The 'nature' of fisheries governance: narratives of environment, politics, and power and their implications for changing seascapes

Noëlle Boucquey[1]

Eckerd College, USA

Abstract

This article responds to recent calls for more engagement from political ecologists in ocean and coastal governance concerns, and employs a controversy over the practice of gill netting in North Carolina as a lens into questions about how narratives of nature and power affect fisheries policymaking processes. The article analyzes commercial and recreational fisher narratives about marine 'nature,' including perceptions of resource health, expressions of blame or responsibility, and storylines about the different roles of fishers and managers in the process of governing fisheries. The article focuses particularly on how fishers perceive the politics of fisheries management and where they believe power lies in negotiations about the 'right' ways to steward and allocate fishery resources. Fisher narratives are then compared to those of fishery regulators themselves. The article asks how the perceptions of different groups about politics and power in fisheries management affect their levels of trust and engagement with each other and with the policymaking process. It offers insights into the complex negotiations over the meaning of terms like 'conservation,' 'endangered,' and 'livelihood,' and analyzes the implications of these narratives for stimulating material changes in the coastal seascape and the lives of fishers.

Key Words: political ecology, governance, fisheries, nature, narrative analysis

Résumé

Cet article répond aux récents appels en faveur d'une plus grande implication des écologistes politiques en ce qui concerne la question de la gestion des océans et des côtes, et utilise une controverse autour de la pratique de la pêche au filet à mailles en Caroline du Nord afin de mieux comprendre comment les discours sur la nature et le pouvoir affectent le processus d'élaboration d'une politique de pêche. L'article analyse des récits de pêcheurs commerciaux et de loisir sur la «nature» marine, y compris les perceptions de la santé des ressources, les expressions de blâme ou de responsabilité et les exposés sur les différents rôles des pêcheurs et des administrateurs dans le processus de gestion de la pêche. L'article s'intéresse plus particulièrement à la manière dont les pêcheurs perçoivent la politique de la gestion de la pêche et où ils estiment que le pouvoir réside en matière de négociation sur la «bonne» façon de gérer et d'allouer les ressources halieutiques. L'on compare ensuite les discours de pêcheurs à ceux des administrateurs de la pêche eux-mêmes. L'article pose la question de savoir comment les perceptions des différents groupes de la politique et du pouvoir en matière de gestion de la pêche affectent leurs niveaux de confiance et d'interaction les uns avec les autres et avec le processus d'élaboration d'une politique. Il offre un aperçu des négociations complexes sur la signification de termes comme la «conservation», «menacé» et «moyens de subsistance» et analyse ces récits et leur implication potentielle pour stimuler des changements concrets dans le paysage marin côtier et dans la vie des pêcheurs.

Mots-clés: écologie politique, administration, la pêche, nature, analyse des exposés

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[1] Dr. Noëlle Boucquey, Assistant Professor of Environmental Studies, Eckerd College, St. Petersburg, FL, USA. Email: boucqun "at" eckerd.edu. I thank the fishers and managers who generously gave me their time and were very patient with my questions. I also thank Dr. Lisa M. Campbell for her close readings and notes on early drafts of this article. I am grateful for two anonymous reviewers and the editor for their comments, which improved the manuscript. All errors remain my own. This research was supported by the National Science Foundation (Award No. 1003158).

Resumen

Este artículo responde a los recientes llamados para que estudiosos de la ecología política tengan un mayor compromiso con temas de gobernanza costera y oceánica. El texto presenta una controversia sobre el uso de redes de enmalle en Carolina del Norte para cuestionar cómo las narrativas sobre naturaleza y poder afectan los procesos de elaboración de políticas pesqueras. El artículo analiza narrativas pesqueras comerciales y de recreación sobre "naturaleza" marina, incluyendo percepciones de la salud de los recursos, reparto de culpas y responsabilidad, y argumentos sobre los diferentes roles de los pescadores y administradores en el proceso de regular la pesca. El artículo se enfoca principalmente en cómo los pescadores perciben lo político en el manejo pesquero y dónde consideran que yace el poder en las negociaciones sobre las formas "correctas" de administrar y asignar recursos pesqueros. Luego, las narrativas de los pescadores son comparadas con las de quienes regulan las pesquerías. El artículo cuestiona cómo las percepciones de diferentes grupos acerca de lo político y el poder en el manejo de la pesca afecta sus niveles de confianza e involucramiento entre ellos, además de con el proceso de elaboración de políticas. Ofrece además observaciones de cuán complejas pueden ser las negociaciones al definir términos como "conservación", "amenazada" y "subsistencia", y se analizan las implicaciones de estas narrativas para estimular cambios materiales en el paisaje costero y las vidas de los pescadores.

Palabras clave: ecología política, gobernanza, pesquerías, naturaleza, análisis de narrativas

1. Introduction

> Nature is treated as something that is both imaginary and material: the product of labor and history, the bedrock for all life, and, yet, at the same time, the elusive and deeply contested subject of intense political debates. (Kosek 2006: 286)

On June 25, 2010, the director of the North Carolina Division of Marine Fisheries (DMF) closed Core Sound—some of the state's prime flounder fishing grounds—to gill net fishing for the remainder of the season. The immediate reason for the closure was straightforward: observers had documented 14 sea turtle interactions[2] in Core Sound's flounder gill net fishery over an approximately one-month period, which the Division determined to be unacceptable given restrictions on such interactions under the federal Endangered Species Act (ESA). The longer-term events leading up to the closure were more complex, and involved a number of political and ecological debates. Back-and-forth editorials and comments multiplied in print and online as DMF, the National Marine Fisheries Service (NMFS), commercial and recreational fishers, and a private sea turtle conservation group haggled—inside and outside of legal proceedings—over the future of gill nets, turtles, and fishers in Core Sound. In the process, the conflict became a symbol around which commercial and recreational fishers made more general arguments about the health of marine resources and the state of fisheries management.

Sea turtles were first listed under the ESA in 1978, and four threatened or endangered species commonly occur in North Carolina waters – the Green (Chelonia Mydas), Kemp's Ridley (Lepidochelys Kempii), Loggerhead (Caretta Caretta) and Hawksbill (Eretmochelys Imbricata) turtles. Commercial fishers had previously clashed with sea turtle regulations in the early 1990s when turtle excluder devices were required on shrimp trawls. For several years there were relatively few sea turtle controversies, but in the summer of 2009 federal observers documented several interactions with sea turtles in the Core Sound gill net fishery and notified the North Carolina DMF that they were concerned about these interactions. The state responded by preparing an interim plan to address sea turtle interactions by closing gill net fisheries for the 2010 season, while they

[2] An 'interaction' is generally understood to include any sort of communication between a sea turtle and a fisher's person, boat, or fishing gear. An interaction can range from seeing a turtle swim across the wake of a boat to a dead turtle caught in a net. Officially, a 'take' under the Endangered Species act "means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct" (16 USC § 1532(19)).

worked on applying for a statewide Incidental Take Permit (ITP)[3] which would allow for a specified number of turtle interactions each year (Daniel and NCDMF 2011). After a February 2010 public meeting where hundreds of commercial fishers protested the plan, however, the North Carolina Marine Fisheries Commission (MFC) voted instead to implement reductions in fishing days, net soak times, and net length instead of instituting a complete closure. In response, the Duke Environmental Law and Policy Clinic filed suit against the state on behalf of the Karen Beasley Sea Turtle Rescue and Rehabilitation Center, who charged that the state was violating the ESA by "authorizing gill nets to operate and to 'take' protected sea turtles in state waters" (Duke Environmental Law and Policy Clinic 2010). In the settlement reached in May 2010, the state agreed to additional observers and other restrictions, which led to Core Sound's closing in June. The state's application for an ITP for all internal waters was signed on September 10, 2013.

During these widely-publicized events, it quickly became clear that for recreational and commercial fishers, the Core Sound closure encompassed much more than a simple state-federal rules negotiation or a product of sea turtle conservation politics. For politically active recreational fishers, the issue became a touchstone for highlighting the bycatch costs of fishing with gill nets and the state's mismanagement of its marine resources. At the outset of the issue, billboards sponsored by a recreational fishing group began appearing on North Carolina highways featuring turtles caught in nets (Figure 1). Another recreational group pushing for game fish designations blogged that the Core Sound closure proved that gill nets were "underwater walls of death" that should be permanently eradicated (Coastal Fisheries Reform Group 2010). Commercial fishers, on the other hand, used the issue to question state (and federal) sea turtle science and argued that sea turtles were becoming entangled in nets because of their increasing abundance. In online comments, commercial fishers accused recreational fishing groups of "masking themselves as 'conservation groups' who want nothing more than to do away with commercial fishing" (Ahab's Journal 2010). Both commercial and recreational fishers used the issue to make particular claims about the status of North Carolina's marine resources (fish, turtles, and habitat) and to critique the state's fishery politics and balance of power.

Figure 1: Highway billboard advocating a ban on gill nets. Source: Matthew Godfrey.

Using the turtle/gill net controversy as a lens into larger resource management questions, in this article I respond to recent calls for more engagement from political ecologists with ocean and coastal governance concerns (Bennett 2019). In doing so, I examine commercial and recreational fisher narratives about marine 'nature' and the process of governing it. I focus particularly on how fishers perceive the politics of fisheries management and where they believe power lies in negotiations about the 'right' ways to steward and allocate

[3] The state already possessed an ITP for a section of the Pamlico Sound known as the Pamlico Sound Gill Net Restricted Area, but not for any other areas.

fishery resources. I then compare these narratives to those of fishery regulators themselves, and ask how the perceptions of different groups about the politics and power in fisheries management affect their levels of trust and engagement with each other and with the policymaking process. This narrative analysis provides insights into the complex negotiations over meanings and their implications for material changes in the coastal seascape and in the lives of fishers. It reveals that management decisions—often the focus of ire from all sides—are only the most visible fragment of a much larger socio-political system wherein competing narratives vie for influence.

2. Theoretical framework: a political-ecological narrative analysis

Verbal narratives are a key means through which broader discourses—which might include symbols, images, and social practices (Norman Fairclough 1992)—are performed. Discourse can broadly be described as "…a form of social action that plays a part in producing the social world—including knowledge, identities, and social relations" (Jørgensen and Phillips 2002: 5). In other words, "there are important connections between saying (informing), doing (action) and being (identity)" (Gee 2010: 2). Conceptualizing the role of discourse as not just reflecting, but rather producing knowledge about the world and influencing interactions between the more-than-human (Whatmore 2006) actors within it, provides common ground for scholars who may employ different methods and emphasize different aspects of discourse in their analyses (e.g., Norman Fairclough, Mulderrig and Wodak 2011; Ingram, Ingram and Lejano 2015; Lees 2004; Potter and Wetherell 2004). Particularly valuable for political ecologists, this emphasis on the production of socio-natural relationships provides a conduit to connect discursive analyses to complementary frameworks that focus more on the material and spatial interconnections of actors, such as actor-network (Callon 1986; Latour 2005), assemblage (Anderson and McFarlane 2011; Grove and Pugh 2015), or social-ecological systems theories (Berkes, Colding and Folke 2008; Clayton and Radcliffe 2018).

Along with Derrida (2001, 2016), the roots of much poststructural discourse analysis can be traced to Foucault (Arribas-Ayllon and Walkerdine 2017; Foucault and Gordon 1980; Foucault, Burchell and Gordon 1991; Legg 2011). Both rejected earlier structuralist claims of universal components in narratives (or indeed any universal theories of culture, history, or politics) (Patterson and Monroe 1998). For Foucault, the notion of discourse is bound up with ideas about knowledge and how people come to believe in the veracity of something. In effect, 'truth' is both produced and maintained through discourses. He argues that "each society has its regime of truth…that is, the type of discourse which it accepts and makes function as true" (Foucault and Gordon 1980: 131). Discourses that constitute 'regimes of truth' are thus inextricably linked to the exercise of power. Indeed, discourse analysis includes attention to the political and material effects of discourses, as well as the effects of the "tactics and strategies" employed to maintain those discourses (Michel Foucault and Gordon 1980: 77). Despite the clear linkages Foucault makes between discourses and the operation of truth and power, his definition of discourse itself is vague. Dryzek (2005: 9) offers a more explicit definition of discourse as:

> …a shared way of apprehending the world. Embedded in language, it enables those who subscribe to it to interpret bits of information and put them together into coherent stories or accounts. Discourses construct meaning and relationships, helping to define common sense and legitimate knowledge.

Discourses can thus be communicated through a variety of means, arguably the most important of which are stories, or narratives.

Though narrative analysis has its own genealogy encompassing contributions from literary theory, political science, anthropology and other disciplines (Patterson and Monroe 1998), practicing narrative analysis is essential for understanding broader discourses (Tannen, Hamilton and Schiffrin 2015). Narratives can be characterized as one 'expressive means' through which "the message of a discourse is communicated" in the company of other means such as images or maps (Adger *et al.* 2001: 685). They can be defined as stories with "a beginning, middle, and end (or premises and conclusions, when cast in the form of an argument)" (Roe 1991: 288). In the context of resource and policy conflicts, the related concept of framing is also used to analyze the

purpose of particular narratives. Frames are employed to draw boundaries around a problem, defining the origins of its existence, delineating information and arguments accepted or rejected as facts, and formulating desired or 'logical' solutions to the problem (Buijs *et al.* 2011; Gray 2004). As discursive constructs, framing narratives offer definitions of key concepts, justifications for particular material and political actions, and roles for key characters within a conflict (Buijs *et al.* 2011; Gray 2003; Leslie-Bole and Perramond 2017). Political ecologists often analyze the construction and effects of narratives as a key window into the operation of discursive power (Svarstad and Benjaminsen 2017; Svarstad, Benjaminsen and Overa 2018). Especially in cases of ontological insecurity, narratives become increasingly politically and materially influential (Veland and Lynch 2017).

By examining how knowledge claims are interwoven with stories about the state of marine resources, a narrative analysis can be useful in revealing the ways that commercial and recreational fishers understand 'nature' and employ it for political purposes. As Cronon (1996: 25) has observed, how we think and talk about nature "is so entangled with our own values and assumptions" that there can be no neutral position from which to speak about nature. Cronon's observation suggests that examining the ways in which people use the word 'nature' (or 'water quality,' 'fish stock,' or 'turtle population') reveals something about the values and assumptions of the people defining the words. Focusing on how and why particular distinctions are made about biophysical entities enables a close examination of "how meaning, materiality, and practice come together in…competitive situations" (Mansfield 2003: 329). Thus investigating how fishers characterize the biophysical systems around them can help to illuminate the relationships between fishers' everyday practices and the meanings they create for particular sociopolitical purposes (Loring 2017).

In the context of North Carolina's sea turtle-induced fishing closures and related conflicts over the effects of gill nets on other marine life (including popular recreational species like red drum, Sciaenops ocellatus, one of the proposed game fishes), fishers offer specific narratives about the ecological condition of fish stocks and fishery habitats. These narratives work to support specific political action (or inaction). In this sense, the 'nature' of fishing problems are continually being produced in different ways for political purposes. As Prudham (2005: 19) describes with respect to forest use debates in Oregon, disagreements over fundamental meanings can be critical:

> …each environmental problem or ecological crisis needs political subjects to construct and confer meaning. And the response to such ecological crises has as much to do with these political subjects and the dynamics of their struggles over meaning…as it does with the underlying or structural character of the problem itself.

This observation may hold particularly true the more that scientific (and lay) uncertainty surrounds the problem. In a marine context, uncertainty is generally even higher than for terrestrial systems, leaving room for competing narratives of environmental health or degradation.

Political ecology research often emphasizes attention to power in order to better understand relationships between social, economic, and environmental problems (e.g., Agrawal 2005; Campbell 2007; Leach and Mearns 1996; Peet and Watts 2004). Some of the earliest political ecology studies pointed to the ways that social and political power were linked to both economic and ecological marginalization (Blaikie and Brookfield 1987; Hecht 1985). In the past two decades, calls for political ecology to increase attention to power in order to "better operationalize research on environmental changes and conflicts" (Paulson, Gezon and Watts 2003: 209) have been heeded, with many more analyses of the complex role of power in mediating human-environment relationships and conflicts (e.g., Ahlborg and Nightingale 2018; Bixler 2013; Büscher 2018; Cavanagh 2018; Neumann 2004). In relation to fisheries, Fabinyi *et al.* (2013: 473) argue that inequalities between resource user groups are "major drivers of fisheries governance outcomes" inseparable from political arguments over management tradeoffs, and others have similarly articulated the material effects of powerful actors and the narratives they employ (Chambers, Helgadóttir and Carothers 2017).

In the context of North Carolina fisheries, what counts as 'power' and to what degree it relates to resource degradation and/or social marginalization is not always clear. Policymaking power is technically shared, with

equal numbers of commercial and recreational representatives on the Marine Fisheries Commission. Recent attempts to circumvent the MFC through legislative game fish proposals might suggest a growth in the power of recreational fishers, though their lack of success thus far calls into question how far that power might reach (Boucquey 2016, 2017). In terms of social and economic power, recreational fishing has more participants and a greater total economic impact, but these are aggregate measures that explain little about the personal standing of individuals or the actions of managers (thus far). This complexity hints at the challenges inherent in operationalizing studies of power in the context of resource conflicts. Further, "power…needs to be studied not only in terms of social and production relations but in relation to local knowledge, culture, and organic life" (Escobar 1999: 10). In other words, the small-scale exercise of power through social and cultural fabrics, and in connection with actual 'natures', can be as important to observe as larger-scale economic and political forces. This article follows individuals' perceptions of how power functions in North Carolina's fishery management process as one avenue toward understanding the reasoning behind fishers' grievances and proposals for change.

Within considerations of power, questions about access to and control over resources have been a central concern of many political ecologists (e.g., Bryant 1992; McCarthy and Thatcher 2019; Neumann 2003; Peluso 1992; Swyngedouw 2004; Williams and Le Billon 2017). These issues are also inherent in the practice of fisheries management and are often inseparable from allocation concerns. As McGoodwin (1990: 163) put it:

> The process of fisheries management involves solving two fundamental problems. The first is conservation: deciding what amount of fish can be harvested on a sustainable basis. The second is allocation: deciding who benefits, in what ways, and to what extent.

Conservation is thus a form of control (Escobar 1998) and allocation decisions grant different groups access to resources and their potential benefits (Ribot and Peluso 2003). Those with immediate control over allocation (e.g., fisheries managers) hold a certain power, while those hoping for access wield their own social and political powers in persuading managers to make decisions in their favor. Of course, user groups and managers can overlap (in North Carolina by design), making distinctions less clear.

Political ecology's emphasis on how material and discursive relationships intertwine among the more-than-human actors in a particular issue is useful in examining the complex, overlapping interactions between user groups, managers, and resources themselves (Braun 2005; Gabriel 2014; Head and Atchison 2009; Lorimer 2010). Part of what is interesting about understanding peoples' 'moral stances' and how they are expressed is that they affect not just "the way that people experience and navigate ecologies", but also the material patterns of such ecologies (Cadieux 2016: 139). Indeed, "different ideologies and imaginaries…have real, material impacts on…landscapes as they play out in decision- and policy-making processes" (Hiner 2016: 178). Once resource access decisions are made, rules and regulations themselves become "political tools that have the effect of allocating profits and determining relations of power" (Wilson and Jentoft in Symes 1999: 66). Thus the rationale for every decision is understandably interrogated by affected resource users.

The controversies engendered by the gill net and other state management decisions highlight the challenges involved in direct and indirect allocation questions. A major source of friction in such instances stems from the different perceptions and definitions of fishery problems by commercial and recreational fishers. As these narratives make their way into public media and the management arena, debating the problem itself—including its social and biophysical components—becomes a central part of decision-making processes. Ebbin (2011: 152) highlights the importance of problem definition as part of the competition for power between groups:

> Defining a problem bounds it and imbues it with meaning. At the same time, a set of preferred solutions is delimited. Stakeholders who develop and advocate a dominant problem definition are empowered to influence agendas, options and outcomes.

Thus the advantage to defining a problem in a way that resonates with those in power is that one's solutions become 'logical fixes' to the identified problem (while often foreclosing competing options), and therefore are more likely to influence the ultimate outcome of an issue.

On a global scale, the power of problem definition (through NGO and 'expert' narratives) has been influential in affecting on-the-ground conservation policies in many different regions (Leach and Mearns 1996; Schroeder 1999). The same is true in smaller-scale domestic fisheries conflicts, where defining fisheries problems has also involved delineating the types of language and data considered legitimate in constructing narratives about fisheries health or management (Mansfield 2004; St. Martin 2001, 2005). As Smith and Jepson (1993: 47) observed in the midst of debates in the early 1990s over inshore netting in Florida, problems were defined in terms of "technoscientific knowledge, bureaucratic standards, and agencies of the state", making it difficult for fishers to insert localized or historical knowledge into the state's decision-making process. The rhetoric in that conflict has continued to echo across the past several decades, cementing the "dramatic reallocation" of Florida's fishery resources from the commercial to sport fishing sectors (Loring 2017: 97). For North Carolina's MFC—as for most resource management agencies—the mandate to "conserve and protect public fishery resources" while "protecting the public's tradition of using coastal waters for fishing" leaves substantial room for defining fishery problems in various ways (Fisheries Moratorium Steering Committee 1996: 15). Following how fisher and manager narratives frame fishery problems can shed light on what types of problem definitions compete for dominance.

3. Methods

Site context

This work is built around a case study of fishing in Carteret County, North Carolina. I focus on a single location in order to "uncover the everyday processes through which groups build their worlds in and through place" (Herbert 2010: 69). Carteret County has a lengthy history of commercial fishing, with whaling industries first thriving in the region during the early 1700s (Reeves and Mitchell 1988). Commercial fishing continues in the county today for blue crabs (Callinectes sapidus), shrimp (including white (Litopenaeus setiferus), pink (Farfantepenaeus duorarum), and brown (Farfantepenaeus aztecus) varieties), southern flounder (Paralichthys lethostigma), striped mullet (Mugil cephalus), and a variety of other species. The area also has a relatively long history of recreational fishing, particularly in the town of Morehead City, where the state's largest recreational fishing tournament—The Big Rock Blue Marlin Tournament—originated in 1956 (CCNT 1956). In addition to marlin (Makaira nigricans), other popular recreational fish include red drum, southern flounder, Spanish mackerel (Scomberomorus maculatus), speckled trout (Cynoscion nebulosus), and bluefish (Pomatomus saltatrix). The mingling of recreational and commercial fishing, lengthy maritime history, and varied marine ecosystems from shallow inshore marsh to the offshore Gulf Stream make the region an ideal location for investigating questions about changing fisheries discourses and their practical implications.

Data

For the narrative analysis in this article, I draw primarily on 74 in-depth, semi-structured interviews (with 60 fishers and 14 managers[4]). Interviews were conducted between May 2010 and June 2011, just after the lawsuit and settlement over sea turtle – gill net interactions. Each interviewee was offered a disposable camera with which to take photos of their fishing activities. This photo-elicitation method (Banks 2001; Pink 2007) was designed to allow fishers to share another dimension of discourse with me. Throughout this phase, I also conducted a less formal ethnography, including participant observation and informal conversations with fishers (Hammersley and Atkinson 2007; Walsh 2004). These activities included three all-day fishing trips and

[4] Managers included 7 of the 9 sitting Marine Fisheries Commission members at the time of interviewing, 3 past commissioners, and 4 people involved in North Carolina fisheries policymaking as Division of Marine Fisheries staff.

dozens of conversations with recreational fishers at boat ramps and with commercial fishers at docks and popular lunch spots.

My analysis of the interviews and the overall story is also informed by data gathered as part of a larger project focused on obtaining a deep understanding of the historical and contemporary role of fisheries discourses in North Carolina. As part of this project, I examined the public record of Marine Fisheries Commission meetings over a six-year period (2006-2011, including audio recordings, meeting minutes, and agendas), reviewed fishery management plans (FMPs), advisory committee meeting minutes and other documents related to fisheries policymaking in North Carolina, and analyzed a stratified random sampling of local newspaper articles on fishing each year between 1920-2010. Table 1 illustrates the data that inform this article. Despite the time that has passed since the data was collected, the framework for fisheries management in the state has remained the same, perpetuating the issues described in this article.

Source	**N**
Interviews (30 commercial fishers, 30 recreational fishers, and 14 managers)	74
Fisher-generated photos (from interviewees)	427
Fisheries Commission meetings for which complete records were reviewed	29
Newspaper articles	551

Table 1: Data collected.

Analysis

The research described here is part of an interpretive tradition (Denzin and Lincoln 2011; Lincoln and Guba 1985) of employing case studies to develop deeper understanding of the relationships between particular contexts, discourses, and processes and to examine theoretical ideas in close connection to real-world practices (Flyvbjerg 2011: 309). It thus reflects the analytical practice in political ecology of attending to "complex and contested normative experiences within case studies" in order to better understand the key discursive and material processes involved in socio-natural change (Cadieux 2016: 138). The photographic, newspaper and policymaking records gathered for the larger project help to triangulate and validate the interview data (Whittemore, Chase and Mandle 2001).

In analyzing the interview data, I explored the ways that fishers and managers give meaning to their activities via specific narratives, and how these ideas influence perceptions (and practices) of fishing values, conflicts, and policymaking. I focused on how and why people make particular claims about fish, fishing spaces, and the role of fishing in socioeconomic and political life. In thinking about the expression of power through discourse, I considered that "sometimes it is a sign of power that actors can get the discourse to which they subscribe accepted by others," though "discourses can themselves embody power in the way they condition the perceptions and values of those subject to them" (Dryzek 2005: 9). I followed these aspects of the power of discourse, especially in analyzing the struggle between commercial and recreational narratives within individual managers and the policymaking process.

All interviews were transcribed and qualitatively coded with the assistance of NVivo qualitative data analysis software. I employed grounded theory (Charmaz 2006; Glaser and Strauss 1967) to identify initial themes in the data, then applied more structured practices of narrative analysis (Fina and Georgakopoulou 2019; Roe 1991, 1994) and theories of political ecology to interrogate the meaning within these themes.

4. The fish, the turtle, and the manager: narratives of environment and governance

Recreational narratives

The recreational story claims that commercial fishers and their gear (specifically gill nets) are damaging fish stocks and sea turtles, and that powerful commercial interests control the MFC. In this narrative, marine resources are the 'victims' of barbaric commercial practices and corrupt management, while recreational fishers are cast as potential heroes or 'emerging voices' battling more powerful interests.

For instance, many recreational fishers held a dim view of fish stock health, intertwined with critiques of the way managers handle stock assessment and rebuilding plans. They blamed managers for ignoring overfishing or preparing inadequate plans. As one fisher explained, "I've only been here 22 years…but I do know that a lot of stocks are down. Southern flounder's been overfished for over 20 years now…the Marine Fisheries Commission seems reluctant to get overfishing under control" (R12). Recreational fishers were suspicious of the MFC's motives and blamed them for allowing overfishing to occur.

In terms of fishing methods, the dominant recreational narrative vilified commercial gill netting. They were adamant that gill nets killed indiscriminately, as one fisher who explained, "the biggest thing is gillnets because that's the most destructive piece of commercial gear in the water. It's a totally indiscriminate killer…it's killing the whole time it's there" (R10). Within this narrative, turtles were a particularly personal issue for some, and they took it upon themselves to 'stand up' for turtles or to save them physically from gill nets. As one fisher recounted, "last year I was out fishing with my brother…and I see a turtle stuck, and I call the DMF, and I try to get permission… Eventually we had to cut the net and let him out…I just did it. The guy was going to drown" (R12). For this fisher, saving the turtle's life took precedence over rules against tampering with commercial nets (and certainly over the condition of the net itself). For him, any turtle bycatch was unacceptable, and efforts to prevent it were therefore legitimized (even if socially inflammatory or legally questionable).

In conjunction with their concerns about fish and turtle bycatch, recreational fishers expressed frustration at managers' unwillingness to ban gill nets, and compared stricter regulations in other states to North Carolina law. As one fisher recounted:

> Up until last year when the lawsuit came about no commercial fishermen had ever reported an interaction with a sea turtle…[but] almost every observer would report at least one interaction. And so, it was a dishonest thing going on… Of course now the state is trying to get a statewide permit so that in the flounder fishery you can kill turtles within the whole state… (R15).

In this fisher's view, commercial fishers brought the gill net closure upon themselves by failing to report sea turtle interactions before the federal government's observers became involved. Even worse, the state's solution—to seek an Incidental Take Permit instead of drastically changing gill net rules—was from his perspective both literally sacrificing nature (in the form of turtles) as well as forsaking a management duty (to protect marine resources).

In highlighting the essential problems with fisheries management, the recreational narrative focuses not directly on science but rather on management's failure to 'put the resource first.' Accusations of failure were often linked to the belief that managers favored commercial interests even when they were detrimental to fish populations. As one fisher put it:

> Carteret County is…steeped in commercial fishing beliefs and traditions and that's a fantastic way to operate a museum. It's a terrible way to manage a fishery resource…you can't manage a resource with your heart. You've got to manage it with hard scientific data…(R14).

The commercial industry was consistently portrayed as having greater political and financial clout. Another fisher put his assessment of power in terms of the gill net conflict: "I think the commercial guys have much

more political clout that the recreational guys do. If they had equal or less, we wouldn't have gill nets in here, okay?" (R22).

Interestingly, about a third of recreational fishers belied the dominant narrative of fisheries decline and overfishing, at least with respect to particular species. The species they felt were doing well tended to be popular sport fish such as dolphin (mahi mahi), red drum, or speckled trout. Despite characterizing overall stocks as down, for example, one fisher explained that red drum has "made a comeback now that is really unreal. And that's one reason why we get a lot of drum tournaments up here is because the fish are so abundant now" (R15). Though they might still criticize commercial fishing practices or lament past abundance, these fishers argued that at least some species were currently healthy.

Commercial narratives

The dominant commercial story is outlined very differently. It dismisses the idea of overfishing and claims that when stocks dip in population it is due to natural causes or to water quality pollution. This narrative insists that sea turtles in particular are abundant and that recreational interests are using the animals to manipulate political and public opinions in a campaign to eliminate gill netting. This narrative cast fisheries managers as captured by recreational interests and intent on putting commercial fishers 'out of business.' In the commercial narrative, there were no potential heroes, only victims (fishers themselves) and villains (organized recreational interests and fisheries managers).

The majority of commercial fishers acknowledged some fish stocks were struggling, and attributed this largely to weather events, natural predation, and water quality. As one fisher explained: "I've seen the grass beds just disappear…there's more runoff, pollution, and people putting fertilizer in their yards…the bottoms are different because of that" (C16). Many argued commercial fishers were being unfairly blamed for fish stock problems that stemmed from water quality issues: "There [are] too many people. Too many detergents. Too much fertilizer. Too much pesticide…Who do you blame? You got a multi-million dollar farm and you're catching $300 crabs. Your voice is not heard very loud" (C30).

Though sometimes accepting fish population declines in the context of natural cycles and water quality concerns, commercial fishers adamantly disputed sea turtles' endangered status. They often drew on their personal experience to demonstrate how plentiful turtles were in the region:

> When we go out shrimping in the channel in the evening, you can look around you and from 7:30 until dark, you can see 15 to 20 turtles all around popping their heads up…I think there needs to be a study done. I don't think it's an endangered species anymore. There's no way there's a chance of them going extinct (C17).

Another fisher echoed these thoughts, explaining that when something was on the endangered species list, "I thought that would mean that you never see them- something that's rare." Instead, "you could be right there in the sound—there's one that pops his head up, there's another that pops his head up—well they can't be too damn extinct" (C8).

Commercial fishers argued further that sea turtles were being used as political tools to force fishers and their nets out of the water (and out of business). They generally blamed recreational fishing groups (e.g., the CCA) and environmental groups (such as the Karen Beasley Sea Turtle Rescue and Rehabilitation Center) for using turtles to push for gill net bans. As one fisher argued, "They're using turtles as a scapegoat. It ain't really about turtles. They're using it because they're an endangered species. So the CCA can come in and they can push the marine fisheries" in an effort to eliminate gill nets (C15). In arguing against these types of tactics, fishers defended their use of gill nets. As one explained, if you have a net with two-inch mesh, "everything under two inches goes through it, goes on about it's business…and you'll catch that size fish- mullet, trout, croaker, whatever…Yeah, it kills fish, it'll catch fish. But it's not a- it's not an indiscriminate killer" (C4). By labeling turtle protection campaigns as propaganda and defending gill nets as selective fishing gear, commercial fishers built on their argument that sea turtles were plentiful in local waters and that efforts to ban gill nets stemmed from political motives.

Commercial fishers were deeply skeptical of sea turtle science. Several had participated in turtle tagging studies and felt that scientists 'should know better' about how many turtles there are. As one fisher explained, "I've known them [turtle people] from the very beginning, they used to go out with me, and I took them for years and years" but when he asked them about how many turtles they thought were in the local sounds, the answer was "well, it's inconclusive" (C4). For this fisher, it seemed to indicate that turtle scientists were motivated by grant money. As he explained, "I would have said the same thing…if they were paying me X amount of dollars to study turtles, somebody asked me about turtles I'd say, 'man, they're endangered. Them damn fishermen are catching them up. We got to do something. We need to study them.' I'd get my money" (C4). This fisher was particularly bitter about his role in the scientific process, but others were similarly skeptical about the purpose and outcomes of sea turtle research. In general, sea turtle science was a complex issue for commercial fishers. While some wanted studies done to validate their sense that turtles were abundant (and because they believed the state was implementing regulations based on old or incorrect information), others who had participated in turtle science felt discouraged when answers were not forthcoming or did not agree with their views.

In characterizing fisheries management, commercial fishers argued that they were unable to compete in the political process and that managers favored recreational interests. They juxtaposed Raleigh or 'upstate' politics with the 'reality' along the coast. As one fisher explained, "the people that's dealing with [fishery regulations] aren't from the area and don't have a clue what we're talking about. And they're listening to the high end politics that come down here with a rod and reel and go recreational fishing" (C3). Another fisher put this sentiment in concrete terms in his description of the proceedings at an MFC meeting:

> Everybody was given three minutes to say your piece- he [the recreational fisher] was given seven and a half…when we got up to speak, the people that were on the committee, they made sure we only had three minutes. But they let him talk for seven and a half…because they wanted to hear his opinion (C5).

In supplying evidence of literal 'voice time' differences, this fisher argued that recreational input was more important to the MFC than commercial input. While not always so literal, the commercial narrative stressed that recreational fishers exerted more political power.

Managers: incorporating and responding to commercial and recreational narratives

The term 'managers' here encompasses both MFC commissioners—those making policy and regulatory decisions—as well as DMF staff tasked with serving the MFC in terms of field data collection, drafting documents, and giving presentations. It should be noted that staff are more constrained in the process by their job descriptions, while commissioners make final decisions. However, staff are responsible for drafting plans and alternatives, and as such have a key ontological role in establishing the initial grounds upon which discussions are based. Commissioners, who shift every few years, also rely on the staff's deep institutional knowledge of past practices and decisions.

In general, manager narratives included more 'gray area' than fisher narratives– there were fewer characters clearly painted as villains or victims, and statements about the behavior of different types of fishers were less stringent. Nevertheless, several aspects of commercial and recreational fisher narratives were incorporated into managers' own perspectives. Like fishers, managers held mixed views about the reliability of fisheries science and to what extent it should determine management decisions. A common sentiment from managers affiliated with either side was that science could be helpful, but the judgment of the Commission was important too: "If the DMF is using the best available science, and the best available data, then we should use it- what they give us." At the same time, "there's room for us to make a judgment call when we think that, golly, these [fishers] are out there on the water every day, they're seeing this, that maybe- maybe the DMF missed a little something" (M10).

In gauging their own power, managers tended to side with the opinions of the commercial or recreational groups they represented. While unaffiliated managers in this case portrayed the MFC as 'balanced' in power (or

swinging back and forth), with just two exceptions[5] commercial and recreational representatives both argued that the MFC was currently biased in favor of the opposite group. As this pattern demonstrates, a key element of fisher narratives is very much a part of manager narratives as well. The unaffiliated viewpoint is particularly interesting, however, as it reveals how clashing commercial and recreational narratives are essentially part of the design of the MFC. As one of the at-large commissioners explained:

> You know, it's a good setup…we have conflicts of interest. Every person except maybe the at-large seats have conflicts of interest…And we're placed on the commission because we have conflicts of interest, because we have that reflection on the industry…I think that yeah, the power works…in a weird way it probably works (M4).

Managers also responded to or refuted elements of the fisher narratives. In contrast to fisher narratives that accused managers of being beholden to state politicians, for instance, managers maintained that their personal decisions operated independently from state influence. As one manager maintained, "the governor has never once picked up the phone and said I want you to do this or do that as far as fisheries go. She appoints people, she trusts them to do a proper job…" (M6).

Managers similarly refuted accusations that fisher input was unimportant in the governance process. Instead, almost all managers voiced strong support for public involvement in management. Where they differed (and began again to reflect fisher narratives) was in their assessments about what type of public input constituted relevant or irrelevant information in the context of management. Some managers accepted cultural or personal information from fishers as legitimate, while others were more dismissive of information not directly related to the biology of fish. Managers of all backgrounds, however, depicted themselves as trying to protect both resources and livelihoods. Often, this challenge was defined as an attempt to allocate resources fairly, although notions of what was 'fair' differed between managers. As one manager explained, it was a priority to maintain livelihoods, but only after fishery resources were cared for:

> I'd like to be more proactive and conservative and try to do as much as we can to avoid the waste, and avoid interactions with endangered species, and try to avoid a lot of those types of angst and problems. But we can have a shrimp fishery, we can have a crab fishery, we can have a finfish fishery…We can have those things and have a viable recreational fishery as well. We just have to all be willing to make the necessary sacrifices to get there (M13).

This manager felt that 'fair' allocations of fishery resources could be achieved, but not before requiring some socioeconomic sacrifices. Other managers viewed allocation tasks differently. As a former at-large representative explained:

> We were mandated to maintain a viable commercial and recreational fishery. And so to me, it's like having two children, and when one child is sick you need to devote some attention to that sick child. And instead what we hear from the recreational fishermen is sort of this false equivalency. You know, like if you're going do that for the commercial fishermen you have to do the same thing for the recreational fishermen to be fair. Well I'm sorry, but the deck is already so stacked against the commercial fishermen…last time I checked, the recreational fishery was pretty darn healthy (M12).

[5] Two former commercial commissioners also argued that the balance of power on the MFC seemed to swing back and forth between favoring commercial and recreational fishing.

Overall, managers acknowledged the many ecological and socioeconomic considerations that made fisheries management in North Carolina challenging, but they chose different aspects of the MFC's mandate to focus on in their own decision-making.

Public input played a complex role in managers' decision-making practices. As a former commissioner explained, he believed that most approached public comments openly:

> I think public comment weighs a lot. I think mostly [commissioners] are honorable people, and I believe that they will try to listen…I mean they might think they know what the answer is, but…the complexities are such that it's very hard to have your mind made up, you know, it really is (M3).

Despite emphasizing the deliberative nature of the management process, however, another commissioner maintained that public comments:

> …can have effect up until the very end, but it depends on your comment. You know, your comment that 'I don't think this is right,' and '…this is gonna hurt me, and it's gonna hurt my community,' isn't going to have much sway. And if that's what you're relying on…to affect the process, then it's not going to affect it…because the process is designed to either rebuild or maintain sustainable stocks (M8).

For this commissioner (a recreational representative), therefore, only some comments were considered legitimate inputs to the policymaking process– those that pertained directly to the fish stocks rather than to any socioeconomic concerns of fishers. A commercial representative, in contrast, advocated for increased interactions between MFC members and the public. Recalling a large meeting where people protested potential gill net closures, he explained:

> That was an outcry. Did we do anything? Nothing…to me, when somebody takes time to come up to you, you know- even during the meeting…That can help us. We listen, we don't know- we don't have all the answers up there. You know… you're only as good as the information you get. You see what I'm saying? We should be more open to them (M9).

Managers also highlighted the challenges involved in trying to please different groups. They expressed the feeling that being disliked was 'part of the job' and could even indicate a job well done:

> If I were to vote today, and not vote the way that the commercial fishermen wanted to vote, then I am an SOB. And if, being a recreational representative, I vote the way that the commercial fishermen want it to be, I'm a double no-good SOB. And, you know, I just think you ought to vote your conscience…you're just not going to make everybody happy (M10).

This manager felt resigned to relying on his internal barometer of what was 'right' and inevitably disappointing one group. Others also expressed a fatalistic attitude toward public opinion. For many commissioners, public criticism was accepted as par for the course. As one recalled:

> When I chose to be on the MFC, I had to make a decision that I was going to be fully invested in all the things that it took, from the ridiculous amounts of time that it takes to the extraordinary insults that you receive to- everything that kind of comes with that…So I think if you're doing a good job, you manage to make both sides angry (M4).

In contrast, there were almost no mentions of 'productive' public meetings or management decisions that left both groups satisfied, and managers expressed a number of frustrations with the process of fisheries governance. A key frustration that several managers alluded to was feeling that most of their time was occupied by small, short-term decisions as opposed to a more holistic approach. This frustration was felt by managers sympathetic to both recreational and commercial groups, but in different ways. As one manager who shared a recreational narrative explained, "we're in constant crisis management mode" which in his view could be attributed to "a sense amongst the fishing community and amongst the commission that short-term economic impacts are more critical than long term sustainable yield" (M13). A former commissioner who shared a commercial narrative felt equally frustrated by the 'crisis management' mindset, in his case because he felt it offered no positive solutions for fishers. As he explained, when he was on the MFC:

> I was just like grasping for straws for any sort of off-the-wall positive things like mediation and stuff because it's very depressing. I thought, am I here just to sort of vote yes and no on mesh size? Surely we can step back and do something a little bit greater than just putting people out of business regulation by regulation (M12).

Whether managers were more concerned about fishery resources or more concerned about fishers, all were dissatisfied with a piecemeal approach to fisheries management.

Despite these complaints, managers also defended the process and offered ideas for how to improve it. As one former at-large representative proposed:

> I would like to see the MFC look at the regulations as a whole, instead of species by species, issue by issue- look at it as a whole and ask, what can we do to restore flexibility for harvesters? Because North Carolina fishermen have survived off of their flexibility. Changing gear, hopping here, hopping there…what can be done to help fishermen be flexible? (M12).

To this commissioner, the MFC needed an injection of creative innovation with respect to commercial livelihoods. For him and others, fishers in the state had attributes—in this case flexibility—that were not productively used by the MFC because of its lack of creativity and emphasis on rule-based decisions.

5. Discussion and conclusions

To return to the turtle conflict with which this article opened, it is useful to consider why the issue sparked such heated rhetoric between different types of fishers and between fishers and policymakers. Despite the fact that the state's actions in the matter were largely dictated by federal policy and by the legal settlement with the Karen Beasley Center, recreational and commercial fishers each used turtles to make larger arguments about the ecological health of marine resources, the underlying motives of the opposite user group, and the ineptitude of state management. Marine turtles elicit strong emotions (Campbell 2007; Cornwell and Campbell 2012), and in environments with much scientific and ontological uncertainty, memorable narrative threads can have powerful effects in shaping broader discourse and practice (Svarstad and Benjaminsen 2017; Veland and Lynch 2017). The turtle issue likely acted as a catalyst for conflict because of its combination of conservation and livelihood implications; however, it is clear that the underlying narratives of commercial and recreational fishers were (and are) contributing to a sociopolitical situation primed for conflict. A management outlook that has accepted the inevitability of conflict exacerbates these clashing narratives.

In thinking about the mechanisms through which such volatile situations are produced, it is helpful to apply Kosek's (2006: 22) interpretation of cultural politics, which "treats culture as an intense site of political struggle" that requires attention to how politics and material practices create both 'artifacts' and 'effects.' Applied to the North Carolina coast, the cultural politics of nature expressed in the narratives of fishers form part of a larger (moral-economic) clash of worldviews that work to materially influence fisheries policymaking. In this case, key 'artifacts' being produced through fisher narratives are the social and economic values of fish and

turtles, and the character of the seascape (e.g., with nets or without, with different configurations of boats and people plying its waters). The 'effects' of these narratives are constantly in flux but include a culture of friction and suspicion, constant political posturing, and changing fishery access regimes.

Cultural and political constructions of nature are central to fisher narratives and to the production of these larger artifacts and effects. In the ways that fishers describe the health of fish stocks and turtles, both their personal identities and political commitments are reinforced. Indeed, "new environmental subject positions emerge as a result of involvement in struggles over resources" (Agrawal 2005: 3). In this case, commercial and recreational fishers fortify the social and material boundaries between them in the ways they construct the health or fragility of marine resources and in the conclusions they draw for management. In assessing fish and turtle populations as threatened and laying primary blame on commercial fishing, recreational fishers distance themselves both ecologically and socially from commercial fishing. They are thus able to identify themselves as conservationists *while* pushing for expanded access to fishery resources (e.g., as in the game fish debate). This double move highlights the power of narrative frames to define what is logical and true for a particular group (Dryzek 2005). These narratives are also echoed in physical transformations of the coastline, where increasing numbers of recreational fishers live in newly-constructed housing developments, which have contributed to rising property costs and the flight of historic commercial fishing families inland (Boucquey 2017; Boucquey *et al.* 2012). These changes extend to the seascape as well, where new developments have shifted the character of local harbors and reduced public water access (Jamouneau and Hibbs 2006).

In contrast, by disputing notions that turtle populations are threatened and by laying blame for fish stock problems on out-of-their-control factors, commercial fishers maintain an identity as misunderstood victims of special interest groups and government bureaucracy. Such an identity allows commercial fishers to largely remove themselves from ecological concerns while depicting regulations as the primary cause of their declining socioeconomic status (rather than, for instance, the collapse of several important fish stocks, the flight of fish processing overseas and competition from foreign imports, or shifting land use practices in the region) (Campbell and Meletis 2011; Crosson 2007; Rich 1991, 2006). Thus the ways that both commercial and recreational fisher narratives construct marine resources serve largely to polarize their political positions. Given that nature "is an effect of power", these narrative formulations can be understood as another component in negotiations for power—and the access to fish it implies—between these groups (Braun and Wainwright in Castree and Braun 2001: 41). Indeed, arguments over the ecology and sustainability of fish populations are often as much about defining access to those populations as about the science itself (Loring 2017).

In constructing their narratives, commercial and recreational fishers each define problems with environment and governance differently, and use diverse sets of experiences, evidence and argumentation to frame such problems. As narrative policy analyses have shown, how problems are defined and framed is a central factor in determining whose narratives become dominant in the public sphere (Buijs *et al.* 2011; Leach and Mearns 1996; Roe 1991; Svarstad and Benjaminsen 2017). Further, those stakeholders who develop dominant narratives are more often empowered to influence policy processes (Ebbin 2011). Following the imaginaries depicted in competing narratives can help illuminate how meanings and materialities are co-produced (Cadieux 2016; Hiner 2016; Mansfield 2003). In this case, the recreational narrative frames both environmental and governance problems as people failing to care about fishery resources- commercial fishers who overfish and managers who shirk their duty to protect fish through regulation. This narrative thus leads to what appear to be clear and simple solutions: stop overfishing; tighten commercial regulations; 'put the resource first.' Concrete actions like removing gill nets stem quickly from the way that the recreational narrative is framed.

In the commercial narrative, on the other hand, problems are defined more diffusely– ecological problems are the result of a number of factors, most of which are beyond the purview of fisheries managers. Governance problems are defined as managers either not caring about fishers or actively trying to put them out of business. With environmental problems defined as complex and governance problems defined fatalistically, the commercial narrative offers no easy solutions or positive actions that might be easily taken by policymakers. While the narratives continue to vie for dominance in the public sphere, because of these differences in framing, the recreational narrative likely has better long-term prospects for influencing fisheries governance.

While fishers work to promote policies that align with their identities and material interests, managers embodying a mix of these same characteristics are charged with making decisions that affect both the material and sociopolitical realities of fishing. With only a general mandate to support both types of fishing *and* the health of resources, fisheries managers struggle in choosing between social values. With these conflicting charges, each felt little choice but to filter their decisions through a personal, experiential lens through which they generally did their best to evaluate the social, ecological, and political trade-offs of their decisions. While managers praised the system as an improvement over past practices, they also critiqued it as fragmented, drawn-out and frequently alienating.

These experiences support the assessment that "the bureaucratic approach to fisheries management…disregards the extent to which fisheries practices are embedded in human communities" and while conventional fisheries management has provided a process for managers, "it has also served to limit our imagination about the potential forms that management institutions can take" (Wilson and Jentoft in Symes 1999: 63, 68). Indeed, technocratic resource management processes often default to narrow decision-making tasks when they encounter challenging "grounded local political realities" (Fabinyi, Foale and Macintyre 2013: 3). In expressing high levels of ambivalence about the success of fisheries governance in North Carolina, managers in this case may be (consciously or unconsciously) pushing against these limits of conventional management structures.

It is worth noting that while the structure of fisheries governance has not changed since the data for this research was gathered, a few intriguing developments have begun that warrant further investigation. For example, while the outlook for commercial fishing appeared extremely bleak in the post-turtle lawsuit period, community-supported fishery ventures (Campbell *et al.* 2014; Stoll, Dubik and Campbell 2015) and new aquaculture operations have begun to shift ideas about what is possible for commercial fishing in the region. At the same time, three attempts by the recreational fishing lobby to reserve particular species for recreational use have been rejected (Luebke and Justice 2009; McCormick *et al.* 2011; Murry *et al.* 2013), and predictions of fishery decline for these species has not been borne out (NCDMF 2019). Further investigation might usefully explore how these shifting social conditions are being navigated by fisheries managers and how broader climate change issues might affect both the social and natural land- and seascapes in this low-lying region.

Overall, this research indicates that 'governing nature' is not solely within the purview of managers. Instead, the decisions made by managers are simply one of the more concrete aspects of a much larger socio-political system wherein competing narratives vie for influence. These narratives are critical to understand given their ability to ultimately affect the material conditions of the fisheries and the socioeconomic lives of fishers.

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