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Perceptions of Participants in the NOAA Marine Sanctuary Nomination Process: A Case Study of Mallows Bay-Potomac River

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PERCEPTIONS OF PARTICIPANTS IN THE NOAA NATIONAL MARINE SANCTUARY

NOMINATION PROCESS:

A CASE STUDY OF MALLOWS BAY-POTOMAC RIVER

BY

CATHRINE L. DENMAN

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE

REQUIREMENTS FOR THE DEGREE OF

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ABSTRACT

Many researchers acknowledge that including the public in marine protected area (MPA) planning and management can lead to more effective management, increased levels of trust, and project ownership that encourages project support. However, planners and managers lack clear guidance on how to design and implement successful participatory processes that effectively and meaningfully engage the public. This study investigated the Mallow Bay-Potomac River National Marine Sanctuary nomination process, a recently established process for nominating areas of national significance, to provide insights into how the public was involved in the process. More specifically, the goal of this study was to highlight how specific characteristics of the process (ways participants interact, share information and make decisions) contributed to the quality of the process.

Semi-structured interviews with 14 members of the Mallow Bay-Potomac River Steering Committee were conducted in the summer of 2016. Respondents were asked their thoughts about the process, their motivation for involvement, and their views on the specific mechanisms of engagement that were used throughout the process. Respondents were also asked to share their perceptions of the process in terms of five features of process quality: active participant involvement, decisions based on complete information, fair decision making, efficient

administration, and positive participant interactions. All interviews were transcribed and coded into themes and subcategories.

Overall, participants felt that the nomination process effectively incorporated three of the process features: active participant involvement, decisions based on complete information, and positive participant interactions. Respondents described eighteen specific mechanisms that were used to engage participants throughout the nomination process, with five mechanisms emerging as especially important (phone calls, emails, public meetings, one-on-one or small group meetings, and networking). Findings suggest that including multiple mechanisms, both traditional and non-traditional, for stakeholder participation helped to ensure the process was successful. Results from this study will help MPA planners and managers design participatory processes that effectively and meaningfully engage the public.

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PREFACE

This thesis is written in manuscript form because it will be submitted to the Journal of Coastal Management.

TABLE OF CONTENTS

ABSTRACT	ii
ACKNOWLEDGEMENTS	iv
PREFACE	v
TABLE OF CONTENTS	vi
LIST OF TABLES	vii
LIST OF FIGURES	viii
MANUSCRIPT – I	1
1. INTRODUCTION	2
2. BACKGROUND	4
2.1 Public Participation	4
2.1.1 Arguments for Public Participation	4
2.1.2 Mechanisms of Public Participation.....	5
2.1.3 Features of Participatory Processes That Contribute to Process Quality	10
2.2 Public Participation in the National Marine Sanctuary Nomination Process	16
2.3 Nomination Process of Mallow's Bay-Potomac River	21
3. METHODOLOGY	28
3.1 Study Sample	28
3.2 Interview Questions	30
3.3 Data Analysis	30
4. RESULTS	32
5. DISCUSSION	59
5.1 Overall Perceptions of the Process	59
5.2 Important Mechanisms Used in the Nomination Process	64
5.2.1 Phone Calls.....	65
5.2.2 Emails	66
5.2.3 Public Meetings.....	66
5.2.4 One-on-one and Group Meetings.....	67
5.2.5 Networking.....	69
5.3 Innovative Mechanisms for Engaging Participants	70
5.4 Media, Outreach and Administrative Mechanisms for Involving the Public in the Nomination Process	70
5.5 Limitations and Future Research	72
APPENDIX A: TYPOLOGY OF PARTICIPATION MECHANISMS	77
APPENDIX B: INTERVIEW PROTOCOL	78
BIBLIOGRAPHY	81

LIST OF TABLES

Table 1: Site requirements for placement eligibility on the List of Recommended Areas.....	19
Table 2: Mechanisms of engagement used throughout the nomination process. Numbers reflect the number of participants that discussed the mechanism in relation to each process feature. Process features include: active participant involvement, decisions based on complete information, fair decision making, efficient administration, and positive participant interactions.	35

LIST OF FIGURES

Figure 1: Dalton’s (2005, 2006) framework that reflects five process features that contribute to the success of public participation processes.	10
Figure 2: Evolution of the sanctuary nomination process from 1972 to the present.	17
Figure 3: Location and area detail of Mallow’s Bay-Potomac River.	22
Figure 4: Images from Mallow’s Bay-Potomac River (Source: Cathrine Denman).	23
Figure 5: Timeline for the nomination process of Mallow’s Bay-Potomac River.	24
Figure 6: Alphabetical list of participation mechanisms... ..	77

MANUSCRIPT – I

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**Perceptions of Participants in the NOAA National Marine Sanctuary Nomination
Process:
A Case Study of Mallows Bay-Potomac River**

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1. INTRODUCTION

There is a general consensus among researchers that involving the public in marine protected area (MPA) planning and management can lead to more effective management, increased levels of trust and stability, and decisions that are more supported (Dalton, 2012; Kelleher, 1999). While including the public in decision making processes has been acknowledged as important for decades, there is still no clear road map for MPA planners and managers to design and implement participatory processes successfully (e.g., Agardy et al., 2011; Chaigneau et al., 2015; Konisky and Beierle, 2001; Pollnac et al., 2001; Sayce et al., 2013; Singleton, 2009). This study investigates the participatory process for nominating the Mallows Bay-Potomac River National Marine Sanctuary (NMS).

After more than 18 years, the National Oceanic and Atmospheric Administration's (NOAA) Office of National Marine Sanctuaries (ONMS) re-established the process for nominating NMS in July of 2014 (Sanctuary Nomination Process-Rule, 2016). The process now requires nominations to be community driven and supported by a broad range of interests. The first of many sites that was successfully nominated is Mallows Bay-Potomac River, a historical site located in Charles County, Maryland known for having one of the largest assemblages of historic shipwrecks in the Western Hemisphere (Sanctuary Nomination Process, 2016). The nomination represented a

significant collaboration among the members of the Mallow's Bay-Potomac River Steering Committee and the broader community.

To provide insights into how the public was involved in this process, Dalton's (2005, 2006) framework on process quality was used to examine participants' perceptions of the process and how characteristics of the process (i.e. ways participants interact, share information and make decisions) contributed to its overall quality, providing MPA planners and managers with a practical guide to engaging participants in similar processes.

2. BACKGROUND

2.1 Public Participation

2.1.1 Arguments for Public Participation

Due to the complexity, uncertainty, and vast number of people that environmental problems affect, citizen involvement in decision making has been widely accepted as important (Blader & Tyler, 2003; Beierle and Cayford 2002; Chen et al., 2017; Collins & Evans, 2008; Devine-Wright, 2017; Fiorino, 1990; Fischer, 2000; Pomeroy and Douvere, 2008; Reed, 2008; Renn et. al, 2003; Spalding et al., 2016). Fiorino (1990) presents three arguments for including the public in decision making processes that is supported by more recent literature: substantive, normative, and institutional (Collins & Evans, 2008; Devine-Wright, 2017; Pomeroy and Douvere, 2008; Reed, 2008).

The substantive argument states the quality of information in a process will be improved by including lay people. Lay people, or non-experts, are able to see problems, issues, and solutions that experts may miss. By including local knowledge and outsider perspectives, the quality of information used to inform decisions will be strengthened. The normative argument for including stakeholders emphasizes the importance of participation for democracy and citizenship. Fiorino states that “to be a citizen is to be able to participate in decisions that affect oneself and one’s community” (Fiorino, 1990, page 227). People expect to have the ability to influence collective decisions that affect them, it is their democratic right. Finally, the institutional argument highlights that including the public in decision making can lead

to legitimate decisions that are more supported. According to Fiorino (1990), “if we lack mechanisms for lay participation, then the current crisis of confidence afflicting risk institutions can only deepen (Fiorino, 1990, page 228). Overall, research suggests that involving the public in decision making processes can provide unique opportunities for more in depth understanding of the issues at hand, more collaboration, the development of new ideas and solutions, longer term success that achieves mutual goals, and higher quality decisions that are more widely supported (Beierle, 2002; Beierle and Cayford, 2002; Osmond et al., 2010; Pomeroy and Douvere, 2008; Reilly et. al., 2016).

2.1.2 Mechanisms of Public Participation

While it is widely accepted that members of the public should be involved in environmental decision-making, there is a lack of clear guidance on how to engage people in such processes (Rowe and Frewer 2000, 2005). Ladders, or spectrums, of participation have been developed to show the varying degrees of public participation. Arnstein’s 1969 foundational article “A ladder of citizen participation” laid the groundwork for showing the varying degrees of citizen power and local control in decision-making processes. Arnstein’s ladder ranges from non-participation, to degrees of tokenism, to degrees of citizen power (Arnstein, 1969). A 21st century variation of this model is the IAP2 Spectrum of Public Participation (IAP2, 2014). The spectrum includes five levels of participation: inform, consult, involve, collaborate, and empower. Within each of these levels there is a defined public

participation goal and promise to the public. The first four levels of the spectrum represent scenarios in which the government and or sponsoring agency retain final decision authority and responsibility.

Collaboration, the final step before decision making power is placed into the hands of the public, seeks to involve the public in each aspect of the decision making process including the development of alternatives and preferred solutions. Collaboration can be seen as a “bottom-up approach involving negotiations and problem solving among a variety of governmental and nongovernmental stakeholders” (Sabatier et al., 2005). Through collaboration, it is argued that a process will be more likely to generate mutual understanding and trust among stakeholders, increase empowerment through informed dialogue, improve implementation, enhance legitimacy, promote the building of personal and professional relationships, contribute to the building of institutional capacity (i.e. social, political, and intellectual capital), and result in win-win solutions to a variety of problems faced by different stakeholders (Innes and Booher, 2007; Wondolleck and Yaffee, 2000). The fifth and final level of the IAP2 Spectrum of Public Participation is empowerment. At this level the final decision making authority is placed in the hands of the public; government and/or sponsoring agencies are then tasked with implementing the public's decisions. At each level in these spectrums of public participation, there are various institutional mechanisms that can be used by practitioners to involve the public.

Rowe and Frewer (2005) highlight that because public involvement can take many forms, in various contexts, with different types of participants, concerns, and goals, it is important to understand which mechanisms of engagement are most appropriate. To do this, a number of authors have tried to develop a typology of engagement mechanisms to show how and when certain mechanisms should be used (Appendix A: List of Mechanisms) (Arnstein 1969; Fiorino, 1990; Glass, 1979; Nelkin and Pollak, 1979; Rosener, 1975; Rowe and Frewer, 2005; Webler, 1999). In an effort to understand the scenarios in which particular mechanisms should be adopted, researchers suggest that it is important to clarify a few terms, namely to distinguish between public participation and public engagement (Rowe and Frewer, 2005). Public participation has varying definitions but is generally accepted to be “the practice of involving members of the public in the agenda-setting, decision-making, and policy-forming activities of organizations/institutions responsible for policy development” (Rowe and Frewer, 2005, page 253). However, because the public may be involved in a number of ways and at various levels- as noted by Arnstein 1969 and the IAP2 Spectrum, further clarification is necessary.

Rowe and Frewer (2005) argue that there are distinct differences between public involvement and public engagement. Public engagement is referred to as public communication, public consultation, and public participation; the flow of information between process participants and sponsors is what separates these concepts. Public communication is the flow of information from the process leaders or sponsors to the public, there is no involvement of the public. Public consultation is the flow of

information from the public to the process sponsors after the process sponsors have initiated the exercise, no dialogue exists rather there is a unidirectional flow of information. Public participation is seen as two-way communication between participants and process organizers where there is some sort of dialogue or negotiation. Because these forms of engagement differ in their purpose and structure, the mechanisms that are used to enable them will vary.

Similar to Rowe and Frewer's (2005) categorization of public engagement mechanisms into communication, consultation, and participation, Beirele and Cayford (2002) argue that public participation can be organized into four categories of mechanisms that range along a scale of intensity. The four categories of mechanisms include: 1) public meetings and hearings, 2) advisory committees not seeking consensus, 3) advisory committees seeking consensus, and 4) negotiations and mediations. These mechanisms differ according to how the participants were selected, who participates, how decisions are made, and what kind of output they produce (Beirele and Cayford, 2002).

Public hearings and meetings are characterized as loosely structured forums where members from the public hear agency proposals and respond; decision making authority is rarely shared with the public. Advisory committees are small groups of people that are selected by a sponsoring agency to represent views of various communities or stakeholder groups on a particular issue or project (Rowe and Frewer, 2000). Unlike public meetings or hearings, advisory committees seek to

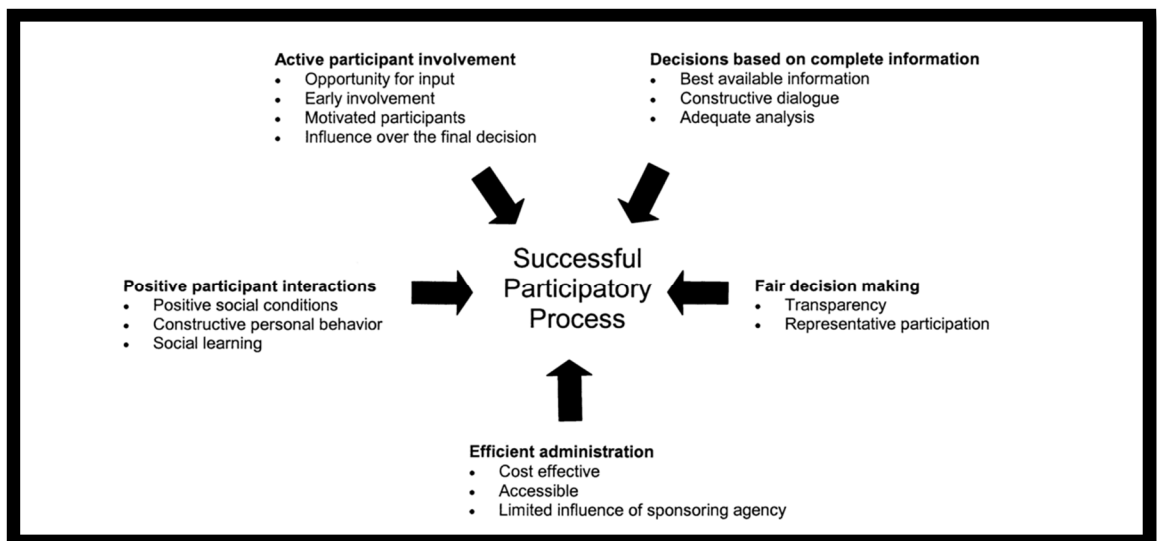
manage interactions among participants and provide input to the lead agency. An important distinction made within advisory committees is whether they seek consensus. Consensus requires those with opposing interests to work together to come up with shared solutions to problems in ways that other decision-making approaches do not. Negotiations and mediations refer to scenarios in which participants form agreements that bind their organizations to a certain course of action. This mechanism category requires decisions to be made by consensus (Beirele and Cayford, 2002).

Beirele and Cayford (2002) argue that mechanisms become more intensive as they advance from public meetings and hearings to advisory committees to negotiations and mediations. Participants in the more intensive processes are more likely to have the capacity to influence participatory efforts because they have become more familiar with the issues at hand. The skills they acquire throughout the process enable them to be more effective in participating, solving problems, and getting decisions implemented (Beirele and Cayford, 2002). The categories of mechanisms discussed are just two examples of how researchers have tried to organize the numerous mechanisms that can be employed in a participatory process. While this research does not seek to fill gaps in the literature on organizing mechanisms, it does seek to provide MPA planners and managers with an array of mechanisms that can help enable meaningful participation in decision making processes.

2.1.3 Features of Participatory Processes That Contribute to Process Quality

Empirical studies of ecosystem-based management processes have shed light on a number of features within a process that contribute to the overall quality of a process. Based on empirical and theoretical research from U.S. natural resource management, Dalton (2005, 2006) developed a framework incorporating five key process features for involving participants in MPA management in the United States (Figure 1). The five process features in the framework include: active participant involvement, decisions based on complete information, positive participant interactions, efficient administration, and fair decision making. Each feature is comprised of individual process elements that can contribute to process quality.

Figure 1: Dalton's (2005, 2006) framework that reflects five process features that contribute to the success of public participation processes.



Active Participant Involvement

According to the literature on public participation in U.S. resource management, stakeholders need to be actively engaged in planning and management. Active involvement can lead to improved plans, decisions, and process outcomes (Glass, 1979). Dalton (2005) highlights four elements that influence active participant involvement: opportunity for input, early involvement, motivated participants, and influence over the final decision. It is not enough for processes to include stakeholders, participants need the opportunity to voice opinions and be heard throughout the process (Webler and Tuler, 2000). According to Glass (1979), ensuring that citizens have an increased opportunity to provide input in planning processes is a central objective of citizen participation. By giving citizens opportunities to provide input, supplemental information that would have been otherwise unknown, can be shared with planners and managers (Osmond et al., 2013).

While the level and type of participant involvement may vary, the literature suggests that participants need to be involved from the very beginning stages of the process (Reilly et. al., 2016). Research suggests that involving participants early on in the process can lead to more effective decisions and more satisfied stakeholders (Agardy et al., 2011; Thomas, 2013; Wondolleck and Yaffee, 2000). Not only must participants be involved early on and be given the opportunity to provide quality input but they should also be motivated to participate.

One of the most influential factors in a public participatory process is the opportunity to influence decisions (Hoover and Stern, 2013). The opportunity to influence decisions is a prerequisite for any democratic proceeding. Participants will be reluctant to accept a final decision if they were only consulted about an issue (Chen et. al., 2017). Showing those involved how their input is used creates trust, transparency, and legitimacy (Dalton, 2005). Legitimacy can be seen as synonymous with acceptance and satisfaction of process outcomes (Gross, 2007).

Decisions Based on Complete Information

In participatory processes, it is critical that those involved are making decisions based on complete information. Dalton (2005) notes that there are three key elements that allow for decisions to be based on complete information: best information exchange, constructive dialog, and adequate analysis. Information exchange, or “bridging planners and citizens together for the purpose of sharing ideas and concerns,” is a key element in any participatory process (Glass, 1979; page 182). To help participants make informed policy decisions, participants must have access to accurate, relevant, meaningful, and well organized information (Crosby, 1986; Reilly et. al., 2016). By sharing the best available information on projects, proposed ideas, and the different ways to get in involved in the process, citizens become more informed and engaged. Information exchange should occur through multidirectional flows allowing participants to learn the information, reflect on the values and goals relevant to that decision, have a constructive dialog with the

broader group, and eventually come to a decision through deliberative means (Crosby, 1986; Rowe and Frewer, 2000). It is important that the methods that are adopted to facilitate the information exchange are designed in a way that takes various skill levels, learning styles, and knowledge levels into consideration (Dalton, 2005). Participatory processes should also include opportunities for participants to have face-to-face small group interactions; these types of interactions allow the participants to begin building relationships and trust (Thomas, 2013).

Positive Participant Interactions

In participatory processes that seek to involve various perspectives and interests, it is important that the way participants interact is both constructive and positive. While all participants may not agree on decisions, it is critical that the process is designed in a way that manages the interactions among conflicting parties resulting in enhanced learning and stronger management. The way in which participants interact with each other can directly influence decision outcomes. According to Dalton's (2005) framework, three elements that contribute to positive participant interactions include positive social conditions, constructive personal behavior, and social learning.

Positive social conditions within a process include management of conflict, relationship building, promotion of a sense of place, and managing agency sensitivities toward participation cost and effort. The social conditions in place

throughout a process can set the stage for participant behavior. The quality of a participatory process can be affected by one's respect, openness, honesty, understanding, listening, and trust toward another involved throughout the process (Dalton, 2005; Tuler and Webler, 1999). A process designed in such a way to facilitate positive social conditions and personal behaviors can lead to better working relationships that may result in more effective decisions that are supported and accepted. The third and final element of positive participant interactions is social learning. When a participatory process is effectively designed and managed, participants are able to work together to produce solutions to problems shared by all involved. Through social learning, participants are able to see how their individual interests and concerns relate to the broader group.

Efficient Administration

According to Dalton's (2005) framework, factors that contribute to efficient administration include cost-effectiveness, accessibility, and limited influence of the sponsoring agency. Effective use of time and resources can maximize participant involvement and improve perceptions of process effectiveness. Processes that are created to promote public involvement must be designed in a way that is sensitive to the demands placed on people's time and resources (Wondolleck and Yaffee, 2000). Access to the process is a component that can affect perceptions of process fairness and representativeness. The process must work to ensure that participants are physically able to participate and have the necessary resources required throughout

the process (Carballo-Cardenas and Tobi, 2016). Access to the process should be equally accessible to all those that wish to participate. While ensuring that the process is efficient and accessible, it is also important that the lead agency does not influence decision outcomes (Fox et al., 2013). The lead agency should act as facilitator rather than a leader in decision making (Alcala,1998; Berkes, 2009; Dalton, 2005; Kearney et al., 2007; Marzuki, 2015; Pomeroy et al., 2008; Singleton, 2009). As a facilitator, the lead agency should maintain neutrality toward outcomes, help groups work together productively, help manage conflict, and coax participants to voice their opinions and listen to views of others (Bryson et al., 2012). Effective facilitation can contribute to high-quality problem solving and decision making.

Fair Decision Making

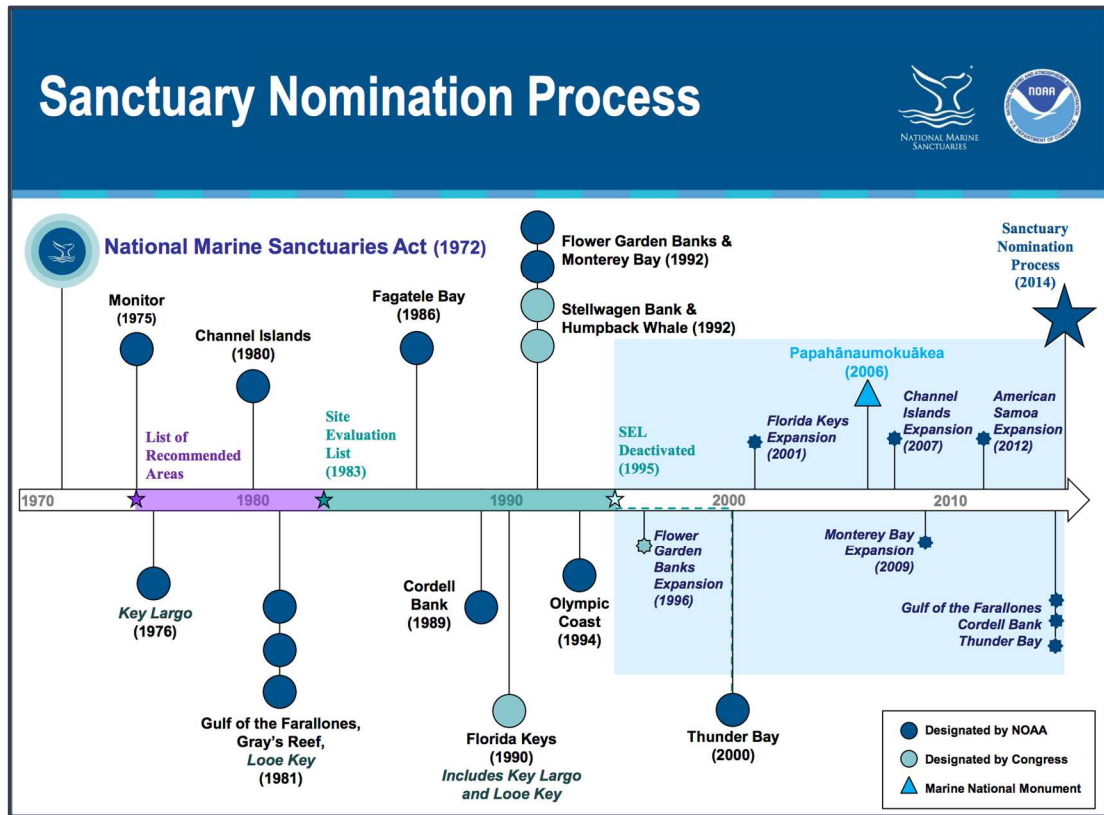
Dalton (2005) highlights that elements such as representative participation and transparency are critical to the success of participatory processes. According to Smith and McDonough (2001), a fair process requires that all persons interested must be able to attend, participate in discussion, and have an influence over decisions. Processes that ensure representative participation can promote the sharing of perspectives among different participants and can help inform planners and managers on participant's goals and objectives throughout the process (Bryson et al., 2012). Those processes that equitably represent all participants and clearly show how final decisions are made are more likely to be perceived as fair. Positive perceptions of process fairness can make unfair or unfavorable outcomes easier for

participants to accept and support (Brockner and Siegel, 1996). Specifically, within MPA planning and management, understanding perceptions of process fairness and factors that influence perceptions can assist policy makers in designing processes that more effectively engage the public and meet the expectations of all involved.

2.2 Public Participation in the National Marine Sanctuary Nomination Process

National Marine Sanctuaries are defined as “areas of the marine environment that possess conservation, recreational, ecological, historical, scientific, educational, cultural, archaeological, or esthetic qualities which give them special national, and in some cases international, significance” (Sanctuary Nomination Process, 2016). As of March 2017, there were a total of thirteen NMSs located throughout the United States (NOAA, 2017). The process of nominating sites for NMS status is not a new concept. Since the establishment of the Marine Protection, Research, and Sanctuaries Act (National Marine Sanctuaries Act) in 1972, there have been four processes, including the most recent, to identify and nominate areas of national significance (Figure 2).

Figure 2: Evolution of the sanctuary nomination process from 1972 to the present. Source: <http://www.nominate.noaa.gov/>



The first process was a loose system in which anyone could submit a nomination. In this system, there were no clear guidelines or standards for how sites were selected for NMS status (Chandler and Gillelan, 2004). Due to the system's lack of organization and direction, there were concerns about the size and scope of the sanctuary system. There were also concerns about the lack of public involvement throughout the process. According to two attorneys, Blumm and Blummstein, "one of the reasons for the programs dormancy in its first five years was lack of significant public involvement, which in turn was in part due to a lack of clear prescribed standards for assessing whether nominated sites were worthy of designation" (Chandler and Gillelan, 2004). According to the attorneys, the system's failure to set

clear expectations and standards resulted in the public being disinterested and distrustful of the process. Overall, this process failed to include the public in a meaningful way.

In 1979, NOAA developed the List of Recommended Areas (LRA) to replace the original process. Like the first process, the LRA allowed anyone to nominate sites. However, the LRA system established a list of requirements potential sites needed to meet to be eligible for nomination (Table 1). The LRA was an inventory of designation worthy sites; however, placement on the LRA did not ensure that designation would ever occur. Similar to the first process, public involvement in the LRA process was limited. As noted by Cicin-Sain and Knecht (2000), “timely public participation was not built into the process nor was there a mechanism for adequate public notification.” This process was designed to address the failures in the previous process by providing information to the public that would reveal how NOAA would determine which sites were worthy of designation. However, simply providing more information on process requirements did not improve the ways the public was able to participate. Beyond identifying a site, there was no interaction or opportunity for the public to be involved in the process of planning or managing the area. In an effort to further refine the process, NOAA eliminated the open-ended process and replaced it with the Site Evaluation List (SEL) in 1983.

Table 1: Site requirements for placement eligibility on the List of Recommended Areas. (Source: Volume 44, Number 148 of the Federal Register and references section 922.21 of the NMSA)

1. Important habitat on which any of the following depend for one or more life cycle activity, including breeding, feeding, rearing young, staging, resting, or migrating: (i) Rare, endangered, or threatened species; or (ii) Species with limited geographic distribution, or (iii) Species rare in waters to which the Act applies, or (iv) Commercially or recreationally valuable marine species.
2. A marine ecosystem of exceptional productivity indicated by an abundance and variety of marine species at the various trophic levels in the food web.
3. An area of exceptional recreational opportunity relating to its distinctive marine characteristics.
4. Historic or cultural remains of widespread public interest.
5. Distinctive or fragile ecological or geologic features of exceptional scientific research or educational value.

Unlike the previous two processes, under the SEL, sites were selected through a scientific evaluation process. Eight regional teams of nationally recognized marine scientists were developed to identify, evaluate, and recommend sites for inclusion on the SEL (Code of Federal Regulations, 1982). The regional teams were tasked with ranking sites according to the science criteria developed by NOAA. The four categories for assessment included natural resource values, human use values, potential activity impacts, and management concerns (Code of Federal Regulations, 1987). Those sites that received a high score were deemed a high priority and recommended for further consideration (National Marine Sanctuary Report, 1983). In this process, public participation increased from merely nominating sites to becoming active participants throughout the process. The public was able to participate in this process in two ways: 1) through identifying and nominating areas

for evaluation, and 2) through a public comment period. However, this process was still characterized as a top-down approach to selecting sites for designation. The regional teams were not reflective of local communities or stakeholder groups; public comment periods were the only opportunity for the public to influence the selection process. This process, similar to the previous two processes, failed to engage the public in any meaningful way.

In 1995, the process was deactivated by the Director of the Office of National Marine Sanctuaries to focus on managing the existing network and to expand community engagement (Sanctuary Nomination Process-Rule, 2016). Since 1995, NOAA has received public comments and requests from the local, state, and federal level asking for the re-establishment of the nomination process. Due to the widespread interest from the public and the maturity of the existing NMS network, NOAA re-established the nomination process on July 14, 2014 (Sanctuary Nomination Process, 2016).

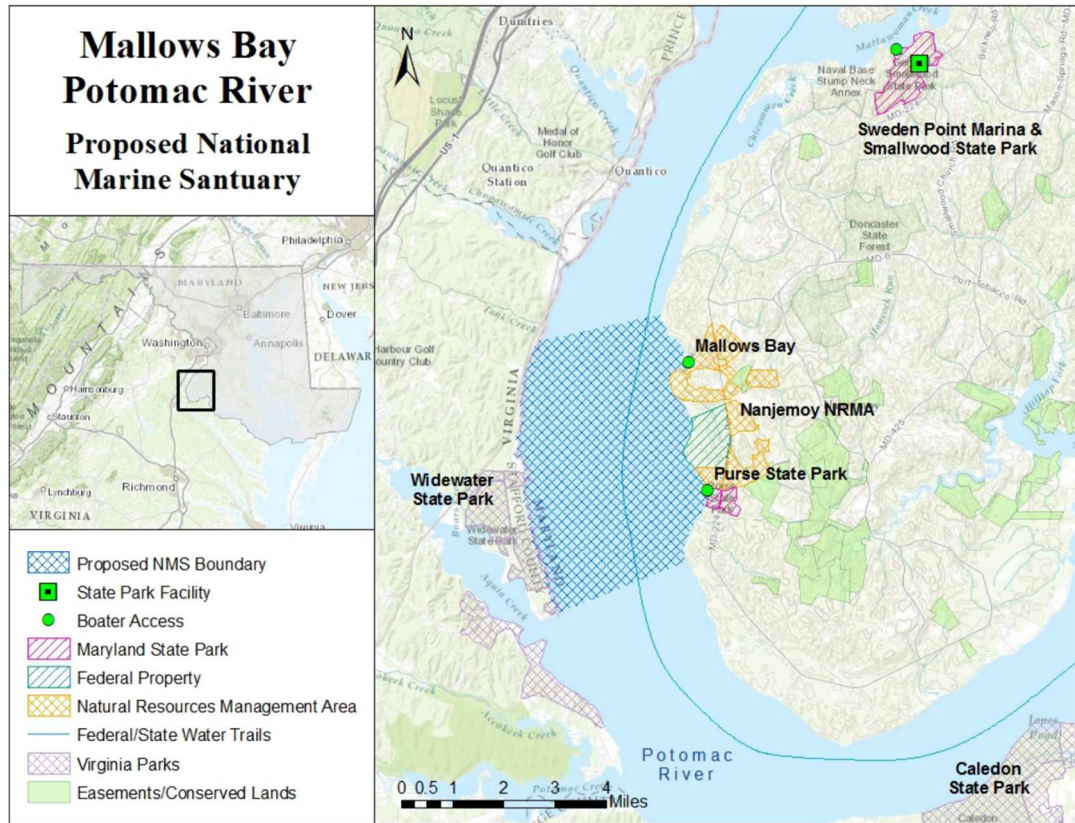
The current nomination process is unlike any of the previous processes. For the first time since the establishment of the National Marine Sanctuaries Act (NMSA), nominations must demonstrate broad support from a variety of stakeholders (Sanctuary Nomination Process- Rule, 2016). Through this system, local communities are empowered to come together to identify and nominate sites worthy of national designation. The re-designed process addresses the lack of public participation cited in the previous processes.

The nomination process now not only requires public support, but it also requires local communities to collaborate with various partners and stakeholders to show how potential sites will be financially supported and managed in the future. To successfully add a site to the inventory of designation worthy areas, local communities must pass through the following steps of the new process: 1) community builds a nomination, 2) community submits the nomination to NOAA, 3) NOAA conducts an initial review, 4) NOAA takes a closer look to determine whether the site is worthy of designation, 5) nomination is accepted, and 6) the nominated area is added to the inventory of sites to be considered for designation. It is clear that since the NMSA was enacted in 1972, the NMS nomination process has changed significantly to try and include the public in more meaningful ways.

2.3 Nomination Process of Mallows Bay-Potomac River

Mallows Bay is a tidal area of the Potomac River located just off the Nanjemoy Peninsula in Charles County, Maryland (Figure 3). Forty miles south of Washington, D.C. the nominated site encompasses approximately 17 square miles of submerged lands. While the State of Maryland exerts jurisdiction over the submerged lands, Charles County operates the Mallows Bay Park. The park is adjacent to Mallows Bay and provides the public with recreational access to the Potomac River and the historic shipwrecks for which the site is known (Collins, 2017).

Figure 3: Location and area detail of Mallows Bay-Potomac River.
 Source: http://www.nominat.noaa.gov/nominations/nomination_maryland_mallows_bay_potomac_river.pdf



Mallows Bay has nearly 200 historic shipwrecks from the Revolutionary War to the present, representing the largest assemblage of historic shipwrecks in the United States. Most notably, this site is home to the largest “Ghost Fleet” of World War I wooden steamships assembled for the U.S. Emergency Fleet. According to historians, the construction of these ships transformed the United States into the maritime power that it is today (Collins, 2017). These ships are archaeological and cultural resources that represent centuries of American maritime history.

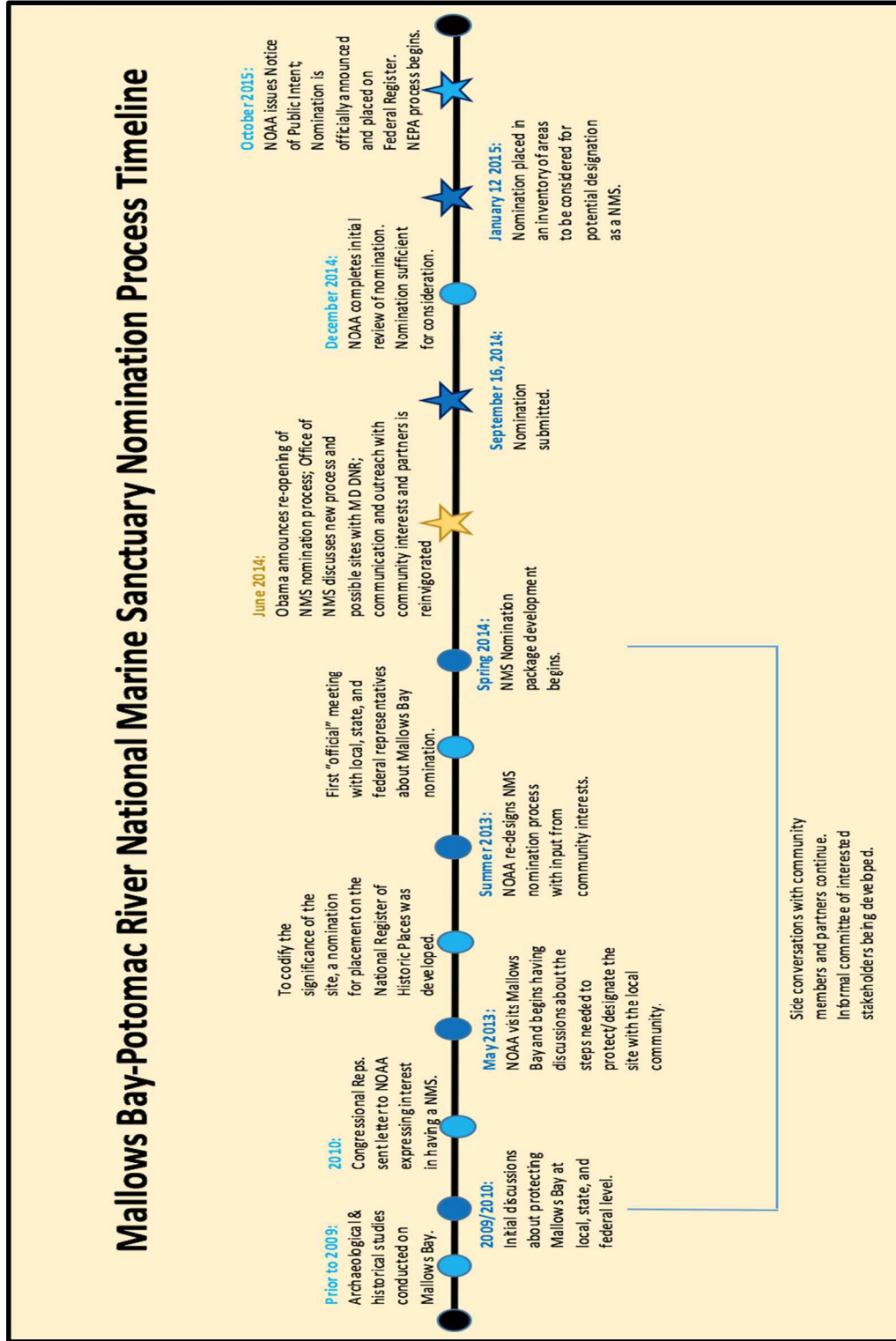
Figure 4: Images from Mallows Bay-Potomac River (Source: Cathrine Denman).



Due to the amount of time these ships have lay abandoned, the wrecks have become artificial reefs and habitats that embody a unique union of history and nature (Chesapeake Conservancy, 2017). These largely undeveloped marine and terrestrial ecosystems have been identified as the most ecologically significant in Maryland and represent critical habitat for fish and wildlife. As a result of the archaeological, cultural, historical, and ecological assets of this site, the area has been cited as one of national significance (Collins, 2017).

While the process of nominating NMS was officially re-established on July 14, 2014, those interested in designating Mallows Bay began preparing many years prior (Figure 5). A number of archaeological and historical studies have been conducted on this site due to its cultural and historical significance. Starting in 2009 and 2010 there were discussions about the need to protect this area at the local, state, and federal level; however, at that time there was no mechanism, or process, in place to protect the area.

Figure 5: Timeline for the nomination process of Mallow's Bay-Potomac River.



In an effort to show their interest in re-opening the NMS nomination process to protect Mallows Bay, Congressional representatives from Maryland sent an official letter to NOAA in 2010.

In 2013, after unofficial conversations with local community members familiar with the site, NOAA representatives visited Mallows Bay. During and after this visit, NOAA representatives and community members began discussing the steps that were needed to get the site protected and designated as a NMS. Through these conversations, community members decided to nominate Mallows Bay for placement on the National Register of Historic Places, a recommended step to codify the significance of the site. The historical information used for that nomination would prove to be extremely beneficial to the NMS nomination package in the years to come.

In the summer of 2013, NOAA began redesigning the NMS nomination process with input from community interests. Between the summer of 2013 and spring of 2014, unofficial meetings with local, state, and federal representatives began taking place to discuss the nomination of Mallows Bay as a NMS. In the spring of 2014, the informal committee began developing the nomination package for Mallows Bay. From 2009 up until this point, an informal committee of interested stakeholders was being developed through side conversations with community members and partners.

While all of the planning and research to get Mallows Bay NMS status started many years prior, President Obama officially announced the re-opening of the NMS

nomination process in June of 2014. Once the nomination process was officially announced, NOAA's office of NMS began discussing the logistics of the new process and potential sites for nomination with the Maryland Department of Natural Resources. It was also at this point that communication and outreach to the wider community began. On September 16, 2014, the Maryland Department of Natural Resources (MDNR) submitted a nomination to NOAA recommending consideration of Mallows Bay-Potomac River as the newest NMS on behalf of the State of Maryland, the Board of Charles County Commissioners, and a diverse coalition of business, education, American Indian, conservation, historical, research and recreational organizations.

The nomination represented a significant collaboration between the members of the Mallows Bay – Potomac River Steering Committee and broader community. The Steering Committee included representatives from Charles County, the Maryland Department of Natural Resources, the Maryland Department of Business and Economic Development, the Maryland Historic Trust, and numerous nonprofit, small business, and community partners throughout the region. In December of 2014, NOAA completed their initial review of the nomination; deemed sufficient for consideration, the nomination moved to the next step of the review process. The nomination was officially accepted and added to the inventory of areas to be considered for NMS designation on January 12, 2015. It is important to note that addition to the inventory does not guarantee that a nominated site will become a sanctuary. However, in October of 2015, NOAA issued the Notice of Public Intent

beginning the official NMS designation process for Mallow's Bay-Potomac River. However, the focus of this study is on the nomination process for the proposed Mallow's Bay-Potomac River NMS.

3. METHODOLOGY

In the summer of 2016, I conducted semi-structured interviews with individuals involved in the Mallow's Bay-Potomac River National Marine Sanctuary nomination process. Flexible, semi-structured interviews, or “conversations in which a researcher gently guides a conversational partner in an extended discussion” were conducted to get an in-depth understanding of how participants perceived the newly established process (Rubin and Rubin, 2005, pg.4). For each interview, an interview schedule, or collection of questions and topics that a researcher wants to cover, was used. This type of qualitative approach allowed the interviewer to follow up on interesting responses, ask additional probing questions, and further explore the respondent’s motives in a way that self-administered surveys or quantitative methods could not (Lewis, 2003; Maxwell and Miller, 2008; Robson, 2011). The interview schedule was used as a tool to guide the researcher through the interview. The schedule was not intended to be a strict set of questions that each respondent had to answer (Bernard, 2006). According to Bernard (2011), there is evidence to suggest that face to face interviews, or a more conversational style of data collection, produces more accurate data.

3.1 Study Sample

The overall goal of this study was to understand how those involved in the NMS nomination process perceived the process and more specifically, to identify how characteristics of the process contributed to the quality of the process. Because this

study evaluated perceptions of the process and sought to identify the specific mechanisms that were used to engage stakeholders, the study participants were those most directly involved in the process: members of the Mallows Bay-Potomac River Steering Committee. The Steering Committee included representatives from a coalition of organizations and individuals at the local, state, regional and national level. The sampling technique used for selecting participants was purposive. Purposive sampling allows the researcher to identify respondents based on the specific needs or attributes of the study (Robson, 2011). In this study, interview participants were identified through conversations with the NOAA liaison for the nomination process of Mallows Bay-Potomac River. A complete list of the Steering Committee is also publicly available on the NOAA NMS website.

I invited all seventeen members of the Mallows Bay-Potomac River Steering Committee to take part in this study to get an in-depth understanding of the process from those that have been most involved in the nomination. Of the seventeen individuals invited, fourteen were interviewed. Three of the seventeen individuals were invited, but did not respond to the invitation to participate in this study. Due to time and availability, I conducted two of the fourteen interviews by phone. Interviews lasted between 60 and 180 minutes, averaging approximately 86 minutes.

3.2 Interview Questions

The questions used for the interviews were created to explore respondents' perceptions of the National Marine Sanctuary nomination process. During the interviews, respondents were asked their thoughts about the process, their motivation for involvement, and their views on the specific mechanisms of engagement that were used throughout the process (Appendix B: Interview Protocol). Specifically, the questions elicited respondents' perceptions of the process in terms of Dalton's (2005, 2006) five features of process quality: active stakeholder involvement, complete information exchange, fair decision making, efficient administration, and positive participation interactions.

3.3 Data Analysis

In preparation for analysis, participant interviews were recorded and transcribed using the Express Scribe Transcription software program. To ensure confidentiality, each transcript was assigned an identifying code.

NVivo was used to qualitatively analyze transcribed interviews. Applied thematic analysis was used to analyze the interview transcripts by segmenting the text for coding and identifying themes (Guest et. al, 2012). To help analyze responses in terms of Dalton's (2005, 2006) framework, a structural coding approach was used. Structural coding applies content based phrases representing research topics of inquiry to a segment of text that relates to specific research questions or applied

frameworks, in this case the framework for process quality (Saldana, 2016). The similarly coded segments were further analyzed to compare and highlight emergent themes. Once emergent themes and subcategories were identified, associated quotes from respondents were assigned to each theme. Respondents' quotes within each of the identified themes serve as the basis for analysis in this study. In the next section, I illustrate the themes that emerged using respondents own words, when possible, to enrich the narrative.

4. RESULTS

Characteristics of Participants

The fourteen participants included in this study reflect various interests and stakeholder groups. During the nomination process, five participants worked for two state agencies that protect the area's natural and historical resources. Three participants were affiliated with three different environmental NGOs. One participant is a historian and author that has conducted extensive research on the site, and one has extensive background in government relations and conservation of the Chesapeake watershed. The remaining four participants are affiliated with an educational institution, a federal agency, the United States Military, and the local recreational fishing industry. All of the participants in the process are active members in their community, with twelve that are active committee members of various organizations, two that are board members of different organizations, and nine that are actively involved in other public processes.

Process Features

Active Participant Involvement

Of the fourteen respondents interviewed, twelve felt that they were involved early in the process, an important element in the participatory process framework. One respondent shared that being involved in the process early was valuable because it allowed participants to shape and form the process. A majority of the respondents

felt that because of their skills or professional affiliations, they needed to be involved early. One respondent felt that the institution he represented played a critical role in the process and for that reason he needed to be involved as early as possible. He notes, "I think if they were using the model of Thunder Bay [National Marine Sanctuary], where a college was such an integral component, they [process organizers] needed to get us on board early." Similarly, a respondent from one of the lead state agencies felt that because of their jurisdiction over state waters and their connections with the area's resource users, they needed to be involved as early as possible to communicate with their constituents and address any concerns. Particularly, the respondent felt that by being involved early, the agency could help prevent conflict with the fishing community.

While the majority of respondents were involved early, two respondents became involved later in the process. Due to the timing of one respondent's professional position, she joined the process once the nomination package had been developed. The respondent felt that the time in which she became involved was valuable to the larger group because she was able to provide a fresh pair of eyes during the editing process of the nomination document. While she felt that her time of initial involvement provided a fresh perspective, at times she felt awkward about coming in late and providing comments and edits on a document that had already been worked on by so many for so long. To her, being involved earlier would have provided valuable learning opportunities.

A core group of individuals, those representatives from the local, state, and federal level that began organizing this process before it was officially opened in 2014, were influential in bringing people into the process. These process founders used a number of mechanisms to invite members to participate in the process. Among the 14 members of the Steering Committee interviewed for this study, the most common methods included personal phone calls, emails, and one-on-one lunches and dinners (Table 2). Of the participants interviewed, four were invited by the process founders via a personal phone call. According to one respondent, “there’s nothing like a personal phone call, or a personal meeting, to say here’s what the opportunity is, we’ve been talking about this for a while, you’d be great in helping to bring this perspective to the table.”

For others, a combination of a personal phone call and email were used. The initial emails sent to invite people to join the process were also used as a way to share information about the process and highlight how the person could contribute. In a few instances, an email was followed up with an invitation to a one-on-one dinner or lunch meeting. One respondent reflects positively on the use of a one-on-one meeting to invite him to participate in the process: “he [one of process founders] invited me and my wife to dinner, so we talked about it at dinner and after, we went to his office and he had a PowerPoint with like 100 slides. And usually 100 slides you are like, oh my god, but it was enchanting to go through in great detail, in more detail than I had been exposed to.”

Table 2: Mechanisms of engagement used throughout the nomination process. Numbers reflect the number of participants that discussed the mechanism in relation to each process feature. Process features include: active participant involvement, decisions based on complete information, fair decision making, efficient administration, and positive participant interactions.

Mechanism	Total Number of Participants That Discussed Mechanism (Out of 14 Interview Respondents)	Active Participant Involvement (Opportunity for Input, Early Involvement, Motivated Participants, Influence Over the Final Decision)	Decisions Based on Complete Information (Best Available Information, Constructive Dialog, Adequate Analysis)	Fair Decision Making (Transparency, Representative Participation)	Efficient Administration (Cost Effective, Accessible, Limited Influence of Sponsoring Agency)	Positive Participant Interactions (Positive Social Conditions, Constructive Personal Behavior, Social Learning)
Phone Calls: Communication by phone to talk one-on-one and with large groups	14	14	14	4	8	2
Email: Personal and group messages distributed by electronic means from one computer user to another	14	14	14	1	10	2
Public Meetings: Formal meetings organized by members of the Steering Committee to solicit feedback from the public on the nomination process	11	10	4	7	5	1
Meetings: In person one-on-one meetings, group meetings, and informal lunches and dinners to engage people in the nomination process	13	9	9	3	4	1
Networking: Use of personal and professional connections	8	6	4	6	6	3
Media: Articles in newspapers, journals, and magazines; public television programs to distribute information on Mallovs Bay and the nomination process	9	8	9		5	
Fact Sheets/Flyers: Typically two page documents that provide information on Mallovs Bay historical site, the process, and opportunities to get involved	9	8	7		6	
Kayak Trips: Organized tours conducted at Mallovs Bay to view and learn about the historical and natural resources	9	9	6		5	
Websites: A collection of web pages with information on Mallovs Bay and the nomination process made publicly available on the world wide web	8	6	8		6	
Trash Cleanups: Annual cleanup at Mallovs Bay organized and supported by a local non-profit	8	8	5		3	
Talks/Presentations: Formal and informal verbal presentations on the historical and natural resources of the site and the nomination process	5	4	5		3	
NOAA Representative: Advisor from NOAA that provided guidance and support on the nomination process and National Marine Sanctuaries	11		11			
Letters of Support: Campaign conducted to collect letters of support from local stakeholders and interest groups	7	5	1	1	2	
Nomination Package: 88-page document that includes letters of support, background information on the sites natural and historical resources, goals of the proposed sanctuary, and information addressing NOAA's sanctuary considerations and selection criteria	6	6	1			
Mallovs Book: <i>The Ghost Fleet of Mallovs Bay: And Other Tales of the Lost Chesapeake</i> - a book about the historical significance of Mallovs Bay	6		6			
Press Releases: An official statement giving information on the natural and historical resources of Mallovs Bay and the nomination process	4	2	3		1	
Google Docs: A free, web-based application used to edit, create, store, and share documents	3	3	2			
Social Media: Online applications such as Facebook and Twitter to share content on Mallovs Bay and the nomination process	1		1			
Total Number of Mechanisms that Contributed to Dalton's (2005, 2006) Process Features:		14	17	6	13	5

All respondents felt that they had an opportunity to provide input throughout the process, another element of a successful participatory process. They shared that the leader of the nomination process, the chairman, continuously stressed the importance of keeping the process open, transparent, and reflective of community interests. According to one respondent, “I think everybody had an opportunity to give input, shape the ultimate application, to broaden the representation where they felt that it was necessary, very democratic.” Respondents felt that the goal of the Committee was to create this type of community-based approach in which the contributions of everyone were considered. Not only did respondents feel that this grassroots approach was necessary to fulfill NOAA’s nomination requirement, but they also felt that it would positively impact the future success of the Sanctuary.

Within the Steering Committee, the most common way for Committee members to provide input was through weekly conference calls. Respondents noted that the weekly conference calls were an effective mechanism that enabled participants in various locations to get together to discuss different aspects of the nomination process. In particular, the calls provided an open forum in which participants could provide input on tasks that needed to be accomplished, gaps in representation, and potential concerns and issues that needed to be addressed. An interesting tool used during the conference call to encourage participants to contribute was referred to as an “open mic session.” These sessions occurred at the end of the conference calls and allotted participants time to talk about relevant events, outreach opportunities, and/or general information about the site and process. One respondent reflects on

the impact this feature had on her experience during the conference calls: “that open mic session, I guess at the very end, has been one of the most key ways that we've kept up to date on everything that's going on relating to Mallows Bay.”

While the leader of the process chaired the calls, all participants felt that the leader listened and welcomed all input. One particular participant that joined the Committee to ensure that his rights to access the site’s resources were protected, felt that during the conference calls that he participated in, “everybody had an opportunity to speak, no one was rushed.” Other participants shared this sentiment and felt that because everyone on the calls contributed to the process, the nomination was truly reflective of the community. In addition to conference calls, emails were a main source of communication used throughout the process that enabled participants to provide input. Emails allowed respondents to provide feedback on issues raised during calls and discuss topics that were possibly contentious or did not require the attention of the entire Committee.

Other mechanisms that allowed respondents to provide input include the development of the nomination package, creation of informational brochures (i.e. fact sheets and flyers), media sources (i.e. newspaper ads, articles, magazines, and videos), and public meetings (Table 2). The nomination package was developed by a number of the Steering Committee members; specifically, those with expertise on the site’s natural and historical resources and those with experience in communications and outreach. Respondents were able to provide input by writing,

reviewing, and editing the document. Emails were used to facilitate the sharing of this document for editing purposes. Informational brochures, or fact sheets, were designed to inform the public about the Mallows Bay site and the nomination process. Nearly half of the respondents contributed to the content and design of these materials. Another way participants were able to provide input through writing was by submitting articles to journals, magazines, and newspapers; these articles shared information about the historical significance of the site and explained the importance of protecting the resources.

A mechanism that allowed both the respondents and the public to provide input into this process was public meetings. The Committee members not only provided input on the timing and location of these meetings but they also provided input during the meetings. Over half of the respondents participated in these meetings by offering public statements and testimony. In addition, these meetings were designed to solicit feedback from the public. While it was not clear from the interviews how information on how the public input was used, the public was given the opportunity to provide input.

An important element of a good quality process is having participants that are enthusiastic and motivated. This process was particularly unique in that a majority of the respondents expressed genuine excitement and passion for the process. Three history enthusiasts were passionate about protecting the historical shipwrecks at the site. One respondent expresses how her passion

for the historical resources has driven her throughout the process: “to tell the story and be able to do the public outreach and see the people become engaged and become interested, to convey your passion to them and see it catch, is like touching a match to a kindling.” Two other respondents shared that their connection to the Chesapeake watershed has driven them throughout this process. In particular, one participants’ zeal for improving access to the site has inspired him throughout the process, which is captured in the following comment: “I have been engaged in this for years and years and in my lifetime I want to see the bay restored, I want to see people enjoying the bay, I want to see people being able to recreate on the bay safely and in lots of areas.”

In addition, there were also certain characteristics of the process that helped participants stay motivated and engaged. According to three participants, having set conference calls each week or every other week was a beneficial way to keep momentum up throughout the process. The participants felt that the regular communication helped people stay engaged, on track, and focused. Respondents also felt that regular email communication (i.e. reminders, sharing of meeting agendas and notes, etc.) with direct tasks and takeaways helped them to stay motivated and engaged. Respondents’ comments suggest that having deadlines throughout the process helped to guide and drive the nomination. A deadline used in this process was the 100th anniversary of America’s entry into World War One, a

particularly important deadline to the process because of the historical significance of the shipwrecks at Mallows Bay. Another characteristic of the process that helped participants stay motivated was the positive reinforcement they received from NOAA, as one participant said, the NOAA feedback helped “keep the spirit alive.”

Throughout the process, all participants felt that they had an impact on the final decisions, another key element of an effective process. In this case, the final decision was the nomination package that was submitted for Mallows Bay-Potomac River. Four respondents recalled times throughout the process that they could easily see how their input was incorporated in the final nomination package. One participant explained why he felt it was important for process participants to have an influence over the final decisions:

I could see the pieces that we had discussed in the proposal. So you know, that’s good, because you know when you are working hard and coming up with creative ideas and then you don’t see them being used, it’s like well wait a minute, I am sort of wasting my time here and then you start gravitating away from the organization. So it is empowering when, you know when you are being validated, and that’s what so many of us were. And again, that’s what I like about this process, people being validated, there was not one vision of ‘this is the only way it can be and we are all going to fit in this box’.

Decisions Based on Complete Information

Over half of the process participants felt that, throughout the process, they had enough information to make informed decisions, an important part of any successful

process. Some, however, felt that there were certain areas where they needed more information. This included information on both the nomination and designation processes, the shipwrecks located at the site, commercial fishing activity, benefits and opportunities created from establishing a NMS, and the community's financial responsibility throughout the nomination process.

Five of the respondents felt that there was more information needed from NOAA on the nomination and designation processes. In particular, participants wanted more detailed information on NOAA's expectations of the processes, what the community partners are expected to contribute to the process, guidelines for what needs to be done by when and by whom, how final decisions are made, areas of the nomination package that are most important, and how to begin preparing for the development of the regulations and management plan during the nomination process. Participants felt that because this newly designed process for nominating National Marine Sanctuary sites had been closed for almost twenty years, the Mallows Bay-Potomac River nomination process was a sort of "guinea pig" for the new process. One participant noted he thought "it was hard even for NOAA because they haven't done it in 20 years, so they didn't have a lot of staff that were familiar with that process so I think everyone was on a learning curve."

The Steering Committee was designed to reflect a number of skills and areas of expertise. However, some participants were less knowledgeable about certain aspects of the process. In an effort to ensure that all participants understood the

process, the site and its resources, and the implications of a NMS, information was shared amongst the planning group in a variety of ways (Table 2). Mechanisms used within the Committee to exchange information that were discussed by most respondents included phone calls, emails, meetings, and interactions with the NOAA representative (Table 2). Phone calls used throughout the nomination process were a convenient way for participants to share information and ask questions. If someone on the conference call had a specific question, people would reach out individually to those with expertise in the specific area. In addition to sharing information on the call, people used email to send links to websites on things such as the site's resources, the NOAA nomination process, and other sanctuaries. Respondents shared that emails were a practical way to share this type of information with the broader group because of how geographically dispersed everyone was.

Of the various mechanisms used, one participant felt that having access to a NOAA representative throughout the process was one of the most helpful ways of getting information. She noted, "I think the one thing that was most helpful again was having [NOAA staff] who had experience with the office and the players and the program and other designated areas." Other participants shared this sentiment and reiterated that the group relied on him to answer questions relating to NOAA and its internal process. The NOAA representative provided the Committee with things like PowerPoint presentations, flow charts of the process, handouts, and web links to other sanctuaries. According to participants, this information was mainly shared via email and on the phone calls.

Through the mechanisms discussed above, information was built upon, collated, and turned into documents for public outreach. Such documents were in the form of two-page fact sheets and flyers that included information on the natural and historical resources of the site, the nomination process, the importance of protecting the area, and what was needed from the local community to support the effort. These resources were shared with the broader public at community events (e.g. trash cleanups) and public meetings. According to one respondent the informational brochures “really helped shape the public message.”

In addition to using the informational brochures, information was shared with the public through a letter of support campaign, media sources, press releases, social media, talks and presentations, kayak trips, and websites (Table 2). Of these mechanisms, the two that were discussed by most respondents were media sources and websites. The media sources used to share information with the public included newspaper articles, articles in journals and magazines, and short public television programs. Respondents wrote the articles and/or were interviewed by the press. Respondents shared that these were a beneficial way to share information with a large audience. One respondent shared that using the media helped to “tell the story about why people should care about this [potential Sanctuary] and why people should get involved.” Websites were also developed by the respondents and used to share information within the Committee and to the broader public. Respondents felt

that websites were of importance because information could be shared with a large audience at no cost.

A few members of the Committee gave public presentations on the historical resources of the site and the nomination process in general through various organizations and events. One participant felt that the talks and presentations were particularly beneficial because “the more you talked, the more people became interested, the more people wanted to come down and see what this particular Sanctuary was all about.” One participant used her time as a professor at a local college to give a lecture on the site, she also brought her students down to the site for a field trip. This particular participant noted that she is inspired and motivated by sharing the story of the site with people.

According to a few respondents, one of the most impactful ways of educating the public about the site was through organized kayak trips at Mallows Bay. As part of the trip, participants are able to view the shipwrecks and hear about their history. These trips, as discussed by respondents, were not used to engage the broader public. Respondents shared that they have either participated in a paddle and/or have organized and led a tour. A number of people outside the process have been invited to participate in this activity including congressional staff, NOAA NMS program staff, and students. These groups were invited to participate in this activity to expose them to the site, educate them on the resources and the nomination process, and to try and get their support. Participants felt that there was a lot of

value in getting people to the site to experience the natural and historical resources, as one respondent stated:

The more that you can connect people and the more that you can get them out there to experience it [Mallows Bay-Potomac River site], to see it, to understand what it is that you are trying to do, I think the more likely you are to have an informed constituency, an educated and informed constituency that wants to engage in this process.

While not the most frequently discussed mechanisms for sharing information, respondents felt that public meetings and trash cleanups at the site were particularly important. The public meetings were designed to inform the public about the process and hear their feedback. Information on the process was shared through the informational brochures, PowerPoint presentations, and statements from a variety of Steering Committee members. Information was also shared through informed discussions and Q&A sessions. One participant reflects on the importance of these meetings for sharing information with the public:

I think that the public meetings were great because there were a lot of different citizens and different organizations that were interested in the process and those were critical in making sure that we were sharing all kinds of information with the community at large so that we were dispelling any kinds of concerns or misinformation that was out there.

Over the past four years, a local non-profit has hosted an annual trash cleanup at Mallows Bay. These events are widely publicized and heavily attended. They have engaged elected officials, county commissioners, local community members, and members of the Steering Committee. Respondents shared that these events were an

important tool to get the community involved in a participatory way. Respondents highlighted that the cleanups were also an excellent way to share information with a large number of people on the site, the nomination process, and ways to get involved.

Fair Decision Making

Overall, respondents felt like the leader of the process strived to ensure that the process was open and transparent, important elements of a successful process. The leader of the process encouraged participants to provide feedback on group discussions and decisions, share names of individuals and/or groups that wanted to be included in the process, and ask questions. One participant felt that the nature of the community driven process allowed it to be both transparent and efficient, saying, “You have to have people behind it already. You’re not trying to win them over, they’re coming to you.” A mechanism that respondents felt contributed to the openness of the process were public meetings. The importance of public meetings for increasing the transparency of the process is highlighted in the following comment: “people could see face-to-face and see that there were other community leaders who were there [at the public meeting] as well. [This] sort of added an element of trust, or demystified it [the process] in some way so it was really effective for that cohort of people.”

Participants did not feel as positively about the designation phase of the process as they did about the nomination process. Over half of the respondents felt that there was a lack of transparency after the nomination was submitted to NOAA. One respondent felt that once the nomination was submitted, there was a lack of communication as to when and how a final decision would be made. Another participant also reflects on this: "I mean we have no...it's like it goes into this canister, and a mysterious decision pops out." Once the nomination moved into the designation phase, the advisory council [representatives on the Steering Committee from the local, state, and federal government agencies] was in charge of working with NOAA to develop the management plans and environmental impact statements. By law, only government agencies at the local, state, and federal level were allowed to participate in the official designation phase of the Sanctuary process. A participant included in the advisory council reflects on the openness of that separate process: "In the designation process, which is what we are doing now, we can't discuss the EIS [with the public], we can't discuss the alternatives, we can't really discuss the management plan so it's like you don't really know what to tell people. There is not much to tell them. You can call a meeting, but you can't tell them anything, so what's the purpose?" Another participant included in the designation process felt that shutting off the rest of the Steering Committee and public resulted in feelings of suspicion and frustration.

Overall, participants felt that the nomination process tried to include as many perspectives as possible, an important element of process quality. To do this,

participants made a running list of organizations and community representatives that they thought should be involved. From this list, participants were encouraged to suggest those groups and individuals that could address gaps in representation. According to the Committee's advisor [a representative from a federal agency], the leader of the process recognized that not all community groups were represented in the process and so he continuously tried to address the gaps. Individuals on the Committee used their own connections which allowed them to "cast a wide net." Sharing professional networks on weekly conference calls, according to multiple participants, was the primary way that the Committee increased its reach and representation. One respondent stated that he could not think of many people that served on the Steering Committee that he did not know through his own personal or professional networks.

According to the process leaders, there is never a sure way to know that you have included everyone. One participant shared that while you do your best and try to identify all those that need to be included, it is possible that some will be left out. One group in particular that was mentioned were fossil hunters, people who come to the area to search for fossils that have washed ashore, a common recreational activity that occurs at the site. The difficulty with engaging this group, according to the process leader, is trying to identify who and where these people are. Respondents felt that while you can do as much outreach as possible, it is important to do this outreach at the very earliest stages of the process to ensure that you "do not

find out at the eleventh hour that we've got this huge group out there that's up in arms."

The desire for the process to be inclusive of multiple interests was emphasized by respondents. According to one participant, "no organization or individual was told 'no, you can't participate'." A leader of the Committee shared that if there was any group or individual that wanted to be part of the process, he would open up the conference calls to them and say "join us, you can listen in on this stuff if you have any concerns." Most participants felt that it was important to include not only those that would support the project but also those that may have concerns or hesitations. However, a few respondents felt that "in order to participate you [had to] have to be invited" and for this reason "it was not, in a sense, a democratic process."

Respondents shared that while this process was supposed to be a true bottom-up approach, people were invited that had something to contribute. Respondents commented that if there was a group that they felt would be concerned or hesitant about the process, they would invite them to participate. In particular, a few groups that the Steering Committee thought needed to be included were the fishing and Native American communities. According to respondents, representatives from these communities were invited but were not particularly active in the process.

Efficient Administration

Respondents noted that the selectiveness of the Steering Committee limited the way the public was able to access the process, where access refers to physically enabling people to participate and ensuring that they have the necessary resources required throughout a process. An additional challenge highlighted by a respondent was a lack of public knowledge on the Sanctuary program and the opportunity to nominate and designate areas as National Marine Sanctuaries. This particular respondent felt that by having a state agency involved in the process, the process became more accessible.

One mechanism used to increase the public's accessibility to Mallows Bay and the Nomination process was a virtual tour, which allowed people to view and learn about each of the historical wrecks on-line. One participant explained how the website was "a really unique and different way to really raise awareness using technology and helping people who haven't been able to get out there and go kayaking. It got a lot of people to experience the resource that hadn't been able to do that." Other mechanisms discussed by respondents include phone calls, fact sheets and flyers, media sources, public meetings, kayak trips, and networking (Table 2).

Respondents commented that distance was a challenge to participating in activities throughout the process. As one respondent noted, "Mallows Bay is far from here. It's an hour and a half drive. Yeah. So I mean, there were a couple of events, a couple of paddles for example that were taking place down there recently and none

of us from [my organization] were able to go.” Conference calls were a mechanism that enabled participants in various locations around the state to stay engaged on a weekly basis throughout the process. One respondent stated that if he had to physically come in for the meetings, he would not have been able to participate as much as he did. While participants generally felt positive about the use of conference calls and email, four participants mentioned that they would have preferred to have face-to-face meetings. Some participants shared that the first time they met other participants was at the public meetings. One participant explains the challenges of choosing between face-to-face meetings and phone calls:

I think there is nothing like face-to-face meetings. I mean telephone calls are okay, I am never going to say it's the best approach. You don't see body language, you don't see nuances, some people don't like to talk on the telephone you know. But, it was the only way it could have worked.

Another participant felt that face-to-face meetings would have allowed participants to feel more comfortable about contributing to the conversations. A few participants felt that fact sheets and flyers helped the public access the process because they communicated information about the site and the possible benefits of site designation in a “snapshot,” this provided people with easily digestible information. Similarly, media sources (e.g., articles in journals, magazines, and newspapers) were used to share information about ways the public could get involved in the process. Public meetings were another mechanism used by the Steering Committee to increase the public's access to the process. Respondents highlighted that in an effort to increase attendance at the public meetings, public

notices were advertised broadly, the meetings were open to anyone that wanted to join, and multiple meetings on different days and times were scheduled.

As respondents noted, organized kayak trips were another important tool used to get people to the site and to share information. Physically allowing people to view the natural and historical resources gave participants a richer understanding of the site's significance. One respondent noted, "I think going to the site was the most useful resource because I'm a very visual person. I had read the [nomination] document, people were telling me things, I was looking at pictures, but it wasn't until I went there for the first time and actually saw everything." While a number of mechanisms were used to increase people's access, one participant reflected on ways to improve access: "of course, you never can reach everybody but I think another mechanism really has to be and continues to be word of mouth from communities and different community groups that run in their own circles."

Some respondents noted that their level of involvement in the process was limited by time availability. A few respondents highlighted that because involvement in the process did not directly align with their organization's mission, the amount of work time they could contribute to the process was limited. In addition to time, another factor that impacted the process was funding. One respondent felt that the lack of funding throughout the process made involvement a struggle at times.

Respondents also discussed the role of the sponsoring agency, another key element of process quality. Twelve out of the fourteen respondents felt that the lead

agency (NOAA) served in an advisory capacity providing guidance on various aspects of the nomination process. One participant reflected on NOAA's role: "I really feel like he [NOAA representative] let the process happen organically and you know was a part of it without pushing it in any one direction which I mean I think it's probably very hard to do. I think he did a great job." Specifically, respondents noted that the lead agency representative provided the following: 1) step-by-step instructions for both the nomination and designation processes, including expectations and requirements, 2) information on the NOAA NMS program, 3) guidance on items to include in the nomination package, 4) support, and 5) a line of communication between the community and top decision making officials in the agency. One respondent highlighted the importance of having a representative of the lead agency be part of the nomination process: "I think that having a clear contact at NOAA was really important because if people did have a question, we knew exactly who to send them to and, you know, somebody who could be the face to the public."

While participants felt positively about the role of the lead agency throughout the process, a few participants were concerned that the agency representative was limited by his professional affiliation. One participant stated,

there were times that he would give us really helpful guidance and I know that he was really trying to retain his objectivity, I don't think he compromised it, but I think that he did not feel as though he had the freedom to help make this as successful as possible.

Participants felt that it would have been beneficial to the process if the lead agency representative was given clearance to freely advise on how to produce the best possible nomination package, without any guarantees of acceptance. While the limitations of his intermediary role were a concern, respondents felt that he was always accessible and available to take questions and address concerns.

Positive Participant Interactions

Two participants shared that in the rare instance that there was a difference of opinion that could not be worked out during the weekly conference calls, the topic would be tabled and discussed offline through one-on-one phone calls or emails. When asked how differences of opinion were handled in the process, one participant commented: “very collaboratively, very fairly, everybody was always listened to. There were never really any heated discussions or battles or anything like that, it was all very congenial.” Overall, participants felt positively about the social conditions of the process, an important element that can impact participant behavior and the quality of a process.

Four respondents commented that through interacting with the other participants, they began to feel a sense of comfort and ease when participating. Participants shared that there were certain characteristics of the process that enabled these feelings: 1) approachableness of process leaders, 2) having team players on the Committee, 3) celebration of successes throughout the process, and 4)

having team members that expressed gratitude. This is reflected in the following comments:

I feel like sometimes I'm a thorn in people's sides but largely everyone, like everyone around the table when we have these meetings, there's never been anger or animosity or anything. We're all very collegial with each other and I feel comfortable voicing these things and playing that devil's advocate role because I'm so comfortable with this group.

I think everyone was treated very well. I think it was a very open group and a safe place to share ideas and have discussions. I think this is always important. There was a lot of sharing and celebrating successes and sharing gratitude in the group so if someone did something, they were always 'thanks' and I think that builds a really good rapport.

Other participants commented that through participation in this process, they were able to connect and work with people that they did not traditionally interact with. One participant, in particular, felt that through this process she built a "pretty good tag team" with one of the other participants. She felt that she could rely on him throughout the process if she was unable to make an event or attend a meeting. It was through continual interaction that participants felt like relationships were built. Multiple participants stated that through these relationships, trust was built. This is highlighted in the following comment:

Relationships built, trust built, and again it's not a 'one and done' kind of thing. You don't build a relationship, build trust, through one conversation or one act, you know, it's the repetitive nature of it, working side by side and the longevity of that and that's what that has built here.

One participant reflected on the importance of building these relationships:

The process that we put in place really was trying to set us up for post nomination too because I think we wanted to make sure that we were cultivating all of those relationships, recognizing that they may have participated in the nomination process but this was going to be a long term relationship that we need to build with everybody.

Trust and relationships played a role in inviting people to participate in the process.

One participant noted he used his personal connections with people to get them to participate in writing letters of support for the Sanctuary nomination. He shared that trust played a role in getting them to participate, as reflected in the following comment:

You know it was all about personal contacts, the people that I solicit letters from I had known for many many years, they trusted me. You know because you sign a letter like that and then all of a sudden it blows up. You could be affecting your institution by aligning yourself with something that is politically very dangerous. And so you have to have that level of trust to get those letters.

One participant was not fully trusting of the process. This particular participant was participating in the process because he wanted to protect his right to access the area's natural resources. He expressed concerns that the agency would disregard decisions made during the nomination process, and for that reason asked for written statements from NOAA stating that certain uses would not be impacted by the process.

Throughout the process, all participants felt that they were treated with respect and dignity. Characteristics of the process that engendered this feeling included saying "Thank You" and listening to what each person had to say. One participant

reflects on the way the leader and advisor of the process treated participants: “I think he [the process leader] is very encouraging in a way that I wish that I could be sometimes. I feel like they [process leader and process advisor] both respond in a very positive, encouraging way no matter how outrageous the idea might be or the comment might be.”

One participant shared his thoughts on the importance and impact of listening to participants throughout the process:

he [process leader] wants to make sure that everyone has been heard and I think that’s so critically important and therefore I don’t think anybody, in fact I am almost sure that nobody, has dropped off because they don’t feel like its valuable or they haven’t been contributing.

While respondents felt that listening to participants was a critical part of the process, they also felt that having leaders that were honest and open was important. Multiple people commented that, at times, the NOAA representative played a tricky role of representing the lead agency while also serving in an advisory capacity for the Steering Committee. While some felt that he could not always be as open as they thought he wanted to be, they did feel he was honest. Participants felt that through communication and collaboration, both NOAA and the Committee learned together and were able to achieve mutual goals and objectives. This sentiment is reflected in the following comment:

I think that this is has been a learning experience just across the board, I mean, Maryland has never done a Marine Sanctuary. It has been a very long time since NOAA has done one, and I think that while in some ways we have

done a very good job of kind of setting a new example for what a new Sanctuary looks like.

5. DISCUSSION

To better understand participants' perceptions of MPA design and planning processes, this study applies Dalton's (2005, 2006) framework to the Mallows Bay-Potomac River nomination process. The aim of this study was to show how those involved in the process participated, and more specifically, to understand how participants felt about the specific ways they were engaged throughout the process. This study highlights how specific mechanisms of participation contribute to overall process quality, providing MPA planners and managers with a practical guide to engaging participants in similar processes.

5.1 Overall Perceptions of the Process

Overall, interview respondents felt positively about the quality of the nomination process. According to respondents, the Mallows Bay-Potomac River NMS Nomination Process effectively incorporated three of the five participatory features in Dalton's (2005, 2006) framework including active participant involvement, decisions based on complete information, and positive participant interactions. The process partially integrated efficient administration and fair decision making.

A majority of respondents felt content about the time at which they were invited to participate in the process. All respondents shared that being involved early in the process was beneficial to the overall success of the process. They felt that being involved early in the process allowed them to shape and design the process, which

allowed them to address gaps in representation and identify areas of concern. By reaching out to groups, like the fishing community, early on, participants felt that they were able to prevent conflict and increase support among a diverse sets of stakeholder groups. This finding is similar to that in Reilly et. al., (2016) who found that early engagement of fishermen in siting marine renewable energy projects was critical to establishing trust. The importance and benefits of engaging people early on in a process is also supported by the public participation and MPA planning literature (e.g., Agardy et al., 2011; Osmond et al., 2013; Thomas, 2013; Wondolleck and Yaffee, 2000).

All respondents stated that they had an opportunity to provide input during the process, a key element of active participant involvement (Dalton, 2005). Allowing participants to provide input helped create a democratic process in which multiple perspectives were taken into consideration (Glass, 1979; Webler and Tuler, 2000). In addition to being able to provide input, all respondents felt they were able to influence the the success of the nomination through things such as edits to the nomination package and by providing information on the natural and historical resources of the site. This finding aligns with Hoover and Stern (2013) who found that having the opportunity to influence decisions is one of the most significant factors in a public participatory process. Being able to influence decisions throughout the process not only helped ensure participant support of the final decision, but it also helped to keep participants motivated and engaged, an important element of a successful process.

Respondents' comments during the interviews demonstrated a high level of enthusiasm for the site and for the process of nominating it as a NMS. Results from this study suggest that having motivated participants in a process contributes to their active involvement throughout the process (Dalton, 2005).

Respondents felt that they had enough information to make informed decisions throughout the process, an important feature of process quality (Dalton, 2005). However, respondents did identify areas of the process where they felt more information would have improved the process. In particular, comments suggest that respondents would have liked more guidance on the nomination process itself (e.g., expected contributions from community partners, important areas of the nomination package that require more emphasis, and implications for future management). While more information was desired about the process, respondents felt confident about the quality and availability of information on the site's natural and historical resources. The composition of the Committee, including people with a wide range of skills and expertise related to the process and the resources at the site, seemed to contribute to the quality and availability of information, giving participants access to useful knowledge. The Committee also served as an open forum for discussion in which people could ask questions and engage in informed discussions. This finding supports the MPA planning literature which states that multidirectional flows of information and constructive dialog can help participants make informed decisions (e.g., Crosby, 1986; Glass, 1979; Osmond et al., 2010; Rowe and Frewer, 2000).

Respondents felt overwhelmingly positive about the ways in which participants interacted throughout the process, contributing to the quality of the process. In the few instances that participants shared a difference of opinion, respondents noted that collaborative discussions were used to give participants an opportunity to voice concerns and reach consensus. No respondent said that s/he did not feel comfortable sharing ideas or challenging decisions throughout the process, which can be attributed to the collaborative nature of the process.

It is clear from the respondents' comments that the leader of the process, the Chairman, was an asset and an important factor affecting the quality of people's participation in this process. Respondents described particular characteristics of the process leader that contributed to the open and welcoming environment: encouraging, positive and upbeat, respectful, inclusive, approachable, collaborative, passionate, organized, patient, informed, open, and honest. The comments suggest that having a leader with these attributes can positively impact a participant's experience in a process. This finding aligns with the literature that claims that the quality of a process can be influenced by positive participant interactions (Bryson et al., 2012; Dalton, 2005; Tuler and Webler, 1999). According to respondents, the collegial environment created throughout this process helped participants build relationships and trust with other participants, contributing to positive participant interactions in this process.

Overall, respondents' comments suggest that the accessibility and cost-effectiveness of the process could be improved. A number of challenges that impacted the efficiency of the process were identified. The first major challenge identified was the public's limited access to the process. Respondents felt that if they were not associated with someone in the process they would have never heard about opportunities to get involved. As mentioned previously, all interested persons need to be able to access the process in order for it to be representative of the broader community because access and representation are interconnected and can impact the quality of a process (Dalton, 2005; Wondolleck and Yaffee, 2000). Respondents also felt that their ability to physically access process activities was limited by distance to the site and to other members of the Committee. A third challenge discussed was lack of funding. Unless a respondent worked for an agency that was actively participating in the process, all involvement was on a voluntary basis. This finding is supported by the literature which states that funding is a critical component that can affect whether goals and objectives are achieved in a process (Osmond et al., 2010). A fourth challenge discussed was time availability. For half of the respondents, their participation in the process occurred outside of their day jobs. Respondents shared that time availability and other work priorities impacted their ability to participate in process activities.

In general, respondents felt that the process was reflective of the local community. However, comments suggested that the representativeness of the process was limited by the use of networking to identify process participants. In

addition, basing involvement on what participants could contribute to the process suggests that this was not a completely open process. These findings suggest that there may be other ways of identifying potential participants that can lead to a more representative and open process, an important feature in public process (Smith and McDonough, 2001).

5.2 Important Mechanisms Used in the Nomination Process

Respondents described eighteen specific mechanisms that were used to engage participants throughout the Mallows Bay-Potomac River NMS nomination process. Fourteen of these mechanisms contributed to active participant involvement, seventeen contributed to basing decisions on complete information, six contributed to fair decision making, thirteen contributed to efficient administration, and five contributed to positive participant interactions. Five mechanisms emerged as especially important: phone calls, emails, public meetings, one-on-one or small group meetings, and networking. These five mechanisms contributed to all five features of Dalton's (2005, 2006) framework on process quality (Table 2). The variety of mechanisms that were used helped ensure that all process features were incorporated into the process.

5.2.1 Phone Calls

One of the main ways respondents participated throughout the process was through phone calls, including both personal phone calls and conference calls. All respondents felt that phone calls contributed to active participant involvement and decisions based on complete information, two important features of a successful process. Respondents felt that the conference calls gave participants an opportunity to: 1) provide input on the design of the process, helping to shape it, 2) exchange information with other participants, 3) identify gaps in representation and suggest people and/or groups to invite to the process, 4) freely and openly discuss issues or raise concerns with the entire group, and 5) stay engaged and motivated, all important elements of a good quality process (Dalton, 2005).

While phone calls contributed to the overall quality of this process, if distance is not an issue, respondents' comments suggest that more personal interactions, such as face-to-face meetings should be utilized early on and more often. This finding is similar to that in Rowe and Frewer (2005) who found that face-to-face interactions can affect the way information is communicated and interpreted and non-verbal cues and body language can help prevent participants from misunderstanding information.

5.2.2 Emails

Similar to phone calls, all respondents felt that email contributed to active participant involvement and decisions based on complete information, important features of process quality. According to respondents, using email to send reminders, provide meeting agendas, and distribute meeting notes kept participants engaged and motivated. All respondents described how emails enabled participants to communicate openly and freely throughout the process, ensuring active involvement and decisions that were based on complete information. Ten out of fourteen respondents indicated that emails also positively contributed to another key feature of effective participation, efficient administration, because they were a convenient way to reach a large number of people in various locations at the same time.

5.2.3 Public Meetings

Members of the Steering Committee were engaged in public meetings in a variety of ways. Committee members organized the meetings, prepared and conducted presentations, created educational materials, offered testimony, and attended to show their support. While most participants felt that public meetings contributed to active participant involvement, many also felt that public meetings were an important mechanism for sharing information.

Respondents highlighted that these meetings were an excellent opportunity to share information with the broader community, dispel concerns, and address

misinformation, important factors helping to ensure that decisions are based on complete information. Respondents highlighted that both the face-to-face aspect of the meetings and the presence of known community members “demystified” the process and added an element of trust. This observation is supported by Beierle (1999) who found that face-to-face interactions can increase transparency and trust in institutions, important elements of successful participatory processes. Although public meetings are often criticized for having unidirectional flows of information (i.e. from the organizers to the public or from the public to the organizers, with no interactive discussion), these public meetings seemed to encourage multidirectional flows of information and face-to-face interactions, contributing to decisions that are based on complete information (Dalton, 2005; Fiorino 1990; Reilly et. al., 2016).

Respondents felt that public meetings were a particularly effective mechanism because they allowed the public to access the process, an important element contributing to an effective process. The organizers of the public meetings tried to increase the public’s accessibility of the process by hosting two different meetings in two separate locations on two different days and times.

5.2.4 One-on-one and Group Meetings

Most respondents felt that informal one-on-one and group meetings contributed to active participant involvement and decisions based on complete information. Various forms of one-on-one or small group meetings were used by participants in

different ways throughout the process. One participant shared that he invited a number of people to join the Steering Committee via one-on-one lunch and dinner meetings. Other participants used one-on-one meetings to invite people to participate in certain activities of the process. Respondents highlighted that emails and phone calls were the initial mechanisms used to invite people to the one-on-one meetings. These meetings were not only used to invite people to participate, they were also a means for people to share information about the process. Specific mechanisms used to share information during these meetings included giving talks and presentations.

During the initial phases of the process, group meetings were held by the process founders to begin organizing and structuring the process. Multiple mechanisms were used to engage participants in these small group meetings. This provides further support for the argument that there is not one way to engage people in a process; rather, different mechanisms can be used in multiple stages of a process in a variety of ways for different reasons. Respondents' comments do suggest that one-on-one meetings were most beneficial during the early stages of the process when participants were trying to actively involve participants. For this process, in person, one-on-one meetings seemed to be useful for motivating people to participate in the process. All respondents that were invited to participate in the process through in-person meetings chose to become members of the Steering Committee. It is possible that participants are more likely to become involved after a personal invitation because of the way they are made to feel during the meeting. One-on-one

meetings, a more personal form of engagement, can create an enabling environment for relationships and trust to be built. The importance of such positive social conditions is supported by Tuler and Webler (1999) that found that relationships can influence processes and decision outcomes.

5.2.5 Networking

More respondents discussed how networking, or the use of personal and professional connections, impacted active participant involvement, fair decision making, and efficient administration than other process features. In particular, this mechanism was used to: 1) fill gaps in information, 2) fill gaps in representation, 3) spread the word about the process, and 4) increase participation, all important features of an effective process. Respondents' highlighted that every single Committee member came to the process with some personal and/or professional connections. Having established connections enabled participants to easily identify and contact people that could contribute to the process. Most respondents felt that the process was reflective of the broader community. However, as noted above, a few comments highlighted that this method may have limited the representativeness of the process by allowing people to subjectively choose who they wanted to include. This suggests that networking may not be effective on its own to ensure that all those that want to participate can. Instead, this mechanism should be combined with other methods to ensure that the process is truly representative, an important element of process quality.

5.3 Innovative Mechanisms for Engaging Participants

The majority of the mechanisms used throughout the process were traditional ways of engaging people in public processes; however, there were two particularly innovative mechanisms that contributed to the quality of the process. The two non-traditional mechanisms used were organized kayak trips and trash cleanups. Respondents felt that kayak trips were of enormous value because they provided opportunities for people to connect with the site. Participants shared that they had an added appreciation for the site once they were able to physically see the resources. Results suggest that this mechanism can enhance active participant involvement by providing alternative opportunities for individuals to engage in the overall nomination process. Similarly, respondents' comments suggest that the trash cleanups contributed most to active participant involvement and decisions based on complete information. The cleanups were particularly successful at encouraging interactions with local community members, sharing information, raising awareness, encouraging participation in the process, and connecting people with the site in a meaningful way.

5.4 Media, Outreach and Administrative Mechanisms for Involving the Public in the Nomination Process

Additional mechanisms used in the Nomination process relate to media, outreach and administrative activities. Mechanisms related to media include newspaper ads, articles, magazines and videos; the *Ghost Fleet of Mallows Bay: And Other Tales of*

the Lost Chesapeake book; press releases; and social media. Within this category, newspaper ads, articles, magazines, and videos were mentioned by most respondents and had the biggest impact on active participant involvement. Respondents' comments suggest that these media sources were most impactful to the process because they provided participants with a free way to share information about the process with a large number of people, contributing to decisions based on complete information and efficient administration. While this type of information exchange can be seen as a unidirectional flow of information, media-related mechanisms were particularly beneficial to this process because they were cost effective, improved access, and helped ensure that the best available information was shared, all important elements of a successful process.

Respondents described a variety of outreach mechanisms used in the Nomination process including informational brochures, letters of support, talks and presentations, and websites. Of these mechanisms, informational brochures, such as fact sheets and flyers, were mentioned by most respondents and contributed to three of the five elements of a successful process: active participant involvement, decisions based on complete information, and efficient administration. Respondents' comments suggest that the brochures were an effective way to convey information to multiple audiences because they were quick and easy to read. In particular, the design of the documents contributed to the process because they showcased information in a way that could be understood by many people with varying levels of knowledge, positively contributing to efficient administration. In addition, access to

these documents allowed people to base their decisions on the best available information, an important element of a good quality process.

Respondents also engaged in administrative mechanisms, namely the use of google documents and developing the nomination package. Of these two mechanisms, the nomination package was discussed by most respondents. The nomination package is an 88-page document that includes letters of support, background information on the site's natural and historical resources, goals of the proposed sanctuary, and information addressing NOAA's sanctuary considerations and selection criteria. The nomination package was developed by members of the Steering Committee who possessed skills and expertise in communications and was informed by those who specialized in the natural and historical resources of the site. Participants contributed by writing, editing, and reviewing the document. This type of participation enabled participants to provide input and shape the content and design of the final nomination package, important elements of process quality. The importance of allowing participants to influence final decisions, in this case the nomination package, is supported by the MPA and public participation literature (Dalton, 2005; Hoover and Stern, 2013).

5.5 Limitations and Future Research

The findings from this study provide valuable insights into the different mechanisms that can be used to engage participants in a process. However, there are

some limitations to this study that should be noted. First, the context of the process influenced the mechanisms that were used in the Mallows Bay-Potomac River NMS Nomination process and how they were perceived by participants. Because of the unique attributes of this process (i.e. distance to the site and personal motivations of the participants), the mechanisms that were identified as most beneficial here may be inadequate for a process in a different location with dissimilar attributes. As such, the mechanisms identified in this study should not be interpreted as appropriate mechanisms for all MPA planning processes. Instead, this study offers planners a practical guide to a suite of mechanisms that can be used in combination to achieve a number of objectives. Planners should select those mechanisms that they think are most appropriate to the particular process taking place. Tuler et al. (2005) emphasize the importance of taking context into consideration when designing participatory planning processes.

Second, respondents included those individuals that were most directly involved in the nomination process. While the results may reflect Steering Committee members' perceptions of the process, this does not necessarily reflect the opinion of those outside the Steering Committee. Future research could extend this study by including individuals from the local community and broader public. It would be interesting to examine if those individuals that were not involved in the Steering Committee felt similarly about the quality of the process. Additionally, it would be beneficial to examine how the mechanisms that were used in the process engaged the broader public.

6. CONCLUSION

This study examined participants' perceptions of the Malloys Bay-Potomac River NMS nomination process. In general, participants felt positively about the quality of the process. Results indicate that certain mechanisms used to engage participants in the process contributed to its success. The findings from this study provide important insights into how specific engagement mechanisms can contribute to effective participation, information-sharing, and decision-making (e.g., Dalton 2012). In addition, these findings provide MPA planners and managers with practical information that can be used to design participatory processes that meaningfully engage members of the public.

Results indicate that the nomination process effectively incorporated some of Dalton's (2005, 2006) framework features, but not others. Features that could be better incorporated into the nomination process were fair decision making and efficient administration. The representativeness of the process, an element of fair decision making, was limited by the use of networking as the primary mechanism for identifying and including people in the process. This aspect of the process may be improved by using additional mechanisms to recruit more participants from the general public. This issue also relates to accessibility, an element of the efficient administration feature. Results suggest that access to the process needs to be improved.

Results show that eighteen different mechanisms were used to engage participants; each of these contributed to the process in unique ways. Fourteen mechanisms contributed to active participant involvement, seventeen contributed to basing decisions on complete information, six contributed to fair decision making, thirteen contributed to efficient administration, and five contributed to positive participant interactions. This finding suggests that incorporating multiple mechanisms for stakeholder participation helped to ensure that all five features of an effective process were included.

Some participatory mechanisms seemed to have greater influence on process quality than others. Results indicate that phone calls, email, public meetings, one-on-one and group meetings, and networking were most influential in the process because they each contributed to all five features of the framework. In addition to the traditional mechanisms that were used, such as public meetings and conference calls, there were non-traditional mechanisms used that contributed positively to the process. Kayak trips and trash cleanups had the greatest impact on the active participation feature. This finding highlights innovative ways to actively involve people in a process and can be used to complement other more traditional mechanisms.

The results from this study provide MPA planners and managers with practical guidance for designing participatory processes by offering insights on different mechanisms that can be used to engage process participants. Although this study

focused on the Mallows Bay-Potomac River NMS, there are some general observations that could apply across a variety of public processes. First, public processes should be intentionally designed to include multiple mechanisms. By incorporating different mechanisms, participants have more opportunities to engage with the process. In addition, processes that incorporate multiple mechanisms may be more likely to achieve overall process success. Second, non-traditional mechanisms should be considered when designing a process. Engaging people in more interactive ways can contribute positively to a process. Ideally, this study will equip researchers and planners with practical insights for designing participatory processes that engage people in more meaningful ways.

APPENDIX A: TYPOLOGY OF PARTICIPATION MECHANISMS

Figure 6: Alphabetical list of participation mechanisms (source: Rowe and Frewer, 2005).

<ul style="list-style-type: none"> • Act Create Experience (ACE) (1) • Action Planning (1, 2) • Appraisal (Community, Public), e.g., village/parish/environmental. (Also "Monitoring," e.g., citizen monitors and scrutiny) (1, 2) • Arbitration (Mediation) (3, 4) • Broad-Based Organizing (1) • Cable Television (Not interactive) (2) • Cable Television (Interactive) (3) • Charrette (3) • Choice Methods (1, 2) • Citizens' Advisory Committee (CAC) (3, 5, 6, 7, 8, 9) • Citizen Advocacy (1) • Citizen Employment (3) • Citizen Honoraria (3) • Citizens' Jury (1, 2, 6, 10, 11, 12, 13) • Citizens' Panel (Research) (2) • Citizens' Panel (Standing) e.g., Health Panel (2, 10, 14, 15) • Citizen Review Board (3) • Citizen Training (3) • Community Dinners (16) • Community Forum - of: Place (e.g., Neighborhood); issues; Design-In (3) 	<ul style="list-style-type: none"> • Service Users; Shared Interest (2, 10) • Community Indicators (1) • Community Plans/Needs Analysis (10) • Community Site Management Plans (1) • Community Strategic Planning (1) • Community Technical Assistance (3) • Complaints/Suggestion Schemes (10) • Computer-Based (IT) Techniques (2, 3) • Conference (generic term, often with qualifier e.g., "planning," "deliberative," "visualization") (3, 10, 17) • Consensus Building (1, 2) • Consensus Conference (2, 6, 18, 19, 20) • Consultation Document (Consultation) (10) • Consultative Panel (2) • Coordinator or Coordinator-Catalyst (3) • Co-option (Citizen Representatives on Policy making Bodies) (3, 10) • Deliberative Opinion Poll (2, 21) • Design-In (3) 	<ul style="list-style-type: none"> • Drop-In Center (also Neighborhood Office, One-Stop/First-Stop Shop) (2, 3) • Enspirited Envisioning (1) • "Finding Home": "Visualizing our future by making maps" (1) • Fishbowl Planning (3) • Focus Group (3, 6, 10) • From Vision to Action (1) • Future Search (1, 2) • Game Simulation (3) • Guided Visualization (1, 2) • Hotline (3) • Human Scale Development Initiative (1) • Initiatives (Citizen Initiated Petition) (2, 22) • Imagine! (1) • Interactive Web-Site (10) • "Issues, Aims, Expectations, Challenges & Dialogues in a Day" (1) • Learning Service Team (2) • Local Sustainability Model (1) • Maps/Mapping (Village, Parish) (1, 2) • Media-Based Issue Balloting (3) • Meeting-Community Sponsored (3) 	<ul style="list-style-type: none"> • Meeting-Neighborhood (location-based) (3) • Meeting-Public ("Open Information," generic) (3, 10, 23, 24) • Meeting-Town (New England Model) (2) • Meeting-Town (Electronic) (2) • Negotiated Rulemaking (6, 22, 25, 26) • Neighborhood Planning Council (3) • Ombudsman (3) • Open Door Policy (3) • Open House (2) • Open Space (1, 2) • Opinion Meires (2) • Opinion Polls (2, 10) • Participatory Appraisal (1) • Participatory Strategic Planning (1) • Participatory Theatre (1) • Planning Balance Sheet (3) • Planning Cell (27) • Planning For Real (1, 2) • Policy Capturing (3) • Policy Delphi (3) • Priority Search (2) • Priority Setting Committee (3) • Public Hearing (3, 6, 22) • Public Information Programs (3) 	<ul style="list-style-type: none"> • Publicity (Leaflets, Newsletters, Exhibitions) (2) • Question and Answer Session (10) • Random Selected Participation Groups (3) • Real Time Strategic Change (1) • (The) Recall (2) • Referendum (generic; compulsory response) (2, 3, 6, 10) • Referendum-Petition (2) • Referendum-Preferences (Preferendum) (10) • Roundtable (2) • Social Audit (1) • Study Circles (2) • Surveys (e.g., Community; Tenants' (Service) Satisfaction) (2, 3, 6, 10, 16, 22) • TalkWorks (1) • Task Force (3, 28) • Team Syntegrity (1) • Tele-Polling (2) • Tele-Voting (2) • Time Dollars (1) • User Management of Services (10) • Value Analysis (3) • Visioning Exercises/Conferences (10) • Workshops (generic, may include: Action Planning; Design; Information Exchange) (1, 2, 3, 29, 30) • Whole System Development (2)
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Figure 2. Alphabetical listing of "participation" mechanisms (references in parentheses).

SOURCES: (1) New Economics Foundation (1999); (2) Democracy Network (1998); (3) Rosener (1975); (4) Baughman (1995); (5) Lynn and Busenberg (1995); (6) Rowe and Frewer (2000); (7) Plumlee, Starling, and Kramer (1985); (8) Hannah and Lewis (1982); (9) Pierce and Doerksen (1976); (10) Lowndes et al. (1998); (11) Barnes (1999); (12) Cooote and Lenaghan (1997); (13) McIver (1998); (14) Dowswell et al. (1997); (15) Kathlene and Martin (1991); (16) Carr and Halvorsen (2001); (17) Rowe, Marsh, and Frewer (2004); (18) Einsiedel, Jelsoe, and Breck (2001); (19) Guston (1999); (20) Joss (1998); (21) Fishkin and Luskin (1999); (22) Fiorino (1990); (23) Rosener (1982); (24) Sinclair (1977); (25) Coglianesse (1997); (26) Susskind and McMahon (1985); (27) Dienel and Renn (1995); (28) Stewart, Dennis, and Ely (1984); (29) Lundren and McMakin (1998); and (30) Twight and Carroll (1983).

APPENDIX B: INTERVIEW PROTOCOL

I. Opening

I am currently a second year master's student at the University of Rhode Island; this research is part of my Master's thesis project. The general purpose of this research study is to understand more about the nomination process of Mallow's Bay and more specifically to explore how those involved throughout the process feel about the nomination process. You were selected as a participant because... (you are a member of the Potomac River Steering Committee or were identified by a member of the Steering Committee). Provide and go over the consent form. Discuss risks (i.e. possible discomfort talking about past experiences and associated feelings) and benefits (i.e. opportunity to learn more about oneself and to help researchers and practitioners improve existing participatory processes). Ask for questions.

II. Main interview

I'd like you to go back in your mind to your most recent experience with the Mallow's Bay nomination process. Remember when you first heard about this process? And then decided to take part in it?

Tell me a little about this process...

1. In your own words, can you explain what you think the purpose of the nomination process was?
2. How did you hear about the nomination of Mallow's Bay as a marine sanctuary? (flyers, word of mouth, town meetings, emails, etc.) How did you become involved in the process? (tell me when you got involved)
3. In what ways were you notified about opportunities to get involved in the nomination process? (emails, flyers, etc.) Was there a specific type of notification that you think was more useful than the others?
4. Why did you decide to become involved in the nomination process? (was being involved convenient/easy or was it a struggle?)
5. At what point in the process would you say that you became actively involved? Do you believe that was a worthwhile time to get involved? Would you have preferred to get involved at a different time? (earlier? or later?) If later, why?
6. If you do wish you had been involved earlier, is there anything about the process that would have made it easier for you to participate earlier? (meeting times/locations, etc.)

7. What were some of the specific activities you participated in as part of the nomination process? (meetings, emails, public forums, comment periods, etc) Were there specific activities that you found particularly useful?
8. Were you able to participate in all of the activities throughout the nomination that you wanted to? If not, why? What specific aspects of the process helped you to participate and stay engaged? (activities, notifications, etc.)
9. How do you think your involvement in the process affected the overall decisions regarding the nomination? What makes you feel this way? (can you describe this more) (what do you mean)
10. How do you feel about the representation of different interest groups in the nomination process? (were there any groups not present that should have been? were there any groups that probably shouldn't have been there? Who (individuals/groups) do you think was instrumental in driving the nomination?) What specifically about the process do you think allowed so many (or not enough) groups to be included?
11. Do you think your input had an effect on the final decisions NOAA presented? If yes, can you recall a time when you were able to see how your input was incorporated? (What made you feel like it was incorporated?) (How do you think your input was valued/received by other participants in the process? - What did they specifically say or do that made you feel this way?)
12. How do you think NOAA made decisions throughout this process? How do you feel about the way they reached their final decisions? Were you able to see how decisions were reached? Can you give an example?
13. From your experience in the nomination process, do you feel like you had enough information to make informed decisions? What made you feel like it was or was not enough?
14. How did you receive information throughout the nomination process? (information brochures, articles, presentations, etc.?) Can you describe the different ways in which information was shared? How do you feel about these particular mechanisms? Are there other ways that you think would be more effective?
15. Can you recall a time in the nomination process when participants shared different opinions? (can you tell me more about what happened?) How were their differences addressed? What do you think about how these differences were addressed? (Do you think the situation could have been handled better? If so, how?)

16. In general, how do you feel about how participants were treated by those driving the process? Can you recall any specific instances that you think were particularly positive or negative?
17. If you could go back, would you choose to participate in the nomination process again? Why or why not?
18. Do you plan to participate in the designation process and future management of Mallows Bay? If so, how do you plan to participate? Why do you want to stay involved?
19. Is there anyone else you recommend that I speak with regarding the nomination process? Is there any group or individual that was not supportive of the nomination that you can recall?
20. Is there anything else about your experience throughout this process that you would like to share with me?

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