capability that will put little strain on the sanctuary program's budget, with the potential to contribute a great deal both through supporting site assessment activities, becoming site monitoring and compliance participants as well as acting in a role that serves community outreach and education.

MH.2—Inventory, Assess, and Characterize Historical Resources

The need to inventory, assess and characterize historical resources is a complex endeavor given the environment in which the sanctuary is working – an offshore, deep water environment subject to unpredictable weather and conditions. This reality points to the need to be as inclusive as possible when forming partnerships and relationships with external entities and groups that can contribute to the process of identification, inventory, assessment, characterization and ultimately management of MH resources.

Objectives in MH.2, section 2.1.2 identify divers, researchers and fisherman as contributors to the process by way of soliciting oral histories and other information from those groups to identify and inventory potential historical resource locations. The process of the MH survey should continue along those lines in order to be as inclusive as possible. In the strategy outlined in section 2.2.1, objectives include accessing governmental, non-governmental, private and individual groups to utilize the most sophisticated and appropriate technologies in support of the MH survey. The act of shipwreck diving is a legitimate form of research and exploration that in certain circumstances can yield equal or better results to those generated from sophisticated technologies that require significant expertise, funding and time to utilize. This section should be amended to add another strategy that is inclusive of divers and survey through diving activities.

The author proposes the following addition to the management plan:

Section 2.2.X: Establish partnerships and relationships with local diving community organizations and individuals to utilize divers in support of historical resource surveys, where appropriate, and use these partnerships to enhance, supplement or substitute the use of other survey technologies and methodologies.

The fulfillment of this strategy should be tied into the overall diving program for SBNMS, which is related to objectives covered in MH.3. The important point is that the sanctuary should not underestimate or under-utilize the diving community in the inventory and survey process, especially given the minimal funding requirements for such a component.

The characterization and synthesis of the work done through inventory and survey should remain a high priority as indicated in the DMP, as this is the culmination of research and ultimately is what will drive public support, and further funding and development of the MH program. Without follow-through and presentation of results, the meaning of the work conducted in the sanctuary is less clear. The sanctuary is conducting science – whether it is an ecologically based study or a study involving maritime archaeology. Publication and presentation of results must be a high priority and further detail to that effect should be mentioned in this section.

MH.3—Protect and Manage Historical Resources

This is certainly the most complicated portion of the MH Action Plan as it gets to the “how.” This is where detail and clear delineation of what groups are being discussed and how various management plan objectives relate to them is necessary. While the goal of protecting archaeological resources from human impacts is a fundamental premise in the sanctuary’s mission, so is facilitating compatible public access. This means that further definition of human impacts is critical to fulfilling the goal of true resource protection, as one must understand fully the scope of the issues in order to manage them appropriately and effectively. Defining what human activities are occurring and then conducting a true assessment as to the human impact on MH resources as a result of those activities is the key to an effective and sensible management approach.

The strategies presented in MH.3 are cause for concern and questions around whether the proposed management system is in fact the best way to manage diverse human activities that in some cases have significantly different impact potentials. Examples of this are the relative human impacts of commercial fishing versus scuba diving. Clearly, these activities have different potential impact to

sanctuary resources and thus have different management needs – all of which still must fold into the overall management vision and reality for SBNMS.

Currently, further regulation and prohibition of commercial fishing, with its documented high impact is not contemplated in the DMP; therefore, lower-impact human activities should be managed with this in mind. The DMP makes a very strong case for how the most significant impact to MH resources is commercial fishing, but changes to address that issue from a legal, regulatory and designation document perspective are not proposed. In contrast, diving is considered a comparatively low-impact form of visitation, with potential risks and impact coming from disruption of the site through removal of artifacts or other pieces of the shipwreck. One might conclude that diving is a low-impact and therefore compatible form of access (that can support the MH program as described above) provided it is done so in a responsible way. This strengthens the argument for a managed access program for divers that reinforces the prohibitions on the removal of artifacts and prescribes mooring procedures to minimize impact on the wrecks. This approach supports both the issue of public access to these resources as well as preservation of those resources. Furthermore, as noted above, such access can also support the efforts of MH surveys and monitoring efforts (efforts for which there is no other funding).

The categorization of sanctuary resources via a two-tier system in the absence of a rigorous site assessment protocol leaves much concern with regard to public site access. The proposed definition of a historical resource would include everything in the sanctuary at least 50 years old. For the purposes of discussion, one should then consider all MH in the sanctuary to be an historical resource. However, it must be pointed out that there is no discussion in the DMP at all regarding how sites that are not considered historical resources would be managed – does this mean that even though they fall within the sanctuary they are exempt from sanctuary regulations? The DMP needs to clearly define when sanctuary regulations would apply to MH and when they would not.

The definition of a “historical resource” is not problematic in and of itself provided that all historic resources are open to the public, as they are at Thunder Bay National Marine Sanctuary. Any deviation from open public access at a historical resource site must have a strong rationale that is based on the outcome of a rigorous site assessment that has evaluated the site and determined that a higher level of protection for the site is required, which does not mean restriction from access.

The second category of “heritage preserve” may be considered for sites that require additional protection. This assessment, in conjunction with listing on the National Register of Historic Places (NRHP), must take into account the different types of human uses and their relative impacts to the site before determining any enhancement to the level of protection being applied to the site. For example, if the concerning impact to a site by diving is 1) physical through the use of a line attached to the wreck and/or 2) potential as a result of disruption of the site’s archaeological integrity by way of removing artifacts, these two issues can be addressed through managed access with clear rules or regulations such as those imposed on the “Land Tortoise” a Radeau listed on the National Register of Historic Places and open to diving, as opposed to taking an extreme stance and simply prohibiting access. At the same time, an additional concern should be the impact of commercial fishing. Gillnets that become tangled on a fragile wooden helm wheel may cause significant damage. Such uses must concurrently be addressed in order to provide a “heritage preserve” site with protection. While very little to no evidence to date has been presented that suggests divers have harmed sanctuary resources in any fashion, the DMP sites evidence regarding how commercial fishing has harmed these same resources.

The argument for creating a 2-category, pro-access management structure for diving is this: the principle forms of diving impact can be managed through intelligent, collaborative approaches that allow for public access in a managed access construct. This will be elaborated on further in the proposed alternative management program.

In section 3.2 the DMP identifies the need to develop a rigorous site assessment protocol that will be used to determine the designation of historical resources as a heritage preserve. The overall section should be clarified to indicate that only sanctuary resources over 50 years old and meeting the historical resource definition will be included. The designation as a heritage preserve is defined by listing on the NRHP and a determined higher degree of fragility based on evaluation by the site assessment protocol. It is recommended that open access to the public be a basic premise in the MH program for all historical resource sites including those designated as heritage preserve. A potential managed access approach will be detailed later on in this document.

In sections 3.3 concerning the need to identify partnerships and relationships for site monitoring and compliance of historical resource permits and regulations, the level of medium priority should be elevated to high priority. The true success of a minimally funded program like MH will be based in the value of the relationships the sanctuary establishes with external organizations, groups and individuals. The sanctuary is a very large area and effective monitoring will be a challenge from a practical standpoint. It is for this reason that the onus should be put on the individuals to educate and police their communities in collaboration with the sanctuary – this is best done in the form of positive relationship-building activities that empower the stakeholders to be custodians of the resources in the sanctuary. Elevating this strategy to a high priority will enhance the efforts already identified as a high priority in the strategy detailed in section 3.4.

Section 3.5 details the strategy for implementing a mooring buoy system in SBNMS to facilitate safe, low-impact scuba diving. The implementation of a mooring buoy system, whether it is widespread or only on select sites is a relatively complex project that requires specialized expertise both in the capabilities of vessels transporting and handling heavy mooring block equipment, as well as the divers performing the installation work. This may not be something the average diver or diving charter operator can manage, which relates to the sanctuary's budget allocation for this strategy and the need to consider the possibility of hiring a commercial operation that has the capability (such as an A-frame, boom arm, winches, appropriate deck space, etc) to perform this task. If this strategy is to remain a medium level of priority because of practical, logistical and budgetary considerations, this strategy should be expanded to include a slighter broader scope, which is 1) identification and utilization of partnerships and relationships with professional external entities in the dive industry that have the capability to install mooring equipment and 2) in cases where complete mooring installation is not feasible for whatever reason, the sanctuary allows divers to utilize a shot line that may be secured to the wreck as conditions require (i.e. areas of high current, high boat traffic) and overall, the sanctuary commits to working with the dive community to generally determine safe and appropriate means to access sites. It is recommended that strategy 3.5 be reviewed for the budget allocation and the text in the Action Plan be amended in the following way:

3.5 Develop and implement a mooring buoy system on historic sites in collaboration with affected parties and regional scuba diving charter operators. Mooring systems may be emplaced to protect historic sites from anchor damage and facilitate safe scuba diving. Mooring systems should be installed and maintained by professional operators with established capability and expertise as it relates to transportation and installation of mooring buoy equipment. Using grappling hooks or other grapple-like anchoring devices is prohibited; however, where complete mooring systems are not available, divers will be allowed to utilize shot lines that may be secured to the wreck in an appropriate manner that minimizes potential impact. The dive community should collaborate with the sanctuary to determine an appropriate means to access the wreck in a fashion that is both safe and minimally impacts the site.

As moorings need to be able to hold larger vessels, it is critical that the appropriate ground tackle be used and that it be emplaced in a location that is both secure and does not have the potential to damage the shipwreck site. Installation of mooring systems should be part of a managed access program that is operated in conjunction with the dive and research communities. The dive community will be able to inform the sanctuary on what sites are most likely to host visitation such that the limited resources and budget are best used on sites that will benefit the most from mooring systems. It is important to point out that a mooring system may not mean a complete mooring buoy system, but components of one. For example, on an infrequently visited shipwreck like the Paul Palmer, a mooring system could easily be configured to consist of a heavy (at least 1000 pounds) mooring block submerged near the wreck (within the limits of average visibility – 20 feet) with a large eye for shackling in chain or tying in line. The dive operator could drop a shot line near the wreck, a dive team would descend down this line, locate the mooring block and secure the shot line to the mooring block. The boat can then moor on this block picking up its shot line. When the dive activities are over, the boat will drop off the buoy and a dive team can release the line from the submerged block and it can simply be pulled up. This leaves no line and buoy to maintain, and makes access safe and appropriate, minimizing impact to the wreck. This type of configuration would be possible on a wreck like the Paul Palmer because it is shallow and visibility is good. With some familiarity with the site, it would be easy to locate the mooring block. A site-by-site assessment would need to be undertaken in collaboration with the dive and research communities to assess the most appropriate mooring system to employ, if one should be used at all.

In strategy 3.6 it should be made clear that the permitting program outlined in this section pertains to the use of permits for archaeological research and not public access. It should be made clear in the appropriate location in the MH Action Plan document that public access permits are not presently contemplated and currently do not have a place in management of diving activities. It is recommended that the text be amended as follows:

3.6 Implement the NMSP Permitting Guidelines for archaeological research (i.e., survey and inventory permit and archaeological research permit). Permits are a management tool to ensure protection of historical resources while archaeological research is conducted. Permits of this type would not be required or issued for public access purposes.

Finally, the objective outlined in strategy 3.7 is perhaps well intentioned, but given the suspicious nature and perceived judgment around possession of a sanctuary resource in light of the fact that it would be difficult to prove either way whether the object was recovered pre or post-designation, this may not be embraced by divers and therefore should not be targeted at divers. Fisherman that inadvertently haul up pieces of a historical resource while conducting fishing operations should be encouraged to turn in those items since their activities – and the consequences of them – are currently within the scope of the sanctuary regulations. It is recommended that the text be amended as follows:

3.7 Develop and implement collection and conservation policies for artifacts previously recovered from SBNMS by fisherman inadvertently through traditional fishing operations before and after designation. Policies need to be developed that clarify the disposition of these artifacts and their conservation.

The current status of low priority for this strategy should remain as-is.

MH.4—Develop and Implement a MH Outreach and Education Program

The objectives in MH.4 should put greater emphasis on outreach to the dive community through the establishment of relationships between dive organizations, clubs and individuals who can act as community-based educators on the sanctuary. Strategy 4.1 should be amended in the following way:

Identify and partner with regional museums, through MOU/Agreements, to conduct MH exhibits and other outreach programs. Identify and partner with dive community organizations such as dive clubs and non-profit organizations with educational mandates. Partnerships will provide a means for information-sharing to the public and user groups on the importance of resource protection and stewardship ethics.

Organizations such as the Boston Sea Rovers have a nearly 55-year tradition of seeking to “raise the level of knowledge of the underwater world” – a mission in part similar to that of the national marine sanctuaries. Organizations such as these have significant reach into the diving community on a large scale and can become important partners in education and sharing of knowledge. Other organizations such as the Bay State Council of Divers in Massachusetts can serve as a distribution hub to reach dive clubs, stores and other small entities within the dive community.

MH.5—Assess Shipwrecks and other Submerged Objects for Potential Hazards

While sport divers may not have an active role in assessing shipwrecks and submerged objects for potential environmental hazards, they should be notified of the potential hazard for safety purposes. Divers sometimes “explore” sites that appear interesting on the sea floor based on sonar imagery (fish finder), and to the extent that sport divers can be aware of potential risks from environmental impacts (such as a leaking dangerous cargo or oil leak), they should be. The public currently does not have easy or unrestricted access to the databases cited in this section. An objective should be added as proposed to address this need:

5.X Establish a public information exchange and distribution program for shipwreck and submerged sites that have been located and are considered a threat to SBNMS. Inform users of the sanctuary the location of the potential hazard and risks, as well as provide guidance on site avoidance.

In cases where the potential hazard is a historical resource, this further supports the need to reach out into the community to inform those that may be accessing the site of the risks or hazards that exist. Consistent with other strategies of this type, the priority level should be medium.

Summary Comments - DMP

Before discussing proposed alternatives – or minimally a management program that is feasible within the framework of the current DMP – it is important to revisit the following points that were discussed in greater detail earlier in the document. The comments provided here are intended to:

Support the creation of a maritime heritage program and an updated management plan for SBNMS.

Support appropriate funding, staffing and resource allocation for the MH program.

Support a management construct that allows for resource protection while facilitating compatible use and access and doing so within the framework of the overall management structure of SBNMS.

Propose partnership and relationship building programs that utilize the diving community, amongst others, to enhance and expand the MH program.

Propose a community-based management program that is based on voluntary participation and that empowers the dive community stakeholders in SBNMS to become stewards of the sanctuary.

Propose a management construct that seeks to expand knowledge, understanding and documentation of rich historical resources through the collaboration of divers, archaeologists, researchers, and educators.

Proposed Diving/Maritime Heritage Resource Managed Access Programs

The “Sustainable Access Program” (SAP)

Overview: A completely voluntary diving access program that relies on an open-access construct (i.e. no sites prohibited from access and no permits required to dive any wreck) that will promote resource protection, information exchange and collaboration between the sanctuary and diving public.

The current DMP proposes significant restrictions diving MH sites within the SBNMS while proposing no restrictions on commercial fishing around those same sites. While allowing that potentially high impact uses of the sites will be permitted, the author proposes the following approach to managing low-impact activities that will allow public access while still providing protection to the resources. The Sustainable Access Program (SAP) is one proposal for accomplishing this in a climate of limited funding for national marine sanctuary programs in general, limited funding for Stellwagen’s maritime heritage program, and broader management issues that are not currently addressed in the DMP (that being regulation of commercial fishing).

Management of MH within the sanctuary as it relates to diving has some practical considerations that warrant a program that requires an emphasis on minimizing overhead and resource allocation (staffing, etc) in order to implement and run the program. The location of the sanctuary and overall diving conditions do indicate that diving has not occurred on a widespread, frequent basis. This is in part due to lack of awareness. While there is a component of this that is related to divers seeking the lowest cost activity – which would deter them from visiting sites that are farther away and require more time and money to visit – a large component of the perceived infrequent diving in the area is a result of lack of awareness. Divers simply do not know what is out there. Comparatively speaking, charters in Massachusetts Bay are priced much less than other areas in part due to the fact that the most commonly visited sites are closer to shore and thus require less time and investment on the part of the charter operator to conduct those trips. For that reason, the precedent has been set for what a “routine dive charter” is and what that should cost. If one looks to other areas, particularly in the New York and New Jersey regions, charter boats are routinely operating much farther offshore to reach desirable dive sites, are charging more money and the trips are longer. The charter structure in these areas is similar

to Stellwagen in this way. What does this mean for Stellwagen? It means that the historical data is largely biased towards pointing to disinterest in the sanctuary because the current operational structure supports short duration, lower cost trips. It has far less to do with the interest and willingness of divers to pay for trips to Stellwagen bank than it does the ability and desire of charter boats to offer these kinds of trips. Recreational and sport divers visit shipwrecks and dive sites for a variety of reasons. Some divers are interested in marine life that may inhabit a wreck – and therefore the nature of the wreck (intact or debris field) is secondary to the primary interest of photographing marine life. An example of this is the Paul Palmer. While this wreck is mainly a sanded-in reef, it boasts tremendous marine life that makes this site a worthy and appealing destination for many. The point is, the “hard core” wreck divers will be interested in intact shipwrecks, but recreational divers have more diverse interests in the sanctuary such as marine life observing, drift diving, etc. Finally, many of the charter boats in New England are short-range day trip boats that do not have the capability to remain offshore for several days. They lack speed or fuel capacity to operate in a practical manner. This reality will mean that visitation of shipwreck sites will occur primarily among those who have specific interest in diving in the sanctuary and when doing so, they will seek out the operations most qualified to operate in the area.

That all being said, the point is that should a MH program be rolled out in conjunction with community education and awareness building, there will be an increased level of interest in diving in the sanctuary, even though the dive population in New England seeking to access the sanctuary will remain small. The short New England season and practical considerations of operational capability, scheduling and tidal windows will to a certain extent act as a natural regulator of the volume of diving activity going on in the sanctuary. Thus, the current and potential diving users of the sanctuary are a small group and therefore the most effective management approach from a budgetary and resource allocation perspective will be one in which overhead and “process” is minimized, and community-based management is facilitated and maximized by collaboration with the dive community leaders in conjunction with oversight from the sanctuary staff.

Sustainable Access Program (SAP)

In this management construct, all inventoried and assessed shipwreck sites in the sanctuary are open to the public – this includes heritage preserves. There are no public access permits required to visit historical resource or heritage preserve sites. Participation is voluntary – if divers chose to dive in the sanctuary without participating in this program – that is acceptable. It is this author's view that most will want to participate. Conversely, this does not mean that there is no management of access by way of having certain standards and requirements to ensure appropriate access (see discussion on mooring systems, etc), but simply put, this program does not utilize or contemplate a permitting program, nor does it prohibit access entirely on any shipwreck. This voluntary participation program is based on two assumptions:

1. There is currently no shipwreck site in Stellwagen that cannot host some form of human visitation by scuba diving provided it is done so in a thoughtful and intelligent manner. Potential negative impacts from diving can be minimized through appropriate rules and regulations (i.e. no taking of artifacts).
2. Commercial fishing is not prohibited on/around any shipwreck site currently or in the proposed DMP. Unregulated commercial fishing does pose significant potential negative threats to shipwreck sites.

To regulate – or prohibit – access for the diving public when other groups are not regulated is unfair and imposes a bias that does not support the goal of resource protection. Management must be fair and consistent, as well as effective. This reality is the justification for a voluntary managed access program that will very likely have a high degree of compliance among the dive community.

The SAP program would operate in the following way:

1. All historical resource sites, heritage preserve sites as well as unclassified sites are open to the diving public for visitation in a manner consistent with existing regulations as outlined in the 1993 Management Plan.
 - a. The location of historical resource sites, heritage preserve sites, as well as unclassified sites will be published and all information, including environmental data, about the site will be made accessible.
 - b. Divers are encouraged to enroll in the SAP program and to submit trip reports on an annual basis indicating number of visits.
 - c. A program for the sharing and use of photos or videos will be developed.
 - d. A program for the sharing of observations at sites will be developed.

Rationale: The sanctuary does not prohibit fishing at this time on any historical resource or heritage preserve. Therefore, open access diving (a lower impact form of visitation) should be permitted at all sites provided it is done so in a responsible way. Sites that have not been assessed and categorized should be accessible to those who wish visit the site. The individual groups accessing unclassified sites should be participating in the MH program as outlined in section MH.2, as appropriate depending on the nature of their visit (i.e. archaeological research vs. recreational diving).

2. Heritage preserve sites are open to the public (all divers), but these groups or individuals should be Sustainable Access Leaders (SAL). If they are not, divers should seek and obtain **endorsement** of their dive by a SAL in the dive community.

Endorsement: An acknowledgement by a SAL that there is no objection to a dive taking place, as there are assurances that sanctuary rules will be followed. This can be as uncomplicated as simply informing the SAL that dives will be taking place and that the group is aware of the sanctuary's regulations concerning conduct on shipwrecks. The SAL should note this contact in his or her periodic reports as part of participation in the SAP.

Rationale: In the current management structure where commercial fishing is not prohibited on heritage preserve sites, there must be public access permitted in some form. The Sustainable Access Program and endorsement concept are attempts to eliminate the formality of a permitting program that is both cumbersome to implement, manage and justify from a budgetary perspective given the low-volume of diving activity occurring in the sanctuary, while at the same time, attempting to promote a collaborate effort that is consistent with resource protection and facilitating public access in a responsible way. This is done through obtaining endorsement of the dive from a SAL who is part of a volunteer dive program and has received some amount of formal training by the sanctuary. By confining the suggested endorsement protocol to heritage preserve status shipwrecks this puts the focus on the sites that might require the most protection and care when visiting, while remaining flexible regarding other sites that are less important (sites <50 years old), in better condition or that have not yet been classified. In doing so, a relationship between the sanctuary and the dive community will have great value on both sides. Community-based participation in the management of the sanctuary will result in greater accountability for those involved, as well as instill a sense of responsibility for being custodians of the resources within sanctuary among divers.

3. Development of Sustainable Access Leader (SAL) designation as part of a volunteer dive program that participants would join.
 - a. participants would pursue some level of education about the sanctuary (perhaps through an online training program);
 - b. be willing to perform outreach on the sanctuary's behalf;
 - c. contribute dive logs for every dive conducted within the sanctuary;
 - d. participate in the sharing of photos and videos; and
 - e. participate in written observations of heritage sites through an on-line form.

This program would require no funding from the sanctuary provided involvement in such a program is part of the general job description of someone in the sanctuary staff and the Diving SAC member was potentially involved to some extent. There would be no sanctuary "sponsored" dives as part of being in a volunteer dive program, though interaction with divers and exchange of information would be welcome and encouraged. This program focuses on education, outreach, liaising with the sanctuary to exchange information about MH sites and participation in the management process.

A Sustainable Access Leader (SAL) is a person that has interest in utilizing the sanctuary, and that also may also have “roots” in the dive community by way of organized affiliations (e.g. a store owner, charter boat operator, local dive club membership, a leadership position in a diving related organization, prior SAC membership, etc.). A SAL would be part of a community-based leadership team that conducts education and outreach on behalf of the sanctuary, supporting existing outreach programs. These individuals should be involved in as many aspects of sanctuary activities as possible – from public education and outreach, to interfacing with the sanctuary staff to provide and receive feedback on diving in the sanctuary, and to act as interpretive enforcement representatives so as to encourage compliance with sanctuary regulations and management programs. SALs are responsible for being involved as a contact for members of the diving public not enrolled in the SAP that wish to conduct dives on heritage preserve sites. By placing responsibility on leaders in the dive community to ensure the proper conduct of divers visiting historical resources or heritage preserves, it raises the level of responsibility and commitment to promote and guarantee (to the extent possible) compliance with regulations, and ensure the greatest protection for the most fragile sites. For example, if an SAL is a well-known instructor and member of an active dive club and this person becomes involved with a group of divers that seek endorsement of a dive, this person has a personal stake with respect to his or her credibility in the community that the dives go according to plan and no sanctuary rules are broken. If a dive is not endorsed, a SAL should make efforts to ensure that unendorsed dives are discouraged by the dive community as a whole to prevent them from moving forward.

The general requirements for SAL status are outlined below. The sanctuary staff would develop an internal approval process based on the below criteria being met. There would be no fees for participation in this program and renewal would occur on an annual basis with the criteria for renewal being something relatively simple such as documented activity as an SAL (in other words, simple and not too burdensome on the individual or the sanctuary).

SAL Individual Diver

Complete an on-line education course

Sign an agreement that includes the following points:

- Agree to follow rules and regulations of SBNMS especially no artifact removal and minimize damage to wrecks
- Agree to either hire an operator who is an SAL or who is willing to follow the mooring protocols, or to follow the mooring protocols when operating his or her own boat
- Agree to submit all dive logs when visiting to SBNMS
- Agree to submit written on-line comments regarding heritage sites (facilitate their research and management of sites)
- Agree to be willing to submit photos and videos for public use

SAL Dive Operator (Boat, Store, Club)

Complete an on-line education course

Sign an agreement that includes the following points:

- Agree to inform all divers of the rules of SBNMS prior to divers entering the park (at the shop, on the boat, at the club etc.)
- Agree to moor according to rules established by SBNMS or hire an operator who will do so
- Agree to ensure all divers have proper certification for dive prior to entering the park
- Agree to be an ambassador for the SBMNS by supporting the rules and regulations surrounding diving in the park, being willing to do outreach, being willing to share videos, photos, etc.
- Agree to report divers who bring artifacts back with them
- Agree to not knowingly allow divers to enter the water with tools necessary to remove artifacts at protected sites

By placing personal responsibility on the participants – from the divers to SALs – and promoting education and outreach, this can be a successful program that has low-budget implications, promotes and supports the MH program, and operates within the proposed management plan objectives and existing sanctuary regulations.

SAP Sanctuary Mooring Program:

The need for a safe and reliable means to access dive sites and shipwrecks is a critical point in the development of any sanctuary regulations or management objectives. To ignore this point when creating sanctuary rules indicates not only a lack of understanding on the practical aspects of diving as an activity, but it knowingly creates a safety issue. If the sanctuary cannot provide a mooring infrastructure, access using conventional techniques with some slight modifications must be allowed. Put another way, the sanctuary must not prohibit divers from securing a line to a shipwreck if there is 1) no mooring present and/or 2) there is no other means to safely access the site given the conditions (i.e. a free descent or drift dive is not possible). The author agrees with prohibiting the use of grappling hooks or anchors that might act similarly to a grappling hook, but to say that divers cannot secure a line to a wreck when diving in an offshore sanctuary, heavily transited by commercial shipping and fishing traffic – as well as in an area exposed to very strong currents – is irresponsible and threatens the safety of divers. Currently the sanctuary’s own website states securing a line to a shipwreck is prohibited, while suggesting no other means to access the site. The lack of published guidance leaves divers with few options to dive on shipwrecks in a safe manner. This author believes that the sanctuary is doing a disservice to the public and creating safety issues by making such statements and withholding alternative information this way. It would be highly advisable to incorporate appropriate language in the DMP as suggested earlier in this document, and update the website to state the following:

“The use of anchors and grappling hooks are prohibited when diving in the sanctuary; however, the use of weighted shot lines is allowed and where no mooring exists or conditions require, the shot line may be secured to the wreck itself provided it is done so in a manner aimed at minimizing potential disruption of the site.”

This allows divers to descend down a line, arrive on the bottom and scout out a good place to secure the line. This technique has been used very successfully for more than 20 years in Massachusetts Bay, where many shipwrecks are wooden vessels that have been underwater at least 50 years. In the context of the SAP, the SALs could be trained in utilizing this technique – and again, this is a technique already being widely used by commercial dive operations outside the sanctuary.

The sanctuary's mooring plans as described in the DMP does not appear to be part of a well-resourced or well-funded program. That being the case, the sanctuary has little choice but to accept alternative means for divers to access shipwreck sites as described above. When moorings are utilized on a limited basis, they can be used in a manner that complements the practice of using shot lines.

Instead of deploying a “full mooring” that would include a mooring block, ground tackle such as chain, heavy rope, floats and marker buoys, the sanctuary can simply place mooring blocks on the sea floor at a distance within the limits of visibility to the shipwreck. This method was previously described in an example earlier in this document, but additional detail will be described here. The mooring block (at least 1000 pounds) shall be placed on the seafloor near the wreck site (a commercial operation would be involved in the installation of this item, as a boat with an A-frame and other heavy duty equipment would be required). When a dive group arrives at the site, a shot line will be deployed and divers will descend down this line – this is exactly the same practice that would be employed if no mooring infrastructure were present at all. The first team down will take the line and move it to the location of the mooring block (the sanctuary will need to publish schematic drawings for those potentially unfamiliar with a site and the mooring point location). The mooring block will be equipped with tackle such as a large eye loop where divers can connect their line to the mooring block. Once this line is secure, the boat can tie-off to this line and the dives can proceed with all divers having a fixed line in proximity to the wreck to descend and ascend on. When the dives have concluded, the dive team tasked with release of the line can simply unclip this line after the boat has dropped off the buoy, and ascend up the weighted shot line (the line's weight block would be left on the line or near it if disconnected while attached to the mooring block). The line can then be pulled up and removed entirely – leaving no line to maintain or pose hazards to navigation or marine life. The only risk in any of this is that a line must be deployed initially and this may come into contact with the wreck itself. The damage something like this would potentially cause (if any damage at all) would be miniscule

compared to the effect of an active dragger net becoming fouled on wreckage. The author believes this is an acceptable consequence of low-impact human activity occurring at the site.

Summary Comments regarding Maritime Heritage:

1. To reiterate the basic point that must be kept in mind when considering management of MH as it relates to diving – commercial fishing, a high impact group, is allowed and will continue to be allowed for the foreseeable future. Since that is the case, **it makes little sense to prohibit access to a lower-impact group such as divers.**
2. Since the greatest sanctuary concern is about artifact removal by divers, the management program should incorporate the following points:
 - a. Define which wrecks merit protection.
 - b. Reinforce the prohibition concerning the taking of artifacts from protected wrecks.
 - c. Place accountability for the removal of artifacts solely upon divers (and not upon boat operators, dive shops or dive clubs).
3. Do not create a permit system for recreational (including technical) divers. Permits of any type should be avoided for recreational sport diving. Looking at the concept alone it may seem like a viable option, but looking at the concept in totality with all aspects of sanctuary management and realities of budget, fishing regulations, etc. considered, permitting for divers is very much out of place for Stellwagen Bank NMS. The small group known to have a desire to dive in the sanctuary in itself presents a strong case for a community-based managed access program. It also argues against a system that would be a misallocation of resources.
4. Create a voluntary and free program that is “by divers, for divers – with the sanctuary” to help address interpretive and enforcement issues.
 - a. Promote the Sustainable Access Program so that divers from outside the region will seek out divers and operators enrolled and engaged in the SAP.
 - b. Promote the SAP so that local divers will self monitor behavior that is not in line with the goals and objectives of the SBNMS.
5. Develop an online education system to train the community overall, but most specifically the SALs.
6. Develop an aspect of the larger education and outreach program that the sanctuary, SAC members and SALs can take to dive clubs and other parties in the dive community to promote

an educational and informational environment that addresses diving safety in the sanctuary, rules and regulations – and importantly, how to get involved.

7. The sanctuary needs to commit to working with divers to find safe and effective ways to access wrecks in the absence of mooring buoys. Such access should address the mutual issues of diver safety and preservation of the wrecks.
8. MH sites that are unclassified should be studied in a manner appropriate to archaeological standards. That should not mean that divers who visit an unclassified site cannot add something to the level of understanding and the library of information about the wreck as long as the procedures are followed (especially if some basic training was available). Given that it can take a very long time to resource projects within NOAA – allocating people, vessels, equipment and then turning out assessments – the community should be allowed and encouraged to participate in documenting these sites and enjoy them responsibly. Again, in a community-based program this group is likely to be an asset as opposed to a liability.

General Comments on the DMP:

1. In closing, my general view is that the DMP avoids addressing high impact uses of the SBMNS including commercial fishing (documented depletion of fishing stock and destruction of the ocean floor) and commercial shipping (documented whale strikes) and instead proposes new and onerous restrictions on low impact uses including diving and whale watching.
 - a. Proposals regarding commercial shipping (well established threat to whales) include voluntary reductions in speed to avoid whale strikes. In contrast, the DMP proposes onerous permits and speed reductions for whale watch operators presumably to reduce the potential for whale strikes. Such regulations for whale watch operators are proposed in the absence of a true justification (i.e. numerous documented whale strikes).
 - b. Proposals regarding commercial fishing (the DMP repeatedly cites the large and negative impact of this industry on the environment throughout its own document) include voluntary measures or increased study. In contrast, the DMP proposes exclusionary policies that would greatly impact divers and dive operators. Again, such regulations for divers are proposed in the absence of a true justification (i.e. documentation that divers have caused severe damage to protected wrecks in the sanctuary).

2. While the economic impact to commercial fishing and commercial shipping were obviously considered when developing the DMP, the same considerations were not given to dive, sport fishing and whale watching operators. While these operators clearly do not represent the significant economic impact of commercial fishing or shipping such impact is real and does exist. Both of these industries provide to the overall economic health of the Commonwealth. However, in contrast to commercial fishing and shipping, these industries have no documented negative impact on the SBNMS or its resources.
3. While facilitating access in a manner compatible with resource protection is an admirable goal and stated mission, we must pause to remember that the original mandate of the sanctuary is still being met (no drilling or mining is occurring) and a fragile, critical, multi-faceted regional economy relies on access to this sanctuary. Do not doom it by making rules that cannot be followed.

Sincerely,

Captain Heather L. Knowles
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Member, Boston Sea Rovers
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August 15, 2008