Who Pays for MPAs? An exploration of how narratives influence marine funding

by

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Chapter 1. Who Pays for MPAs? An exploration of how narratives influence marine funding

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"Conservation investment is an expression of our faith in the future of natural systems that are essential to life on Earth. It is an expression of our faith in the future of deeply loved natural wonders. And it is an expression of faith in the future of our families and communities, whose lives will be immeasurably enriched by the living world that we are striving to sustain"
- James A. Levitt

Abstract

Marine programs, particularly those related to marine conservation, utilize a suite of tools to offset the negative consequences of human activities on marine environments. However, among others, limited funding can represent a challenge for these programs in terms of achieving their desired outcomes. Using systems and organizational theory, this study expands scholarship on funding for marine programs by incorporating a social science approach to understanding funding challenges. Systems theory, specifically the Narrative Policy Framework (NPF), was further refined through exploratory interviews to develop a theory specific to funding organizations. Our theory proposes that organizational characteristics (e.g. allocation process), focusing events (e.g. natural disasters), and attribution of character roles (e.g. a villain) influence funding outcomes. These relationships were investigated through descriptive statistics and pairwise correlation tests applied to survey results. Results are synthesized into 5 applied recommendations that marine programs may utilize to potentially bolster their funding proposals. Notable findings suggest that higher funding amounts were allocated to projects that highlight the proposed work's ease of success and ability to create lasting impacts. Additionally, funders that valued equity were more likely to fund projects that directly interact with human communities.

Keywords: conservation funding, policy & management, marine management, marine protected areas, focusing events, NPF, organizations

1. Introduction

Marine programs carry out a wide range of activities, particularly the implementation of management tools to improve marine environments facing natural and anthropogenic threats. Marine programs range from managing fisheries, controlling and studying invasive species, research and development of renewable energies, to conserving biodiversity. Management tools take differing approaches to marine management and can vary in level of protection, means of protection, and desired outcomes, all of which influence potential outcomes (NOAA Office of National Marine Sanctuaries 2015). Recognizing the tensions between conservation and use, we use the term *marine programs* to refer to any program, governmental or non-governmental, that manages some aspect of the marine environment with potential conservation outcomes.

One of the main tools used by marine programs is the establishment of marine protected areas (MPAs). MPAs are most commonly managed by the government, as they have the jurisdiction, authority, and duty to provide a comprehensive view of marine management through different entities (e.g. tribal councils, fishery management councils) and scales (federal, state, local). While MPAs certainly are not the only management tool for addressing marine protections, they are the most commonly utilized strategy and, to many, exemplify the epitome of marine conservation efforts. Governmentally established marine programs receive the majority of their funding from public sources of funding; although exact funding rules and mechanisms differ depending on specific governance entity. Government funding presents several challenges including spending restrictions, reallocation due to shifting priorities, and strict funding cycles.

Despite these persistent challenges, marine funding has received little attention in academic literature. What does exist primarily utilizes economic analyses or simply defines historical funding sources (Berger, Caruso, and Peterson 2019; Birz and Lott 2011; Elliott, Seldon, and Regens 1997; Lerner, Mackey, and Casey 2007; McClanahan and Rankin 2016; Wang 2011). A recent study that explored funding for marine conservation and sustainable fisheries has highlighted three primary challenges for marine funding (Blasiak et al. 2019):

1. Lack of transparency within funding organizations
2. Low cohesion and coordination among funding organizations and projects
3. Insufficient follow-up with funded projects to determine their outcomes

While these publications successfully identify salient funding challenges, they do not investigate the root causes of those challenges. These challenges have yet to be studied in an in-depth manner that investigates the factors that drive funding decisions. The Narrative Policy Framework (NPF) is one systems theory that enables an empirical analysis of the decision-making process by focusing on funder's internal characteristics, contextual events, how those events are perceived as narratives with characters, and how those narratives influence decision-making. This novel method for investigating the context and perceptions surrounding decisions has been utilized to study environmental policymaking (Lawton and Rudd 2014) but has yet to enter the niche of marine policy and management. An NPF analysis can help to unveil the specific decision-making processes that each funder experiences when deciding whether or not to fund a marine program. This information may provide marine program administrators a unique perspective on the root cause of funding challenges, enabling a thoughtful consideration of new approaches for addressing those challenges.

To explore the root causes of marine funding challenges and provide recommendations for marine programs that desire more substantial and sustainable funding, we conducted an NPF analysis of funding available to marine programs in one U.S. state. Oregon has a history of protecting its marine and coastal environments and supports various marine programs with potential conservation outcomes, notably the Marine Reserves Program. In 2023, the Oregon legislature will review a comprehensive evaluation of the Marine Reserves Program, from which they will determine the future of the program. They are likely to consider funding, as a previous program assessment found significant funding limitations (Blue Earth Consultants, LLC. 2013). A thorough understanding of their potential funders may provide valuable information for addressing this instability. Therefore we applied the NPF to organizations that funded marine programs in the state of Oregon as a first attempt to contribute to an emerging scholarship and provide unique insights into their funding challenges.

The following paper describes themes derived from exploratory interviews built around the NPF that elicited organizational characteristics and focusing events, and character roles considered by funding organizations. This critical step helped fill gaps in funding literature and served as a method of theory building. We then further investigate those themes (organizational characteristics, focusing events, character roles) by distributing an online survey and analyzing results through pairwise correlation tests. Key findings are synthesized into a discussion and five key recommendations for

marine programs desiring more substantial or sustainable funding. These recommendations may signal ways for marine programs to create stronger proposals, engage more appropriate funders, and assist decision-makers in writing policies that support funder relationships. By applying this unique social science approach and demonstrating the real-world implications of such an analysis, this research aims to catalyze a new area of marine social science research and engender future applied studies that specifically investigate marine funding through social science methods.

2. Background

Before diving into an NPF analysis, we must first characterize the streams of marine funding and discuss how those streams operate in the specific context of Oregon.

2.1. Funding Streams

Three streams provide the majority of marine funding opportunities: governmental, non-governmental organizations (NGOs), and private foundations. Governmental funding serves as the backbone for all governmentally mandated marine programs. Exact funding mechanism differs based on each state's budget structure. Typically, the mechanism involves a mixture of federally allocated funds, tax revenue, lottery revenue, and license/permit revenue. The state legislature distributes government funds through an in-depth 2-year budgeting cycle involving a wide range of stakeholders and interests, which can make it difficult for programs to successfully achieve higher rates of funding.

Government funds alone may not fulfill a program's desired funding levels, prompting an exploration of external funding sources such as NGOs or private foundations (Berger, Caruso, and Peterson 2019; Levitt and Bergen 2005). The term "NGO" has various interpretations but is generally accepted as non-profit organizations that function apart from government and support a specific cause. For example, the World Wildlife Fund in an NGO that supports wildlife conservation. Private foundations are not legally defined but are typically communicated as independent foundations, family foundations, and corporate foundations. Independent foundations are usually funded by a single endowment, family foundations are usually funded through a family endowment, and corporate foundations are supported by a corporation (although the foundation itself is a separate legal entity). Private foundations function separate from government but can generate a profit and are not always tied to a cause. For example, a family foundation may choose to

allocate funding based on current family interests. Grants offered by NGOs and private foundations are less consistent than governmental funding in amount, duration, and frequency. However, they tend to offer more frequent funding opportunities and increased flexibility (Wang 2011). Various NGOs and private foundations offer grants specifically for marine activities, and many are now explicitly seeking out projects with potential conservation outcomes.

Unfortunately, some government marine programs are not permitted to seek funds from non-governmental sources. This rule is a substantial obstacle since it forces marine programs to rely solely on funding allocated from the government. Programs may be able to work around this obstacle by creating cooperative organizations or forging partnerships with eligible organizations and applying for grants together.

2.1. Marine Management and Funding in Oregon

In Oregon, current marine programs center around 19 state-wide land use planning goals that express the government's stance on various land use topics. Four goals are specifically related to marine environments: Goal 16 – Estuarine Resources, Goal 17 – Coastal Shorelands, Goal 18 – Beaches and Dunes, Goal 19 – Ocean Resources. Marine programs that address these 4 goals are primarily housed within the Oregon Department of Fish and Wildlife (ODFW) or the Department of Land Conservation and Development (DLCD). For example, ODFW oversees the Marine Resources Program which houses the Marine Reserves Program. The DLCD houses the networked, and federally-supported, Oregon Coastal Management Program which manages for potential conservation outcomes by stewarding coastal access sites and rocky shores.

Both of these programs receive multiple streams of state government funding, coming from four main sources: general funds, lottery funds, other funds, and federal funds (Oregon Department of Fish and Wildlife n.d.). State funding is primarily distributed through *General Funds,* which come from a mixture of state-collected taxes and are allocated by the legislature. *Lottery Funds* come from the state lottery system and are set aside for specific work and projects, such as fish screening and Oregon Plan-related activities. *Other Funds* come from several sources, including hunting/fishing licenses and commercial fishing permits, and serve as ODFW's working capital and are used to pay personnel and other expenses. Funding from the federal government comes in the form of *Federal Funds*. Federal Funds are received as a result of federal laws or agreements with federal agencies. As

outlined earlier, the Marine Reserves Program, in particular, influenced this research because of their identified funding challenges and their upcoming evaluation. The Program was first established in 2009 with three main goals: (1) conserve marine habitats and biodiversity, (2) serve as scientific research sites, and (3) avoid adverse impacts to coastal communities and users (Oregon Ocean Policy Advisory Council 2008). They now manage a system of 10 marine protected areas, 5 of which are even further protected as no-use marine reserves. This program presents the most straightforward form of marine conservation in Oregon, by explicitly calling for marine protections, restricting human use, and being included in the National Marine Protected Areas Center's inventory.

Records of previous marine grants indicate a wide range of NGO and private funding opportunities that are currently untapped by the Marine Reserves Program (Table 1). Unfortunately, they are unable to accept these other sources as their current legislative statutes only allow them to accept funding from the Oregon legislature or federal grants specifically offered to state programs. However, they can seek external funds through partnering organizations that provide research, administrative, or operational support. Additionally, a guiding statute explains that the program shall make recommendations to the legislative assembly "if funding cannot be secured to meet enforcement and research-based monitoring needs" (75th Oregon Legislative Assembly 2009). If the Marine Reserves Program were to initiate this conversation, the findings from this research may be quite valuable in highlighting new avenues for obtaining the funding needed to meet their goals.

Table 1: Total grant opportunities available to marine programs in Oregon, and the total amount funded through those grant opportunities. Data reported from The Foundation Center.

Stream	Total Grant Opportunities	Total Amount Funded
Government	254	$111,841,052
NGO	850	$5,672,257
Private Foundation	1993	$197,795,933
Total	3097	$315,309,242

3. Theoretical Framework

There is an absence of theory that directly explores the drivers of funding decisions through a social science approach. Until now, funding studies have largely centered on general trends in funding or relationships to macro-level economics (Birz and Lott 2011; Blasiak et al. 2019). While these analyses serve as a strong foundation for understanding general funding behaviors, they fail to identify the motivations and perspectives that underlie these trends. Consequently, we drew from systems theory, organizational literature, and exploratory interviews to develop a theory as to how organizational characteristics and contextual events may influence funding allocation.

3.1. Systems Theory: The Narrative Policy Framework

In social science disciplines, systems approaches are used to model and predict how multiple elements of a system interact and lead to specific outcomes (Marc J. Stern 2018; Miller 2002; Weible and Sabatier 2017). This study utilizes a systems approach commonly used for policy and decision-making analyses: the narrative policy framework (NPF). NPF emphasizes contextual events (Shanahan, Jones, and Radaelli 2018), with a unique focus on the narration of those events. Importantly, this analysis is subjective in nature, as narratives differ with each unique perspective. The NPF provides an original framework for operationalizing these narrations and conducting empirical hypothesis testing. As we are interested in exploring these concepts in a testable manner, NPF stands out as a promising theory to apply.

We relied on four core NPF concepts: actors, focusing events, character roles, and outcomes (Figure 1) that provide a structure for quantifying and analyzing funders and contextual events to understanding funding decisions (Shanahan, Jones, and Radaelli 2018). The following discussion explains how these NPF concepts were operationalized for marine funding.
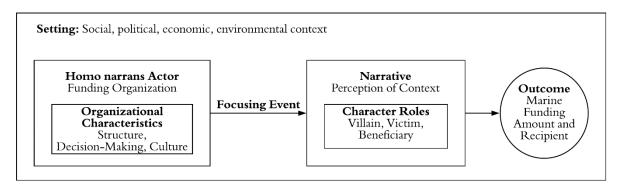

Figure 1: Core concepts from the Narrative Policy Framework, and how each is operationalized in the context of this study.

NPF analyses center around *actors,* whose perspectives guide the proceeding analysis of focusing events and narratives. Actors function as homo narrans or 'storytelling' individuals who rely on narratives for processing information, communicating, and forming reasonable decisions (Shanahan, Jones, and Radaelli 2018). The NPF hypothesizes that an actor's internal characteristics contribute to the formation of narrative understandings. Funding organizations have never been investigated as homo narrans actors, though organizational literature suggests that they do create understanding through narratives (Leigh and Melwani 2019; Morgeson, Mitchell, and Liu 2015). We propose that funding organizations operate as homo narrans actors whose internal characteristics influence narration and eventual funding outcomes.

The internal characteristics of these funding organizations can be explored through Organizational literature. Indeed, scholars of Organizational studies propose multiple internal characteristics that define the way an organization functions: structure, methods of decision-making, and culture (Dalton et al. 1980; Fredrickson n.d.; Ivancevich and Konopaske 2014). Structure provides the most basic anatomical design of an organization and drives the day-to-day functions of the organization (Ivancevich and Konopaske 2014; Ranson, Hinings, and Greenwood 1980). Decision-making methods are specific processes that exist within the organization's structural framework and delineate a distinct work-flow aimed at making critical decisions (Ivancevich and Konopaske 2014). Employees' individual values and informal practices contribute to an organizational culture, which fosters the organizational goals that motivate decision-making (Ranson, Hinings, and Greenwood 1980). Each of these organizational characteristics was further investigated through exploratory interviews, to investigate how they contribute to their funding decisions.

According to the NPF, actors (and their unique characteristics) exist within the setting that describes the general context in which funding decisions are made, including legal constraints, cultural norms, socio-political contexts, economics, and other system-wide events occurring in a particular system. Actors, then, consider critical aspects of the setting (coined *focusing events)* and create narratives around those aspects. *Focusing events*, thus, emerge from within the setting (Birkland 1998).

Actors subconsciously assess focusing events through a narrative process that includes a consideration of the people involved in, or left out of, the narrative. NPF studies identify four main *character roles* within a narrative structure: the hero, villain, victim, and beneficiary. The hero and

villain represent the good side and the bad side, respectively, composing the two primary forces that propel a story. These two characters are often directly at odds, and outcomes of their struggles impact victims and beneficiaries. Victims experience negative outcomes whereas beneficiaries receive positive outcomes. Critically, the attribution of each of these roles is subjective and differs with each funder's point of view. Whom one funder may perceive as a villain may play a hero to another. Characters within the narrative experience this paradigm shift as well - "every villain is the hero of his or her own story" (Christopher Vogler 2007). Another critical relationship exists between the victims and beneficiaries; one character loses while the other wins. Some narratives may deliberately place these outcomes unequally, but others develop naturally over time with no intentionality. For example, a fisher purposefully catches fish (the victim) because of her desire to sell and provide for her family (the beneficiary). Conversely, agriculture never deliberately intended to damage corals (victims) through ocean acidification caused by their field runoff. They only intended to produce food to feed their communities and create jobs (beneficiaries). Some narratives are completely based around the victim because the main actor hopes to relieve some of their burdens. Many non-profit organizations operate through this narrative, as they often work to help vulnerable populations. In these cases, their beneficiary may be the victim within a neighboring narrative.

The consideration of character roles and how they drive perceptions of focusing events has never been applied to understand the challenges facing marine programs. Based on broad discourse surrounding marine environmental problems, we can hypothesize some of the groups that fulfill these character roles. Many individuals perceive extractive industries (i.e. oil drilling, unsustainable fishing, etc.) as the villain due to the potential harm that they may afflict on marine environments. The hero, possibly marine programs or funding agencies themselves, then attempts to combat these challenges to alleviate the hardships placed on the victim. Based on prior research on marine environmental problems, we speculate that the victims could include coastal communities or the environment itself (Eanes, Robinson, and Silbernagel 2018; Millennium Ecosystem Assessment Board 2005; Pitcher and Cheung 2013). These roles are further investigated, through exploratory interviews with funders as the key actors, to substantiate our predictions on funding decisions.

Organizational characteristics, focusing events, and character roles contribute to final outcomes or decisions. We define funding outcomes as both the amount of funding (how much money is being

allocated to marine programs overall) and types of funding recipients (what types of marine programs are receiving the funding). Funding recipients are key for effective funding, as they are the actual entities that utilize funds to achieve potential conservation outcomes. Available funding data delineates two general types of recipients: human-based or environmental-based. Human-based recipients are those that serve some aspect of human society (vulnerable populations, students, sustainable development), while environmental-based recipients solely address natural system concerns (biodiversity, single species, ecosystems). We are particularly interested in the relationship between perceived victims and funding recipients (beneficiaries), to explore if funders allocate money in ways that benefit these perceived victims.

3.2. Exploratory Interviews for Theory Building

Exploratory interviews further explored how NPF concepts (organizational characteristics, focusing events, and character roles) operate in the realm of marine funding. Interview respondents were representatively selected from a subset of data from a database managed by *The Foundation Center*[1] that includes ocean-related funding opportunities available to Oregon organizations since 2002[2]. Representation was determined based on organizational size and type of organization (Table 2)[3]. Within those parameters, specific funding organizations were randomly selected to participate in an interview.

Table 2: Summary statistics from The Foundation Center database used for representative sampling.

	Frequency
Government	1.13%
NGO	29.79%
Private Foundation	69.08%
Big (> $36,000)	53.55%
Medium (> $600, < $36,000)	30.53%
Small (< $600)	16.12%

Organizations were contacted in three waves, beginning with an initial invitation and followed by two reminders. Ten organizations agreed to participate, making up a response rate of 83.33%.

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[1] The Foundation Center offers general funding information for the entire United States. We utilized a subset that only included funding opportunities available to the state of Oregon.

[2] Only 80.5% of funds were actually distributed to Oregon programs, however, that was a possible outcome. The resulting dataset contains 459 unique records spanning from 2002 to 2018, across 50 distinct funding organizations.

[3] Organizational size was manually calculated based on the distribution of each funder's total funding. Each funder was then categorized as either small (< 1st quantile), medium (> 1st quantile and < 3rd quantile), or big (> 3rd quantile). Type of organization was already provided by the dataset and included private foundation, corporate giving program, governmental organization, and charity.

Before beginning the interview, respondents were presented with the necessary privacy information[4] and informed that any question could be skipped or additional privacy measures could be discussed. Each contact was assured that their personal information and the name of their organization would remain confidential, but agreed to be identified in aggregate terms.

One individual from each organization participated in a 30-minute semi-structured phone interview, which covered three main topics that we used to theoretically ground our analysis: organizational characteristics, past funding decision-making discussions, and future funding opportunities (full interview guide available in Appendix A). Discussions covering each of these topics were fairly unstructured to allow prevalent themes to emerge naturally. Probing questions were used when new topics emerged and required further description, or when more clarification was needed to fully understand the concept. Reflection and qualitative analysis occurred throughout the interviews to support an adaptive interview guide, which evolved to include new concepts and themes that emerged in previous interviews.

3.2.1. Organizational Characteristics

Respondents identified allocation process, project factors (e.g. urgency, longevity, durability), and moral foundations as critical drivers for marine funding. These three characteristics played a large role in the decision-making process, and often directly influenced funding outcomes. In addition to influencing funding decisions, these characteristics illustrate a funder's underlying preferences by revealing their priorities and motivations for funding.

Organizations self-reported as following one of four allocation processes, ranging from most to least structured (see definitions in Table 3). *Hierarchical decision-making* included multiple levels of power and oversight, with funding decisions often starting at lower levels of authority and earning approval through increasing levels of power. Organizations with hierarchical structures typically considered strategic plans, which were also developed through a hierarchical process and were usually revised on a regular time-scale. Many organizations reported an allocation structure that was driven by adherence to their *mission statement,* which also required top-down approval but emphasized

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[4] Project was determined IRB exempt since interview and survey questions only asked about organizational behaviors and components, and was thus not considered human research. We still followed the general IRB privacy procedure by providing a confidentiality statement, maintaining untraceable contact identities, and obtaining informed consent.

consistency with the mission. One organization explained that their allocation decisions were "what [they] thought they needed to get to [their] goals" (Interview 8, February 2019). *Collaborative decision-making* centered on egalitarian discussions that aimed to fulfill the mission statement and values of individual employees. Lastly, smaller organizations reported a freer allocation process that only considered board members' *individual values*. Some of these organizations provided each board member with a set budget, which the member could then distribute at their discretion. Mission statement structures were the most common and occurred through all types and sizes of organization. Individual values only occurred for smaller, often family-run, foundations and larger foundations typically utilized the hierarchical process.

Table 3: Allocation processes identified through exploratory interviews, along with a definition and exemplary quote.

Allocation Process	Definition	Example
Hierarchical	Top-down approval	"Working through multiple layers of our organization to get approval"
Mission Statement	Consistency with the mission	"What we thought would be needed to get to our goals"
Collaborative	Egalitarian discussions	"Working in concert with our program officers and CEO"
Individual Values	Personal goals	"Each board member chooses one or two projects a year"

Respondents referred to various factors relating to the proposed project itself, such as urgency for funds and the likelihood for a project to result in long-term changes. Seven factors emerged: locality, efficiency, reality, opportunity, urgency, longevity, and durability (see definitions in Table 4). These factors indicate a funder's underlying motivation for funding marine projects. For example, those that prioritized locality tended to have a higher interest in community-based focus while those that prioritized reality were more interested in research and academia. In more nuanced ways, the tendency to prioritize urgency over durability suggests that a funder is more focused on short-term outcomes than long-term outcomes. Those funders may also be more interested in achieving high impact and noticeable change, as opposed to the gradual change that often occurs in long-term projects.

Table 4: Project factors identified through exploratory interviews, along with a definition and exemplary quote.

Project Factor	Definition	Example
Durability	The project's ability to create long-lasting and persistent change	"[My organization] likes to target root causes"
Efficiency	The strength of outcome related to the cost of funding the project	"Getting the most bang for our buck"
Locality	Distance to a community-of-place or community-of-interest that is targeted by the funder	"Responding to community need"
Longevity	The length of time that the funder must remain invested in the project to see results	"It takes decades to get stuff done"
Opportunity	How easily a project can achieve its goals in the given social, political, and economic climate	"Is there an enabling environment for this project to succeed and create real change?"
Reality	The ability of a project to target documented and/or researched challenges	"Everything is evidence-based"
Urgency	If the project, or funding itself, is needed in a time-sensitive and high-risk situation	"Is there a genuine need for money?"

Through either explicit or implicit mention of values and goals for marine programs, it became apparent that each organization operates through different moral foundations. Moral foundations have been identified in environmental ethics and psychology research and describe how people and institutions place value in the environment (see definitions in Table 5) (Kathleen Dean Moore and Michael P. Nelson 2010). Many funders utilized strong language when discussing marine challenges, and this language often exemplified a moral foundation. For example, one funder explained that "our constituencies are the 8 million other species that inhabit the planet, not the human species" (Interview 1, December 2018), a view that exemplifies the intrinsic moral foundation. While moral foundations have never been theoretically or empirically linked to funding outcomes, our interviews

suggest that morals are important organizational attributes that impact the types of projects that are solicited or accepted.

Table 5: Moral Foundations identified through exploratory interviews, along with definitions based on (Moore & Nelson, 2010)

Moral Foundation	Definition
Equity	Concerned with the equitable distribution of environmental challenges among human communities
Future Generations	Environmental protection is necessary so that future generations can use it and enjoy it
Intrinsic	The view that the environment has the right to exist, even if it does not provide anything to humans directly
Stewardship	A desire to protect the environment because we have a duty to do so
Utilitarian	Valuing the physical and monetary aspects of the environment

3.2.2. Focusing Events

Exploration of past funding decision-making discussions indicated a wide range of focusing events that are regularly considered during allocation discussions. Although these events did vary quite widely, they could all be aggregated into one of four categories: money, institutional actions or structures, threats of or actual harm, and organizational or scientific learning (see examples in Table 6). Events having to do with *money* dealt with an organization's own funding, the behavior of other funding organizations, and political funding. *Institutional* events were some sort of political action that would either help or impede upon marine projects. *Harmful* events imposed some sort of harm on an environment or community, or threatened to impose harm. For example, a hurricane may impose physical harm on a marine area whereas proposed bills may threaten to harm a marine environment. Even though this threat may or may not come to fruition, it can catalyze marine funding as a precautionary measure. And *learning* came about either through the growth of organizational knowledge or scientific research.

Table 6: Focusing events brought up during exploratory interviews, categorized into those dealing with money, learning, harm, and institutions.
*Governmental funding has been counted as both a money and an institutional event since funders recognized both the political aspects of government funding and the purely monetary aspects.

Focusing Event	Category
Governmental Funding*	Money
Funding Capacity	
Other Funders	
Stock Market	
Scientific Literature	Learning
Results from Previously Funded Projects	
Threats to Currently Funded Projects	Harm
Natural Disasters	
Social Events	
Policy	Institutions
Political Barriers	
Governmental Funding*	

It is critical to clarify that many of these events have the potential to impact all funding organizations since they occur on a national or regional scale; however, each organization differentially identified the events that were most salient to their own funding organization. A funder may place more emphasis on a particular event because of how the funder perceives the event as related to their funded projects or marine programs as a whole. These perceptions stem from within the funding organization itself and may be related to the organizational characteristics previously identified.

Interview respondents suggested that these events impacted their funding decisions in three major ways: increased or decreased funding resources, funding reallocation, or temporal shifts in funding. Certain events, particularly those having to do with money, directly alter the amount of money available to funding organizations for future allocation. When events such as these occurred, funders were forced to reduce funding. Funders also reacted to the threat of decreased resources by prematurely reducing their funding commitments. Events can also encourage funding reallocation, or the lateral redistribution of funding to other organizations or topics. Funders may choose to fund different organizations, projects, and locations to enhance project benefits or avoid negative interactions. For example, one organization explained their perception that political barriers in the U.S. hinder successful marine programs. In response, this organization chose to reallocate their funding resources to international marine projects in countries with more flexible or supportive political systems. Funders also explained that some events lead to temporary accelerations or pauses

in funding. Unanticipated events, such as natural disasters or a threat to a currently funded project, may necessitate immediate financial support to mediate or prevent harm. Conversely, events that introduce temporary constraints, such as a change in the presidential administration, may encourage funders to pause their funding until those undesirable conditions change.

3.2.3. Character Roles

Table 7: Character roles delineated by the NPF, and each entity fulfilling that role

Character Role	Entity
Beneficiary	Coastal Communities
	Conservationists
	Everyone
	Funding Recipients
	No One
Victim	Coastal Communities
	Everyone
	The Environment
	Vulnerable Populations
Villain	Coastal Communities
	Everyone
	Extractive Industries
	The U.S. Federal Government

Respondents were asked who they perceived fulfilled character roles within each of the events they discussed. Interviewees generally reported that character roles were consistent across all events; for example, if one organization found the U.S. Government responsible for causing political barriers, they typically found the U.S. Government responsible for any negative event. However, different funding organizations did not choose the same institutions as filling each role. Interviewees reported the villain as the U.S. Federal Government, Extractive Industries, and even Coastal Communities.

This suggested that character roles may not differ for specific focusing events, but do play a large role in how organizations perceive marine conservation as a whole. Interviewees also discussed the entities that they perceived as benefiting from their own marine funding (outcome). For example, one organization reported coastal communities as the primary beneficiary, since they most commonly funded projects with intended outcomes for communities. Recurring characters are outlined in table 7.

4. Methods

A survey was distributed to investigate the relationships between themes elicited during interviews (organizational characteristics, focusing events, character roles) across a larger sample. Results were then statistically correlated with each organization's past funding decision (both the amount of money and recipient of funds), which was available through *The Foundation Center's* dataset.

4.1. Data Collection

The survey questionnaire was used to record organizational characteristics, focusing events, and character roles. The completed survey contained 35 questions and took approximately 15 minutes to complete (full survey available in Appendix B). The survey ended with questions about future funding for marine programs. All survey communication was conducted through *Mailchimp,* an online outreach platform that enables mass distribution of high-quality emails.

The survey was electronically distributed to the majority of the funding organizations included in the *Funding the Ocean* dataset, whose contact information was obtained through publicly available emails or online contact requests. Individual points of contact were identified through an online search relying on search platforms (i.e. Google) and foundation repositories (i.e. guidestar.org). However, the majority of funding organizations lacked any online presence. If these searches came up empty, we manually searched for each foundation's 990 tax form, which includes a field for the director's phone number. As a last resort, I searched for remaining organizations on the communications platforms of *Facebook* and *LinkedIn.*

Organizational characteristics were elicited through multiple-choice questions. Each question allowed respondents to skip, report that they do not know, or fill in an *other* response. Respondents selected which allocation process and project factor best applied to their organization's decision-making process for marine funding. Each option included a brief description, to support that consistent comprehension of the questions. Moral foundations were elicited by asking each organization to report which moral stance most aligned with their organizational culture and past funding decisions. Again, moral stances were explained to assist organizations in recognizing which best fit their organizations.

The various focusing events that were identified through interviews were included in one large survey question, wherein respondents reported the degree (on a scale of one to ten) to which the event was regularly considered during decision-making. For example, an event with a response of 10 indicates that this type of event is strongly considered on a regular basis. This format allowed us to weigh the relative importance of each event with more specificity than a dichotomous response. Character roles were elicited by asking respondents to evaluate who was responsible for marine

challenges (the villain), who was most negatively impacted by marine challenges (the victim), and who would most benefit from their own organization's funding (the beneficiary).

Contacts were first approached with an email briefly introducing the research project, primary researcher and academic affiliation, and explaining that their organization was selected to participate in a short online survey. One week following this initial alert, contacts were sent an email containing privacy information[5] and a link to the survey. In the following four weeks, contacts received four survey reminders. The last contact explained that the survey would close within a week and that immediate participation was necessary if their organization wished to be included. Upon the conclusion of survey collection, participating organizations were sent a short thank you note and a link where they could sign up to receive a copy of the completed study.

4.2. Data Analysis

Survey results were appended to the *Funding the Ocean* dataset. This allowed us to statistically test relationships between organizational characteristics, focusing events, and previous funding decisions. Some organizations provided multiple contacts for survey completion; however, due to the nature of the dataset, only one survey response could be utilized in the proceeding statistical analysis. We chose to include survey results from the individuals who were the most directly involved in the allocation process (this information was elicited through a survey question).

Multiple pairwise correlation tests statistically estimated the correlations between survey responses and funding outcomes. Funding outcomes (the dependent variable) were tested as the average amount of funding for marine programs, human-based recipient, and environment-based recipient. Average funding was calculated by summing yearly funding data into one aggregate measure and then dividing by the total number of grants, by funding organization. Types of recipients (marine programs, in this case) were aggregated into two categories (Human-Based Recipient and Environment-Based Recipient) and tested as dummy variables. The dummys were coded with a "1" if the funder had ever funded a project conducted by a human-based or environment-based recipient; some funders had 1s in both categories because they had funded both types of recipients.

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[5] See footnote 1.

Each of these three dependent variables was correlated with multiple independent variables that were collected through the survey. Categorical survey questions, such as allocation process and moral foundation, were transformed into dummy variables. Scaled survey questions, such as event consideration, were kept as numeric variables. Additionally, multiple dummy variables were generated as control variables to account for specific characteristics of each organization.

Character roles were statistically correlated to funding recipients as dependent variables, to explore how a funder's type of recipient (i.e. human or environment) is related to their perceived narratives of marine issues. Correlations were conducted in *Stata SE* using the *pwcorr* command. This test calculates Pearson's Correlation Coefficient (r), which indicates the strength of a linear relationship between the two included variables and the statistical significance (p-value) of r (Pickett and Wilkinson 2007).

4.3. A Word on Subjectivity

Statistical methods have been used for NPF analyses (Shanahan, Jones, and McBeth 2018; Shanahan, Mcbeth, and Hathaway 2011), but certain disciplinary assumptions are at odds. Statistical methods aim to objectively quantify and predict reality, while the NPF inherently rejects the idea that such an objective reality exists (Shanahan, Jones, and Radaelli 2018). Since the NPF hypothesizes that certain internal characteristics shape how actors perceive and respond to the setting, each narrative exists within the actor's subjective reality. Therefore, one event could spark various internal narratives, each nuanced based on the perceiver's own psychology. While these ontological differences are significant, previous NPF studies do not discount the power of statistical analysis. This study recognizes the subjectivity of NPF analysis; in fact, this subjectivity makes this analysis particularly useful for understanding a funder's unique decision-making process.

5. Results

The sample covered 12.67% of funders included in the database, with 51.58% unreachable and 35.75% declining to participate. In total, surveyed funders had allocated 57 grants totaling $1,624,139 to marine programs between 2002 and 2016. Surveyed funders were highly skewed toward foundations, and the majority resided on the west coast (Table 8). Foundations varied in age from 13 years to 79 years of operation. Nearly equal amounts were allocated to human-based and environment-based recipients, making it a fairly balanced comparison.

Table 8: Summary of basic organizational information from funding organizations surveyed. Percentage of each categorical value, with raw frequency in parentheses.

Organizational Information	Descriptive Statistics
Type of Organization:	
Foundation	72% (18)
Charity	8% (2)
Corporate	8% (2)
Government	8% (2)
Academia	4% (1)
Location:	
West Coast	44% (11)
East Coast	24% (6)
Gulf Coast	12% (3)
Not Coastal	20% (5)
Size of Organization:	
Big ($442,533 - 42,001)	20% (5)
Medium ($42,000 - $2,001)	44% (11)
Small ($2,000 - $231)	24% (6)
Number of Employees:	Mean = 13.83; Min = 0; Max = 100
Age:	Mean = 33.68; Min = 13; Max = 79

Raw frequencies of survey results characterize the distribution of organizational characteristics, focusing events, and character roles across organizations that fund marine programs. This information can help to reduce the uncertainty surrounding marine funders by revealing their processes and perspectives, and potentially serve as a basis for future funding studies. Pairwise correlations suggest statistically significant relationships that may impact funding amounts and recipients. Also of interest is the absence of expected significance, indicating a potential disconnect between qualitative funding expectations and quantitative funding realities.

*Table 9: Correlation table indicating the correlations (r) between dependent variables (average amount of funding for marine programs, environment-based recipient, human-based recipient) and independent variables (organizational characteristics, focusing events). * - p < 0.1; ** - p < 0.05; *** - p < 0.001. Raw frequencies in parentheses with corresponding dummy variable, and total weight in parenthesis for numeric variables.*

	Average Amount of Funding for Marine Programs	**Environment-Based Recipient**	**Human-Based Recipient**
Summary Stats	$1,624,139	23 Recipients	7 Recipients
Organizational Characteristics			
Allocation Process:			
Collaborative (52%)	0.347	0.0406	-0.1823
Mission Statement (28%)	-0.2683	0.2041	-0.0268
Individual Values (12%)	-0.1442	0.1195	0.305
Hierarchical (0%)	0	0	0
Project Factors:			
Locality (24%)	-0.1735	0.2052	-0.2236
Efficiency (16%)	-0.1619	-0.2557	**0.4287***
Longevity (12%)	-0.1862	0.1325	0
Reality (12%)	-0.165	0.1325	-0.2887
Opportunity (8%)	**0.5299****	0.1053	-0.2294
Urgency (8%)	0.0905	**-0.4474****	0.6205
Durability (4%)	0.4081*	0.0725	-0.1581
Moral Foundation:			
Stewardship (48%)	0.1937	-0.1873	0
Future Generations (24%)	-0.1457	0.1502	-0.126
Utility (4%)	-0.1202	0.0526	-0.1325
Equity (4%)	-0.0088	0.0526	**0.3974***
Intrinsic (0%)	0	0	0
Focusing Events			
Harm (weight = 239)	0.1888	-0.0422	-0.1879
Money (weight = 239)	0.1943	-0.0569	-0.0231
Learning (weight = 228)	0.0939	0.0722	-0.0026
Institutions (162)	**0.397***	-0.0451	-0.0874
Controls			
Location:			
West Coast (44%)	-0.2426	0.2614	-0.0144
East Coast (24%)	0.1617	0.1657	-0.1418
Not Coastal (20%)	0.21	**-0.5898*****	**0.3563***
Gulf Coast (12%)	-0.1004	0.1089	-0.2303

Size of Organization:			
Big (20%)	**0.7753*****	0.1336	-0.2212
Medium (44%)	-0.2562	**-0.3733***	0.2614
Small (24%)	-0.2756	-0.1418	0.1657
Number of Employees (ave = 13.83)	0.1282	-0.0012	-0.0546
Age (ave = 33.68)	**0.4392***	0.1576	-0.3641
Type of Organization:			
Foundation (72%)	-0.0246	0.0458	0.1138
Corporate (8%)	-0.1049	-0.1839	0.087
Charity (8%)	-0.1744	-0.2303	0.1089
Government (8%)	0.2008	0.3273	**-0.6922*****
Academia (4%)	-0.1046	0.3273	0.0602

5.1. Organizational Characteristics

Collaborative allocation processes were most common among surveyed funding organizations, followed by mission statement and individual values. Interestingly, hierarchical processes were not reported by any respondent, even though they had been identified within interviews. This may be due to a limited sample that did not reach those hierarchical organizations. Pairwise correlations did not support any significant relationship between allocation process, funding, and recipient. This suggests that the actual structure of decision-making does not impact decision outcomes.

Locality and efficiency were the most highly considered project factors but were not significantly related to marine funding. Two project priorities were significantly related to higher funding: opportunity and durability. Funders that preferred projects with high levels of opportunity were moderately more likely to allocate larger amounts of funds for marine programs than other priorities ($p = 0.0135$). This suggests that funders allocate more funds to marine projects that demonstrate their ability to easily achieve their goals in the given social, political, and economic climate. Additionally, funders allocated more money to projects that had the intention of creating long-lasting results than those that did not ($p = 0.0663$). Project factors were also related to funding recipients: funders that prioritized urgent projects funded the environment-based recipients less ($p = 0.042$), and funders that prioritized efficient projects funded human-based recipients more ($p = 0.0525$). The first finding may suggest that funders do not perceive environmental challenges as

particularly urgent. The second finding suggests that funders perceive human-related projects as more efficient than environmentally-related projects.

Nearly half of the surveyed funders reported a stewardship moral, suggesting that funders perceive themselves as fulfilling a duty to protect the environment. No funders demonstrated an intrinsic moral foundation, even though that had been present in the interviews. This again may reflect our limited sample size. Moral foundations were not related to the amount of marine funding but were related to the recipients of those funds. Organizations that reported an equity moral funded human-based recipients more than organizations with other morals ($p = 0.0828$). This result reflects their value of equity and indicates that their value is being reflected in their funding distributions.

5.2. Focusing Events

Organizations most strongly considered harm and money events, followed closely by learning events. Institutional events were the least commonly considered, which may be due to a sample highly skewed toward non-governmental organizations. However, funders that more strongly considered institutional events funded more money toward marine programs than those that did not consider institutional events ($p = 0.0747$).

5.3. Character Roles

Table 10: Pairwise correlations between funding recipients and perceived character roles. Victim roles were tested, but are not displayed as none were significantly correlated to funding recipient. * - $p < 0.1$; ** - $p < 0.05$; *** - $p < 0.001$

	Villain			Beneficiary
	Coastal Communities	U.S. Federal Government	General Public	Conservationists
Environment-Based Recipient	0.0556	**-0.4564****	0.1601	**-.05345****
Human-Based Recipient	**0.3944***	**0.579****	**-0.406****	-0.068

Funding organizations that allocated money toward environment-based recipients were moderately less likely to view the U.S. Federal Government as the villain ($p = 0.0495$). This may indicate the belief that environmental challenges are not due to governmental actions. These funders were also less likely to perceive conservationists as the beneficiary of their funding opportunities ($p = 0.0401$). Funders that preferred human-based recipients were correlated with the perception of coastal communities and the U.S. Federal Government as villains ($p = 0.0947$; $p = 0.0107$).

6. Discussion

Results from the interviews and survey suggest that organizational characteristics, focusing events, and character roles do influence the amounts and recipients of marine funding. When examined in aggregate, these findings unveil previously hidden funder characteristics and provide insight for forecasting future marine funding. This study also sparks many opportunities for future research to continue expanding knowledge of marine funders through a social science perspective.

6.1 Previous Funding: Increasing Transparency

Marine funding is crucial for effective marine programs. However, many of the processes within funding organizations are hidden, making financial planning a guessing game. This research helps increase transparency by unveiling organizational characteristics that are most common amongst marine funders, indicating project factors that are significantly related to funding decisions, and identifying who funders intend to benefit through their funding decisions.

The NPF analysis has revealed a possible disconnect between funding goals and funding realities. Most respondents believed that coastal communities, the general public, or vulnerable populations were most at risk from marine challenges, and that these challenges were caused by the general public and extractive industries. However, it does not appear that funders believe their funding actually addresses this issue. The total amount of money funded by organizations who believe they help coastal communities and the general public was the lowest of any beneficiary ($7,321 and $67,000, respectively); most money was granted with the idea that the money would not help anybody at all. Although this option was not initially offered in the survey, as it is not particularly intuitive, respondents physically wrote in that they believe their funding will not benefit any human or environmental entity. This possible gap between funding needs and funding realities may be a result of the lack of coordination and lack of appropriate follow-up that was identified by Blasiak (2019).

Furthermore, survey results indicate that, while funders do prioritize locality, this priority does not translate into increased funding. They instead allocate more money to projects that emphasize opportunity and durability. Although funders may indicate that human communities are most at risk, this research suggests that their funding behaviors may not actually address this issue. Perhaps this

indicates the perception that funding cannot alleviate the marine-related challenges placed on communities. This could be due to a perceived inability to change human behavior, or because challenges are too large to be placated by any smaller-scale funding source. Future research could further investigate this trend, to gain a deeper understanding of why marine funders do not allocate more resources for helping this common victim.

6.2 Funding Futures: Will the funding limitations continue?

Past research identified that marine funding has remained constant since 2010, and this research supports that finding (California Environmental Associates 2017). Exploratory interviews and the survey questionnaire investigated the root causes of this stagnation and provided some information that begins to explain the lack of funding. Both interview and survey questions about future funding opportunities allowed funders to self-report predictions about how their own organizations may allocate funds, and under what conditions they could see those predictions changing.
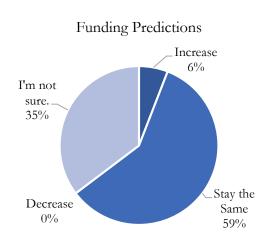

Figure 1: Surveyed respondent's perceptions of how funding for marine programs may change in the future.

Most organizations expected funding for marine programs to either decrease or stay the same, because of the perception that marine funding is already sufficient or perhaps even oversaturated. This relates to the project factor of *urgency*: since funders perceive marine programs to already have enough funding, funders feel as through their funding will not make a significant impact. One respondent shared this sentiment, explaining that "[this funding area is] already saturated with funding" (Interview 10, February 2019).

Additionally, multiple funding organizations explained that they may increase funding if there was an expansion of governmentally-supported marine programs, if marine conservation were to become a more salient social issue, or if projects had a closer connection to community need.

Surveyed funding organizations suggested that future marine funding may stay constant, but may change in distribution (Figure 2). Survey responses suggest that marine funding may be moving in the direction of equity and coastal community support. Increased community engagement may

contribute to this trend by influencing funders to increase funding opportunities that target community-level change. One survey respondent did indicate that their organization would consider increasing funding for marine programs if there was "a greater intersection with equity", which we can assume to mean social equity. Other surveyed funders shared frustration with past marine funding for failing to "address the need for long-term thinking", and believe that "too much short-term thinking has harmed the ocean". This frustration may be reflected in the prioritization of durable projects, which was the lowest priority but was correlated with high amounts of funding. Perhaps, those funders that strongly prioritize long-term things are the least common but offer the most amount of related financial support.

While these findings do not indicate that the challenges of funding are coming to an end, they also do not reject the possibility that funding will increase. Although distributions of funding may shift toward human-based recipients, marine programs can still apply for and receive those funds. Human dimensions monitoring has become a more common aspect of marine programs, and many now have dedicated social science staff. By channeling proposals through these human-focused efforts, marine programs may be able to secure more outside funding. In the context of government-funded programs that allow external grants, this potential additional funding would then increase their ability to supplement their overall budget, which can be reallocated accordingly to best serve their program functions.

6.3 Applied Recommendations

The trends identified in this research support actions or strategies that marine programs could apply to increase their financial sustainability. The following list of recommendations suggests specific strategies for approaching funding.

1. Many funders, especially smaller organizations, are more reliant on organizational discussions for their funding-allocation decisions than the technicalities within their mission statements. Marine programs may be able to branch out to funders that do not have marine management explicit in their mission statements by appealing to the funder's general priorities and motivations.

2. Programs with human-based goals and objectives may find greater success when they highlight their ability to *efficiently* produce outcomes, especially if those outcomes can prevail

in the face of governmental decisions. Since organizations that fund human-based projects may be more likely to view the U.S. Federal Government as the *villain*, programs can highlight how their projects could succeed regardless of governmental actions or, better yet, actually alleviate some of those challenges.

3. Funding organizations that fund environment-based marine programs may be less likely to view the U.S. Federal Government as the villain. Environment-based marine programs may find higher success if they avoid references to the federal government or concerns about their actions.

4. When applying for funding, programs should highlight the *opportunities* available for their project to succeed, specifically in regards to institutional support or ability to overcome barriers. This is particularly important if an *institutional* event has occurred that has the possibility of decreasing the proposed program's opportunity for success.

5. Focusing proposals on human-based projects related to marine programs may increase their success.

Prior literature and this research highlight the range of financing opportunities available to marine programs from non-governmental sources. We suggest that policymakers support financial stability within government marine programs by developing legislative frameworks that enable the acceptance of external funding. Flexible funding structures will allow marine programs to explore non-governmental funding sources, a practice that has been shown to increase program resilience (Lennox et al. 2017). Government agencies may encourage these policy decisions and utilize this research to illustrate the significance of flexible funding mechanisms.

6.4. Limitations
Funders were highly difficult to communicate with because many organizations avoid unsolicited communications, as we were told that cold calls are typically a request for money. Many funders answered my calls with a firm statement that they "aren't accepting any requests for funding", upon which I would explain that my intention was purely research-driven and I was in no need of money. While I did include language to directly address this assumption, I expect that some funders never opened my emails. As funders are rarely studied or communicated with outside of the need for money, I was not surprised by this response to my request for information. Of the organizations

that I did manage to successfully contact, the majority of organizations expressed surprise at my request.

Since many funders actively discourage unsolicited communications, a sizeable portion of the population did not provide any contact information. However, each organization was required to provide a physical address on their 990 tax forms. Therefore, a mailed paper survey may have been a more successful survey mode for this specific audience because we could have directly contacted every single organization in the population. Additionally, funders may have been more likely to open a mailed invitation. This mode was unfortunately beyond the capacity of this project due to, ironically, our own funding and time constraints.

Analysis of the collected survey data indicates that actual responses were not significantly correlated with any organizational characteristics. Respondents were appropriately varied across region, type of organization, and size. There were slightly more responses from smaller foundations, but that is consistent with the greater *Funding the Ocean* dataset. This analysis suggested that the final dataset was a representative sample, so it may have some levels of generalizability. However, future research should verify these results through a larger and more diverse survey sample. This could be achieved by considering the entire national or international pool of funders, or by employing techniques to overcome low response rate.

7. Conclusion

Funding challenges, such as lack of funding transparency, affect marine programs. By using the NPF to investigate marine funders as decision-making organizations operating within a broader context, we elucidated internal and external factors related to funding decisions. We found that project factors, moral foundations, and focusing events influence funding outcomes. We also identified critical character roles related to funding outcomes, which may be utilized to frame funding proposals. Pairwise correlation tests support that these predicted relationships exist, but do not statistically prove the strength or consistency of those relationships. Therefore, more in-depth studies that specifically focus on certain relationships, are necessary to increase funding transparency and expand this growing discipline.

This study provides numerous opportunities for future research to more deeply investigate relationships, such as that between the project factor of *opportunity* and the consideration of institutional events. Many organizations reported *opportunity* as the most important project factor that is considered when selecting marine projects to fund. However, institutional events were the least important external events during allocation discussions. This disconnect may be further investigated through a distinct project investigating the relationship between funders and institutions.

Another area for future investigation concerns an organization's consideration of money events. These events were the most commonly discussed events across all funders, but this consideration did not necessarily translate into higher or lower granted amounts. Perhaps money events do not result in funding increases or decreases but instead, lead to lateral shifts in funding appropriation. Future research can explore this relationship to understand how money-related events actually impact funding decisions.

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Appendix A. Interview Guide

Thank you for agreeing to participate in this interview. This study aims to better understand the decision-making processes of funding organizations such as your own. Your personal information will be anonymous, but information you share may be identified by the organization. If you ever feel uncomfortable with a question, we can discuss options for additional privacy or you can choose to pass. The interview will cover three main topics: information on your organization, past funding behavior, and future opportunities.

Organizational Information:

1. Let's start with some general information on your organization.

        a. What types of projects/programs do you fund? Why?

        b. Have you funded marine conservation projects or MPAs before? Why or Why not?

2. Can you tell me about organization's process for selecting and allocating funds?
        Allocation process:
        a. Are proposals typically solicited?

        b. What topics or events are discussed during decision-making discussions?

        c. What is your personal involvement in these decisions? (in term of person's position within the organization) :

The remainder of this interview will ask questions about funding *specifically for marine conservation or marine protected area programs.*

3. To the best of your knowledge, how has funding changed in the past 10 years?

        a. What has caused that change?

I'm interested in understanding why changes occurred when they did. I will ask some questions on events and how they may have impacted your funding decisions.

4. Previously, you mentioned how [focusing event] was discussed during your allocation meetings. Can you provide more information on how [focusing event] was discussed and impacted your decision?

        a. Did it have a large or small role in decision-making discussions?

        b. Did this event a negative or positive impact?

b. Who caused this event?

c. Who was hurt by this event? Who gained from this event?

d. Who responded to this event?

Now, let's discuss future funding opportunities.

5. Based on the *current* context of your organization, do you expect funding for MPAs to increase or decrease in the future?

6. What conditions or events may influence your organization to increase or decrease funding opportunities for MPAs?

7. Is there anything else you wish to add about funding for MPAs?

Appendix B. Survey

Q1.1 Thank you for considering to participate in this research study! Please note that we are interested in your responses whether or not you fund environmental or marine activities.

Purpose: You are being asked to take part in a research study. The purpose of this research study is to better understand funder decision-making processes. In order to be in this study you must be of legal age to consent, which is 18 in most states.

Activities: This study will occur through an online survey. Time: Your participation in this study will include the completion of a 5-10 minute online survey. Risks: N/A Benefit: We do not know at this time if you will benefit from being in this study. If desired, we can provide you with the finished report that utilizes this survey.

Confidentiality: The results of this study will be synthesized and shared with Oregon State University as a Master's essay, reported to the Oregon Department of Fish and Wildlife (ODFW), and may eventually be published in a peer reviewed journal/report. To this end, we will share survey responses with ODFW, but we will not include your name or any other information that may serve to identify you or your organization.

Voluntary: Participation in this study is voluntary. Please feel free to skip any topics that you would prefer not to discuss in a survey setting.   Study contacts: If you have any questions about this research project, please contact me: Adrian E. Laufer, at laufera@oregonstate.edu. By clicking the "next" button and taking this survey, you acknowledge that your participation in

this study is voluntary, you are at least 18 years of age, and that you understand and accept the project information and confidentiality explained above.

○ I consent, begin the study. (1)

○ I do not consent, I do not wish to participate. (2)

Q1.2 Are you affiliated with an organization that provides funding opportunities for environmental conservation?

○ Yes (1)

○ No (2)

Q1.3 Has your organization funded marine & coastal conservation projects, currently or in the past?

○ In the past, but not currently (1)

○ Both in the past and the present (2)

○ Currently, but we had not in the past (3)

○ I don't know (4)

Display This Question:

If Q1.2 = 2

Q1.4 What types of projects does your organization primarily fund?

_____

Q1.5 Why did your organization decide to terminate funding for marine & coastal conservation?

_____

Q1.6 Why does your organization fund marine & coastal conservation?

_____

Q1.7 Why has your organization decided to start funding marine & coastal conservation?

_____

Q1.8 To the best of your ability, please estimate your organization's general budget for marine conservation funding in the past funding period.

_____

Q1.9 In the past 10 years, how has your organization's funding for marine & coastal conservation changed?

   ○ Increased (1)

   ○ Stayed the same (2)

   ○ Decreased (3)

End of Block: Default Question Block

Start of Block: Organization

Q2.1 **First, I will ask you some questions about your organization and funding history.**

⤫

Q2.2 What type of organization do you affiliate with?

○ Federal government agency (1)

○ State government agency (2)

○ Non-governmental organization (3)

○ Community foundation (4)

○ Company-sponsored foundation (5)

○ Corporate giving program (6)

○ Governmentally-linked foundation (7)

○ Independent foundation (8)

○ Public charity (9)

○ Academia (10)

○ Other: (11) _____

✳

Q2.3 Please estimate the number of people employed by your entire organization.

_____

⤴

Q2.4 Where does your organization get money from?

○ Charitable contributions (1)

○ Stock investments (2)

○ A different funding organization (3)

○ A government entity (4)

○ Endowments (6)

○ Interest (7)

○ Other: (5) _____

Q2.5 Compared to other funders, I think my organization offers...

○ MORE funding. (1)

○ about the SAME amount of funding. (2)

○ LESS funding. (3)

○ I don't know. (4)

Q2.6 To the best of your knowledge, for what purpose does your organization **primarily** fund marine & coastal activities? (please choose 1)

○ Research (1)

○ Evaluation (2)

○ Policy advocacy (3)

○ Network-building and/or collaboration (4)

○ Capital and infrastructure (5)

○ Leadership and/or professional development (6)

○ Capacity-building (7)

○ Individual development (8)

○ Presentations and/or productions (9)

○ Program development (10)

○ Financial sustainability (11)

○ Outreach (12)

○ Student training and/or engagement (14)

○ Other: (13) _____

○ I don't know (16)

○ We don't fund marine activities (18)

Q2.7 On a scale of 0 to 10, where 0 is no participation and 10 is full decision-making power, how directly do you participate in funding decisions?

	Not at all	Slightly	Moderately	Incredibly
	0	2	4	6	8	10

Participation in decision-making: ()

Q2.8 Does your organization accept unsolicited funding requests?

○ Yes (1)

○ No (2)

○ In certain instances (3)

○ I prefer not to answer (4)

Q2.9 Does your organization follow a structured process for deciding which projects to fund?

○ Yes (1)

○ No (2)

○ I'm not sure (3)

Q2.10 Which process best describes your organization's allocation process?

○ Collaborative decision-making (1)

○ Addressing the mission statement (2)

○ Based on individual values of employees or board members (3)

○ Hierarchical decision-making (4)

○ Other: (5) _____

Q2.11 **Now, this survey will ask some questions on events and how they may have impacted your funding decisions.**

Q2.12 When choosing projects to fund, which of the following does your organization tend to prioritize?

○ Sustainability of impact (1)

○ Efficiency, or getting the most "bang for our buck" (2)

○ Urgency (3)

○ Our relationship with the community we would assist (4)

○ Policy windows (5)

○ Evidence-based need (6)

○ Whether we want to partner with the project in the long-term (7)

○ If there is community support (8)

○ Other: (9) _____

○ None of the above (10)

○ I don't know (11)

_____

Q2.13 The following environmental values define the various reasons that people appreciate the environment. In your opinion, which environmental value does your organization most reflect?

○ Utility: protecting the environment to preserve the direct value gained from the environment through resource extraction and jobs (1)

○ Equity: supporting equitable distribution of impacts among human communities (2)

○ Stewardship: protecting the environment because it is our duty to do so (3)

○ Future Generations: protecting the environment so that future generations can use it and enjoy it (4)

○ Intrinsic: protecting the environment because it has the right to exist, even if it doesn't provide anything to humans directly (5)

○ None of the above (6)

○ I don't know (7)

○ This doesn't apply to my organization (8)

Q2.14 Another measure for worldview explores how humans place themselves in the food web. In your opinion, which of the following graphics best represents the worldview of your organization?

☐ Image:Human (1)

☐ Image:Ecocentric (2)

☐ I don't know (3)

☐ This doesn't apply to my organization (4)

Page Break

Q2.15 In your opinion, who is **most responsible** for the challenges facing marine & coastal environments?

○ The U.S. federal government (1)

○ Conservationists (2)

○ The general public (3)

○ State agencies (4)

○ Extractive industries (5)

○ Academia (6)

○ Coastal communities (7)

○ Other: (8) _____

○ I don't know (10)

Q2.16 In your opinion, who is **most affected** by the challenges facing marine & coastal environments?

○ The U.S. federal government (1)

○ Conservationists (2)

○ The general public (3)

○ State agencies (4)

○ Extractive industries (5)

○ Coastal economies (6)

○ Coastal communities (7)

○ Academia (8)

○ My organization (11)

○ No one is affected (10)

○ Other: (9) _____

○ I don't know (12)

Q2.17 On a scale of 0 to 10, to what extent does your organization consider the following external events when making funding decisions?

	Not considered	Mildly considered	Moderately considered	Strongly Considered
	0 1 2	3 4 5	6 7	8 9 10

Media attention on marine & coastal issues (1)	
Natural disasters (2)	
Political or institutional barriers (3)	
Scientific literature (6)	
Results from my organization's previously allocated funding (14)	
Threats to currently funded projects (15)	
Other funding organizations' decisions and/or input (16)	
Health of the economy (21)	
Governmental funding behavior (22)	
Social movements or uprisings (23)	
Other 1: (7)	
Other 2: (8)	

Page Break

Q2.18 Please explain how "${Q2.17/ChoiceGroup/ChoiceWithHighestValue}" impacted funding decisions.

_____

⤨

Q3.1 Who do you expect will be most affected by your organization's budgetary changes?

○ Conservationists (1)

○ The general public (2)

○ State agencies (3)

○ Extractive industries (4)

○ Coastal economies (5)

○ Coastal communities (6)

○ Academia (7)

○ No one will be affected (8)

○ Other: (9) _____

○ I don't know (10)

Q3.2 In your opinion, do you expect your organization to increase or decrease funding for marine conservation in the future?

○ Increase (1)

○ Stay the same (2)

○ Decrease (3)

○ I'm not sure (4)

Q3.3 In your opinion, do you expect your organization to begin funding for marine conservation in the future?

○ Yes (1)

○ No (2)

○ I'm not sure (3)

Q3.4 Which of the following conditions may influence your organization to **increase** funding opportunities for marine conservation?

☐ Increased governmental support (1)

☐ Heightened public awareness and concern (2)

☐ Stronger existing research (3)

☐ Increased funding capacity of my own organization (4)

☐ More promising proposals and/or funding opportunities (5)

☐ We would not increase funding for any reason (6)

☐ Other: (7) _____

☐ Other: (8) _____

☐ I don't know (9)

☐ None of the above (10)

Q3.5 Which of the following conditions may influence your organization to **reduce** funding opportunities for marine conservation?

☐ Decreased governmental support (1)

☐ Reduced public awareness and concern (2)

☐ Decrease funding capacity of my own organization (3)

☐ More promising proposals and/or funding opportunities in other subject areas (4)

☐ Less urgent need for funds (10)

☐ We would not decrease funding for any reason (5)

☐ Other: (6) _____

☐ Other: (7) _____

☐ I don't know (8)

☐ None of the above (9)

Q3.6 Please provide more information on future funding for marine conservation.

_____

Q3.7 Is there anything else you wish to add about funding for environmental or marine conservation?

_____

Q3.8 Thank you for participating in this study!

Click 'Next' to submit your responses.