

Controversy over beach access restrictions at an urban coastal seal rookery: Exploring the drivers of conflict escalation and endurance at Children's Pool Beach in La Jolla, CA

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ARTICLE INFO

Keywords:

Human-wildlife conflict
Pacific harbor seals
Perceptions of wildlife
Environmental values
Marine mammal management
Coastal management

ABSTRACT

Coastal urbanization and the recovery of many marine species has caused human interactions with marine wildlife to become more common, sometimes resulting in conflict. In La Jolla, CA, the increasing presence of Pacific harbor seals at Children's Pool Beach (CPB) resulted in a 25 year conflict over appropriate beach use. Drawing on archival analysis, stakeholder interviews, and beach-goer surveys, we present a history of the conflict and explore the drivers that have enabled the conflict's escalation and endurance. Many factors influence people's polarized views about seals at CPB, including personal values and sense of identity, differing perceptions of what is "natural" at CPB, the threat of change and loss of beach access, and underlying inter-personal conflict. Politicization and inaction during the early stages of the conflict also precluded conflict resolution and contributed the conflict's escalation. While overt conflict has decreased in recent years, polarized views about seals at CPB and legal challenges continue. In order to prevent conflict escalation and persistence, it is important that coastal managers work to address conflict over marine wildlife early and decisively. We present suggestions regarding minimally controversial management measures that could be undertaken early in a conflict, and suggest that managers prioritize commonly held values to facilitate stakeholder dialogue. While it may not be possible to generate solutions that appeal to all stakeholders, understanding the values and cultural frameworks driving conflict is an important first step toward understanding and generating workable solutions to conflict over wildlife.

1. Introduction

As coastal areas urbanize, and conservation measures such as the Marine Mammal Protection Act (MMPA) (1972) and Endangered Species Act (1973) enable the recovery of previously threatened marine and coastal species, human interactions with marine wildlife are becoming increasingly common [1–4]. Much of the research surrounding human-wildlife interactions focusses on mitigating conflict, but evidence suggests that long term conflict resolution is rare [1,5]. Indeed, it seems that there is a social complexity in conflict relating to wildlife, due in part to differing stakeholder values and frames of reference that shape perceptions of wildlife and their management, which can intensify conflict and impede conflict resolution [1,6,7].

The long history of dispute over Pacific harbor seals' use of Children's Pool Beach (CPB) in La Jolla, CA, exemplifies this type of conflict (Fig. 1). As harbor seal numbers grew under federal protections, seals

began to use CPB as a haul out site and rookery (Fig. 2), leading to conflict over the appropriate use of the beach. Advocates for seal protection wanted to limit human use to protect nursing seals and their young, arguing that the beach provided a rare opportunity for people to view and experience marine wildlife, from a distance, in an urban setting. Others maintained that the beach's original designation as a place for human recreation should continue, and human access should not be restricted. The conflict over access to this beach quickly escalated; six lawsuits and five appeals relating to beach use were filed between 2004 and 2019, and decisions regarding appropriate use of the beach have continued to be a regular agenda item at California Coastal Commission (CCC) hearings.

Despite the persistence of this conflict, there has been little attention to the underlying values and beliefs that have driven it. Here, we explore the enduring conflict over harbor seal use of CPB, identifying drivers of conflict that enabled its escalation and persistence. We draw on archival

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<https://doi.org/10.1016/j.marpol.2021.104659>

Received 18 July 2020; Received in revised form 29 May 2021; Accepted 21 June 2021

Available online 5 July 2021

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analysis, stakeholder interviews, and beach-goer surveys to identify personal and environmental values and perceptions that shape the polarized views on each side of the conflict, as well as other factors that have contributed to the conflict’s endurance. We conclude with broader considerations regarding how the conflict at CPB can inform efforts to prevent and mitigate future conflict over human interactions with marine species.

2. Material and methods

In order to understand the values and perceptions driving this long-standing conflict, we employed a mixed methods approach to document the history of the conflict and the perceptions of key stakeholders, including advocates and managers, as well the broader public visiting CPB. We explored the following questions: (1) How has human use and seal use of this area changed over time? (2) What beliefs, values, or other factors are associated with negative and positive perceptions of seals? (3) What are the stated and underlying reasons for conflict over seals’ use of CPB?

To understand the historical context of the conflict, as well as the arguments, values, and perceptions associated with the conflict over time, we reviewed archival records of San Diego City Council meetings. Relevant meetings were identified using the query terms: “seals”, “children’s pool”, and “La Jolla”, and meeting minutes were downloaded for analysis. Available video files of relevant meetings were also reviewed to record and summarize testimony regarding seal use of CPB. For all public testimony, we recorded the date, name of testifier, organizational association, how the testifier self-identified (e.g. La Jolla native, diver, mother), and whether they were testifying for seal protection or human access. We also reviewed government reports and local newspaper articles and opinion pieces to provide the historical context for harbor seal population changes, management issues and decision-making, and social conflict relating to beach use at CPB.

In order to better understand the stated reasons behind the 25 year conflict, as well as the values and beliefs of the stakeholders involved, semi-structured interviews were conducted with advocates who testified repeatedly, as well as with representatives from public agencies involved in seal and/or coastal management in the region. Interview questions aimed to understand the respondents’ involvement in the conflict, their perception of drivers behind the conflict, and their values relating to the conflict. Community advocates were recruited via a solicitation published January 9, 2019 as an op-ed in a local newspaper, the *La Jolla Light*, which was selected because it frequently publishes citizen-authored opinion pieces relating to the CPB conflict. From the newspaper solicitation and further snowball sampling, a total of nine interviews were conducted with beach access advocates, and seven interviews were conducted with seal advocates. Ten public agency representatives were also interviewed after being recruited through public contact information and snowball sampling. All interviews were conducted between January and May 2019 and ranged from 30 to 70 min. Interviews were recorded and transcribed prior to their input and analysis using NVivo software. Transcribed interviews were reviewed and coded using an iterative and inductive approach [9], identifying themes relating to stakeholder values and perceptions and factors influencing conflict. Preliminary thematic groupings of codes were generated and then condensed to reduce redundancy and focus on themes most relevant to the research objectives.

To assess the perceptions of the broader public visiting CPB, 350 individuals were surveyed at CPB between December 15th, 2018 - April 27th, 2019. This period was chosen because it fell within the harbor seal pupping season, when CBP is closed to human access from December 15th-May 15th. Survey respondents were asked primarily multiple-choice and Likert scale questions, with an opportunity to provide open-ended responses to expand if desired. The survey contained questions relating to people’s perceptions of seals, the acceptability of different beach management strategies, and respondent demographics.

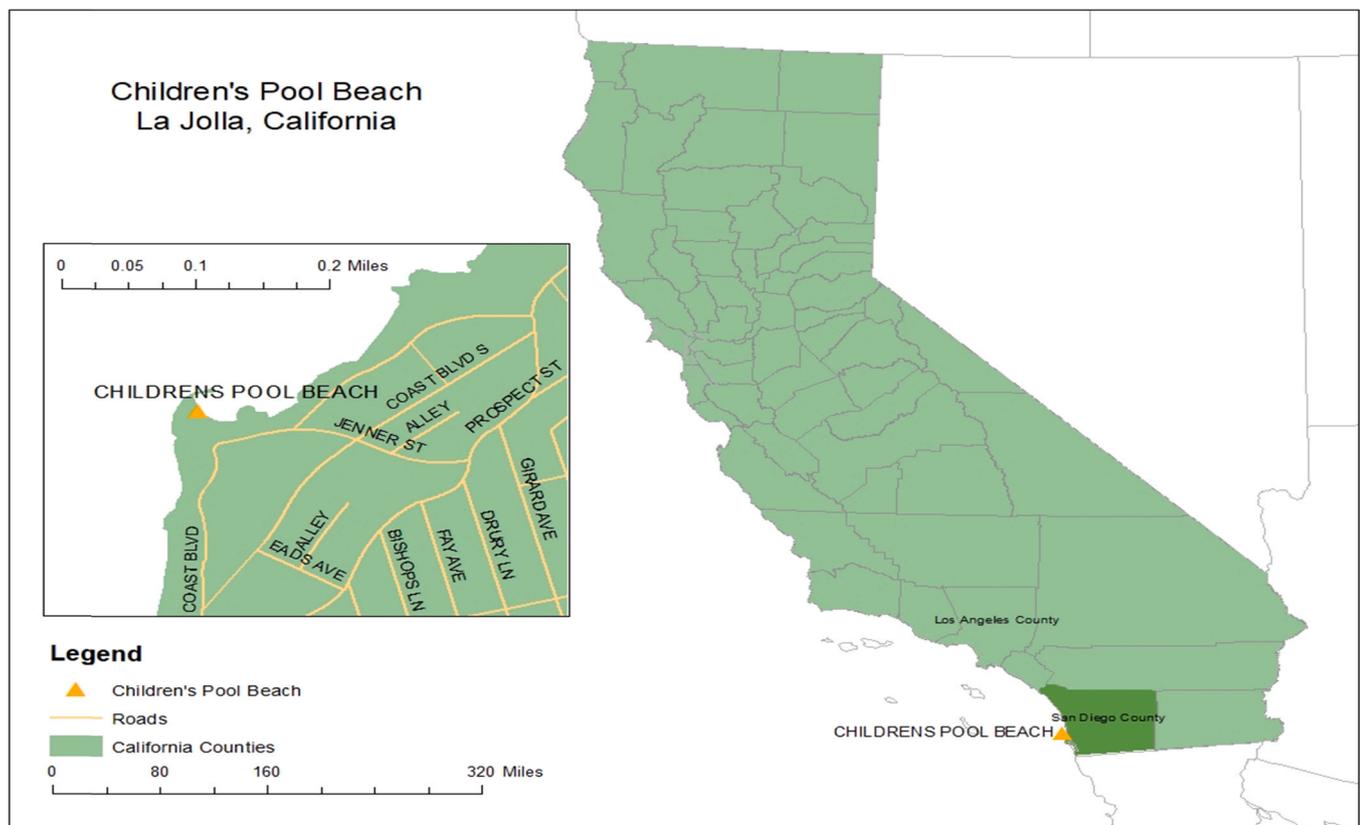


Fig. 1. Map of study site at Children’s Pool Beach located in La Jolla in San Diego County, California.

Summary statistics were generated using excel, and chi-squared and spearman's rank correlation tests were performed to determine correlations between variables.

3. Theory

Human-wildlife conflict has traditionally been conceptualized as a situation where wildlife impacts humans negatively, but there is a growing consensus that conflicting interactions between people about wildlife can be as important as people's interactions with wildlife in driving conflict [8]. In coastal regions, conflict over human-wildlife interactions often centers around shared use of natural resources and natural spaces, such as beaches. Scholars have generated frameworks to better understand these conflicts, as well as the underlying values, beliefs, and perceptions that drive conflict. One such framework, the Conservation Conflict Transformation framework by Madden and McQuinn [10], aims to shift the view of conflict as a destructive social force to one that can catalyze positive change and foster growth in a society. The framework breaks conflict into three distinct levels: "dispute", "underlying conflict" and "identity-based conflict" (Fig. 3) [11]. The "dispute" level of conflict is the most obvious manifestation of a conflict or a basic disagreement. Although some conflict can exist only at the dispute level, conflict often manifests as a result of deeper "underlying conflict" occurring from a history of unresolved disputes. This deeper conflict exists with more significance than the actual stated cause of the dispute. The deepest level of conflict is "identity-based conflict," also known as "deep-rooted conflict." This type of conflict involves values, beliefs, or social-psychological needs that are paramount to the identity of one or more of those involved in the conflict. When conflict

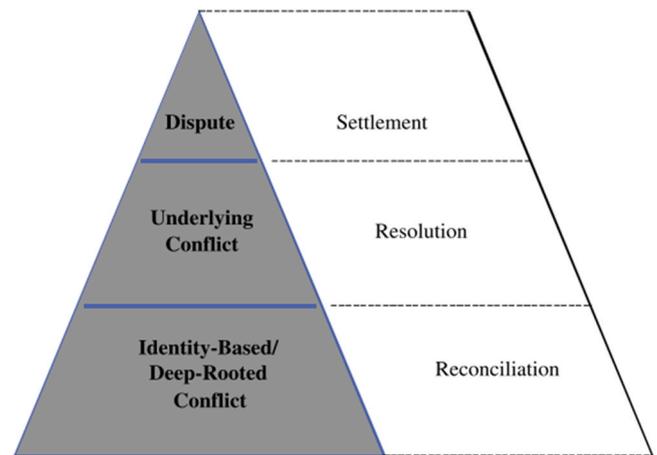


Fig. 3. The three levels (left side) that exist in a conflict and the process used to address each level (right side). The Levels of Conflict Model was created by Madden and McQuinn (2014) as adapted from the Canadian Institute for Conflict Resolution (2000) [10,11].

exists at this level, stakeholders will go to extreme measures to "win" [10]. Identifying the level at which conflict exists, and the true drivers of conflict, whether they be issues related to the dispute itself, a history of unresolved disputes, or deeper factors related to the individuals' personal values and identity, can provide greater insight into the social processes contributing to conflict and the corresponding actions necessary to address conflict at each level.



Fig. 2. Children's Pool Beach (photo taken in December 2018 at the beginning of the harbor seal pupping season closure).

Deeper levels of conflict over wildlife often stem from differing stakeholder values and perceptions of wildlife and its management [1, 2]. As noted by Fulton and Manfredi, of the limited research exploring human values, values specifically regarding wildlife are not explicitly recognized [12], although Stern found that altruistic, biospheric, and egoistic value orientations were associated (positively or negatively) with environmental belief and actions [13]. People's broader beliefs, values, and perceptions are a critical, but often under-recognized, component of the complex social factors that drive conflict involving wildlife [14]. The way people understand wildlife is heavily influenced by the frames of reference they use to understand what these animals mean to them and to society, and there is a need for processes that can help resource managers understand and address these conflicts that arise from differing values associated with wildlife [1,4,7,10,14–16].

4. Results and discussion

Here we present findings based on our review of public testimony, written documents, stakeholder interviews, and beach goer surveys to better understand factors contributing to the enduring conflict over the appropriate use of CPB. We organize the results and discussion of our study by thematic areas that emerged from our research: the history of the conflict, stated values driving conflict, the question of what is “natural” at CPB, the threat of change and loss of beach access, underlying conflict, politicization and inaction during the early stages of the conflict, and management considerations. Within each thematic area, we present our results and draw upon the theoretical insights discussed above to understand how values, environmental beliefs and perceptions, and other factors contributed to the enduring conflict.

4.1. History of conflict

In order to understand the origins and drivers of this long-standing conflict, it is important to understand the history of CPB. CPB was created in 1931 when a key community figure and philanthropist, Ellen Browning Scripps, saw the dangers of strong cross currents for swimmers in La Jolla and funded the construction of a seawall to form CPB as a safe place for children to swim in the ocean [17]. Upon completion, the beach was gifted to the City of San Diego and in 1933 the Tidelands Trust deeded the beach to be maintained by the City of San Diego. Over the next 60 years this beach was used by the community as a place to swim and spend time on the beach. One La Jolla resident recalled their familial ties to CPB, saying “We’ve been here 50, 60, years. We swam in the Children’s Pool, our kids swam in the Children’s Pool” (Beach Access Advocate).

Commercial hunting greatly reduced Pacific harbor seal populations during the nineteenth century, with only a few hundred individuals remaining along the California coast in 1928 [18]. After federal protections were put in place under the MMPA in 1972, the population increased dramatically, with an estimate of 30,968 harbor seals in California in 2012 [19]. An aerial survey conducted by NOAA’s National Marine Fisheries Service (NMFS) and California Fish and Game Commission from Pt. Loma to La Jolla, CA (a region including CPB and beaches to the south) observed 155 seals in 2002 and 121 seals in 2005, but no seals were found along the mainland coast between La Jolla and Pt. Mugu to the North [20]. The lack of harbor seal haul-out sites along the northern region was attributed to human beach use and urban development [20]. At CPB, a study conducted by Hubbs SeaWorld Research Institute [21] and data collected by the Seal Conservancy documented seals present at CPB as early as 1996 (Fig. 4).

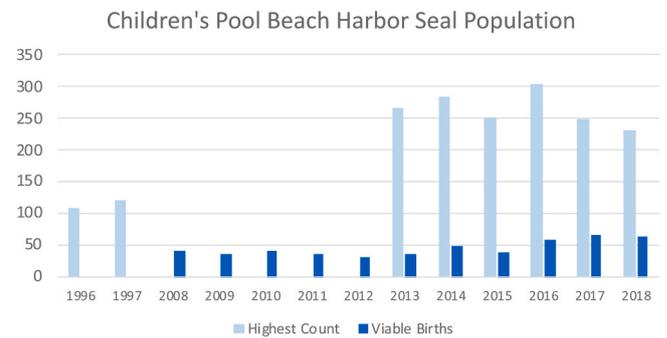


Fig. 4. Peak counts of Pacific Harbor Seals observed from land and viable births at CPB. Observations in 1996 and 1997 were conducted by Hubbs SeaWorld Research Institute [21] and all other data was collected by volunteers from the Seal Conservancy [22]. No data was available on viable births prior to 2008, and no data for highest count is available between 1998 and 2012.

Fig. 5 presents a chronology of events related to the conflict over CPB, based on archival data and interviews with managers. The first sign of conflict was marked by the creation of Seal Rock Marine Mammal Reserve (SRMMR) in 1993, intended to reduce harassment of harbor seals on neighboring CPB where interactions between people and harbor seals were increasing, generating concern for seal safety [23]. A monthly peak count of 142 seals occurred on CPB in 1997 [22] and by 1999 CPB was closed due to high levels of contamination with fecal coliform bacteria (largely from seal feces). This closure prompted the involvement of beach access advocates, escalating conflict over seal use of the beach. Following the closure of CPB, the number of harbor seal haul outs increased and by 2000 the National Marine Fisheries Services (NMFS) documented that harbor seals were now utilizing the space as a rookery [24].

CPB was opened again in 2003 when fecal contamination dropped to “advisory” levels, allowing beach access advocates in the La Jolla Swim Club to organize a protest swim upon the beach’s reopening. As the swimmers entered CPB, they flushed the seals that had been hauled out on the beach. A National Oceanic Atmospheric Administration (NOAA) law enforcement officer charged with upholding the MMPA was present and cited a number of swimmers for this violation [25]. These citations resulted in one swimmer filing a lawsuit that sparked 15 years of legal battles and court appeals between both seal and beach access advocates and the city of San Diego. After a string of appeals by the city, a judge ruled in favor of the swimmer, ordering the city to disperse the seals and dredge the sand at CPB in order to return it to its 1944 condition [26]. To avoid the costly dredging project, the city passed an amendment in the Tidelands Trust to include “a marine mammal park” as part of the original intent of CPB, and in 2009 the judge’s previous orders were vacated [27].

Increased seal numbers and increasing interactions between people and seals, magnified by pending lawsuits, escalated the conflict between seal advocates and beach access advocates. According to public records, between February 2009 and January 2010 police responded 184 times to conflicts at CPB, with 37 cases of disturbing the peace and 4 cases of battery [28]. Advocates on both sides of the conflict explained what took place at CPB during the height of the conflict:

“It was utter chaos and no guidelines [during] pupping season. I was telling people politely to please keep a distance, because you can cause a miscarriage and abandonment. And then this guy swooped down and stuck a video camera in my face and started yelling at the

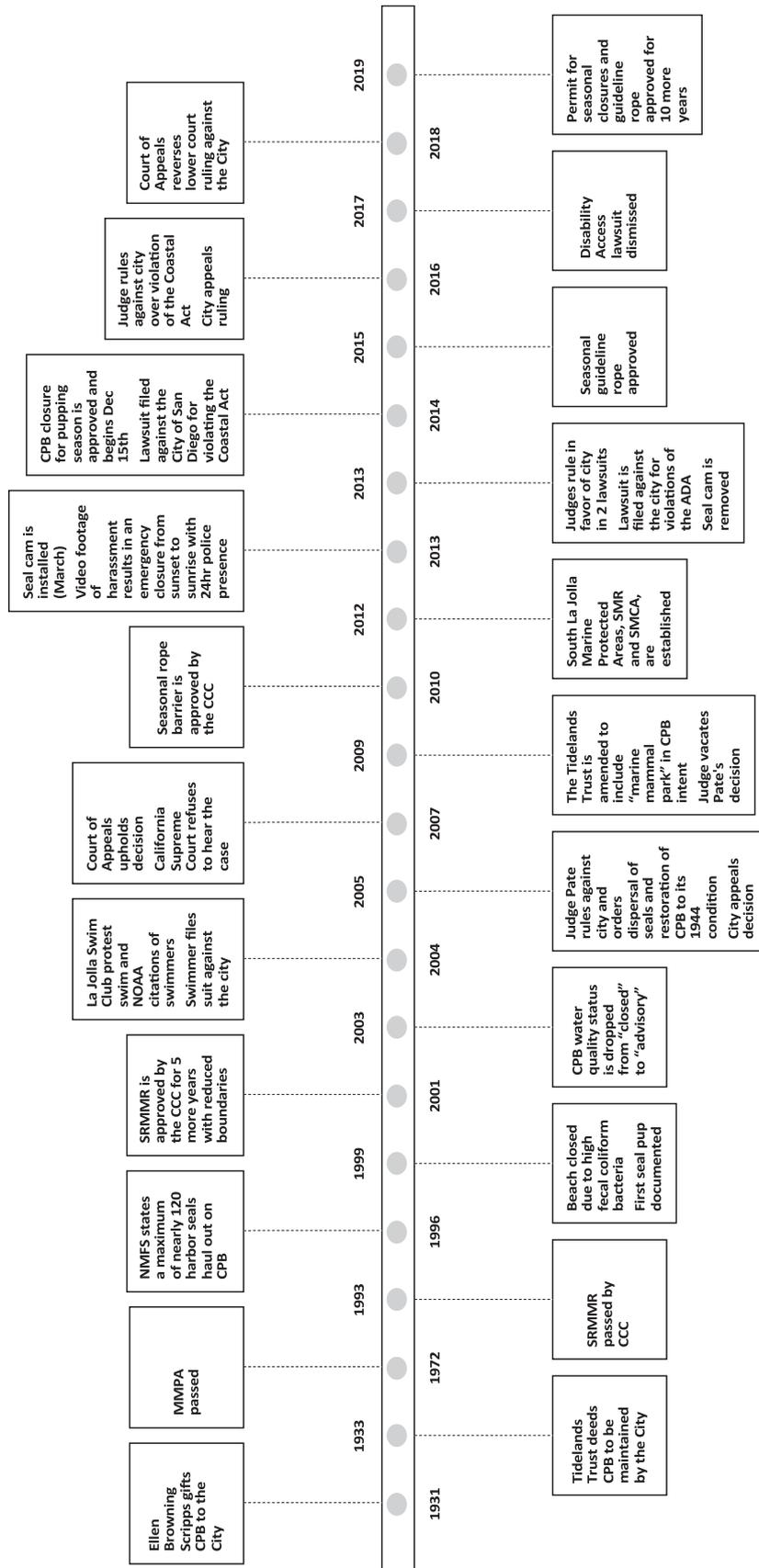


Fig. 5. Timeline of events occurring from 1931 to 2019 concerning conflict over seal use of Children's Pool Beach.

top of his lungs “you don’t have to listen to her! You can go wherever you want!” ... I pulled back but then thought this is so wrong ... I couldn’t turn my back on it after I had connected with that seal.” (Seal Advocate)

“There used to be a bunch of people...they used to fish out on the end of that walkway, they weren’t causing anybody any trouble. But these animal people would surround them and intimidate them.... [believed they were] taking the fish the seals would eat, I don’t know what it was. They wanted them [people] out of there and they’ve actually got them all to leave, which they said they would, they would surround people and then they’d start a confrontation and then somebody [a seal advocate] would fall down and say this person pushed him down and well they got 10 people who agree with them there.” (Beach Access Advocate)

“They were doing really, really stupid things. The 4th of July with the fireworks here in La Jolla, the seals were trying to come up about six or seven in the evening as they always did. And they [beach access advocates] set up their umbrellas and their tents right to block their exit out of the water.... So, we would stand there, and them with their umbrellas and their barbecues. And we would say if you folks would move aside, we can share this beach during the fireworks and the seals will have a little part of the beach over by the seawall and then you can have the rest of the beach. A lot of them would move over, but not the Friends of the Children’s Pool.¹” (Seal Advocate)

“I’ve got personal experience being yelled at by them. The ‘Seal Nazis’ are fanatics. They are fanatics...they wouldn’t understand the word compromise if you spelled it for them 10 times. They’re fanatics and they’ve created the conflict because they’d go down there with their microphones and their TV cameras and film people who are walking on the beach and harass tourists. I mean, they do things, it’s amazing you can get away with it.” (Beach Access Advocate)

“During the time I was around the pool and down at the pool we got into discussions and arguments. A friend of mine got into a physical argument; we made a kelp line and my friend came down with a stun gun and the anti-seal guy jumped him and the cops who didn’t know what to do, and [who] had been anti-seal, arrested him.” (Seal Advocate)

Perceptions that people were harassing seals prompted hostile interpersonal interactions that were also seen as harassment. Disputes between individuals over seals at CPB led to arrests, citations issued in response to violations of the MMPA, and lawsuits between individuals and the city of San Diego. The ranger assigned to CPB in 2011 described the conflict as “People screaming at people. It’s a people issue, not an animal issue... it’s the human-seal interaction that causes the human-human interaction.”

As the conflict came to a head in 2014, a key lawsuit resulted in CCC approval of permits authorizing beach closure during pupping season from December 15th- May 15th, with a guideline rope to be in place the remainder of the year to encourage people to maintain distance from the seals. Protesting these regulations, a beach access advocacy group filed suit against the City of San Diego (Friends of the Children’s Pool v. the City of San Diego), arguing that by disallowing access the city was in violation of the Coastal Act [29]. As with the previous case, the judge ruled against the city, and the city appealed the ruling. After multiple appeals, a judge ultimately ruled in favor of the seasonal beach closure and the guideline rope, solidifying the 5-year permits. These permits lapsed in June of 2019, when the CCC renewed both permits for an extended 10-year period [28]. Following this decision, the Friends of the

Children’s Pool filed an official complaint claiming that a retaining wall had been placed at CPB illegally and was restricting beach access. The entrenched nature of this conflict, and the extreme animosity between opposing sides, has precluded conflict resolution even after legal cases are settled. The conflict has endured for over 25 years and it seems unlikely that the most recent lawsuit will be the last.

4.2. Values driving conflict

Despite the long-standing nature of this conflict, the numerous lawsuits, and the polarized views of those vocally involved with the issue of human and seal use of CPB, the general public visiting CPB is highly supportive of seals’ presence on the beach. Beachgoer reactions to seals and seal pups at CPB were overwhelmingly positive (Fig. 6), with 89% of beach goers surveyed expressing “very positive” or “somewhat positive” views of seals on CPB and 91% expressing “very positive” or “somewhat positive” views of seals pupping on CPB. Only two percent of all respondents expressed negative perceptions of seals or seal pupping on CPB. As CPB is a popular tourist destination, the majority (62%) of survey respondents were from outside La Jolla or San Diego County. These non-local respondents held slightly more positive perceptions of both seals at CPB ($\chi^2(1, N = 318) 4.43, p = 0.04$) and seals pupping on CPB ($\chi^2(1, N = 291) 10.82, p = 0.001$) than local respondents from La Jolla or San Diego County, but a large majority of both local and non-local respondents had positive reactions to seals and their young (Fig. 6). Thus, the persistence of this conflict and ongoing lawsuits are not due to broad public disagreement over how the beach should be used, but rather to vocal minorities who feel passionately about the issue (Fig. 7).

The question remains: why do certain people have such fundamentally differing views of seals at CPB, and what makes them care so much about this issue, allowing the conflict to persist? Scholars have documented similar reactions to wildlife in terrestrial contexts, indicating that the source of conflict often stems from individuals’ values and sense of personal identity. For example, a passionate debate over lethal techniques to manage grey wolf livestock depredation [30] pitted those who identify as livestock owners against those who identify as wildlife lovers. Similarly, grouse hunters were found to view hen harriers as a nuisance species and a threat to their identity as hunters (by reducing grouse populations), while conservationists perceive the hen harrier as an important species to conserve [31]. As stakeholders interpret the effects of wildlife differently, they also differ in their perceptions of both the roles and values of wildlife, as well as management objectives for human-wildlife interactions [2,14]. These fundamental differences in stakeholder values and problem framing create challenges in solving complex conflicts, and thus make understanding values and perceptions a critical component of conflict mitigation.

During interviews, advocates for both seals and beach access clearly expressed their arguments for or against beach closures, revealing fundamentally different perceptions of seals and the issues surrounding the use of CPB. The clarity and consistency in arguments presented by interviewees from each side of the issue may be due in part to the level of stakeholder involvement in litigation and high levels of organization on each of the opposing sides, but they also reveal very different ways of framing the issue of seal use of CPB. Those who advocate for beach access argue that harbor seals are overly abundant, and that their existence at the manmade CPB is unnatural and therefore should not supersede the original intent for the beach to be a safe place for children to swim. They believe shared use is possible and access to beaches is their human right. Those advocating for seal protection at CPB argue that seals are vulnerable to human harassment and require protection during pupping season. They feel that CPB is vital to the harbor seal life cycle and provides a unique opportunity for children to view and learn about harbor seals in their natural habitat. Arguments often paralleled, with each side having diametrically opposed views on the same topic (Table 1). These arguments illustrate how each side’s perception of the

¹ Friends of the Children’s Pool is an organization that opposes restrictions on human access to CPB.

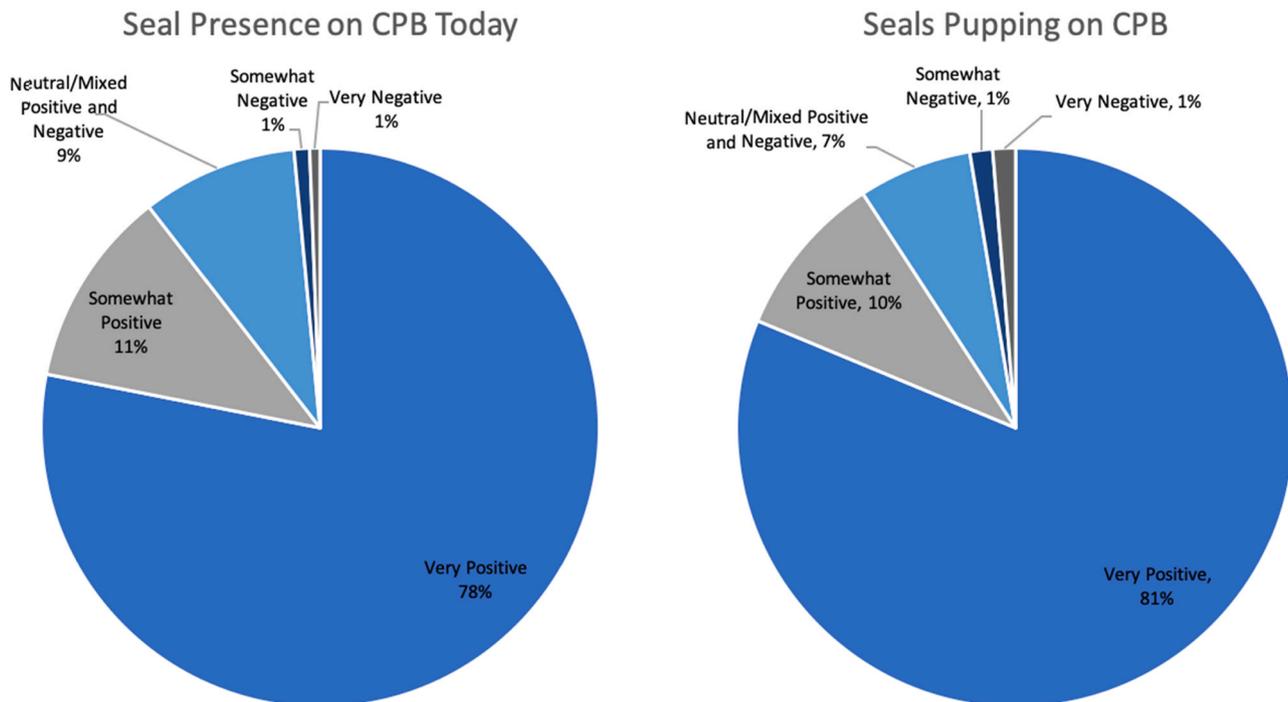


Fig. 6. Public reactions to harbor seal presence and harbor seals pupping on CPB, based on survey responses.

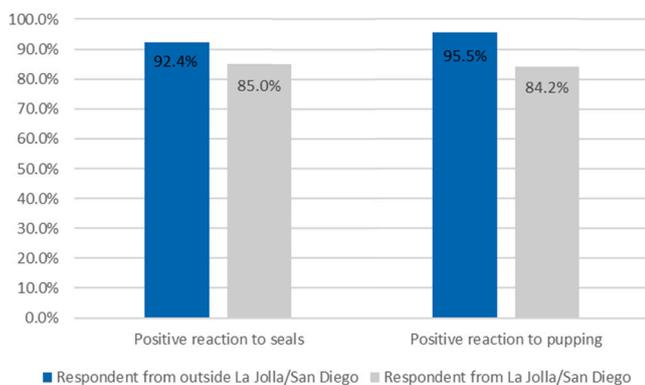


Fig. 7. Public reactions to harbor seal presence and harbor seals pupping on CPB by place of residence. Total shows percent of survey respondents who held “very positive” or “somewhat positive” reactions (as opposed to negative, mixed, or neutral reactions to seals).

conflict, and of harbor seals themselves, differs dramatically.

One factor contributing to the fundamentally different perceptions of this issue is stakeholders’ values. Table 2 shows the distribution of stated values that emerged during stakeholder interviews with individuals advocating for beach access versus those advocating for seal protection. Values such as: *recreation* and *beach access* were mentioned by a much higher percentage of those advocating against beach closures, while: *seals, animals and wildlife, nature, and protection*, were only mentioned by those in favor of beach closures for the protection of seals. Some values, such as *children*, and *safety*, were expressed by a similar percentage of beach access advocates and seal advocates; however, these two groups held different perspectives regarding how these values were realized. For example, beach access advocates believed that children should have access to a safe place to swim while seal advocates believed that children would benefit most by having the opportunity to enjoy watching seals in their natural environment. Likewise, beach access advocates valued CPB as a safe place to swim, whereas seal advocates valued safety in human-seal interactions at CPB. *La Jolla identity* was also expressed by both

sides of the conflict as a source of legitimacy for their viewpoint on how CPB should be used.

4.3. What is “natural?”

In many urban coastal areas, encounters with marine mammals are happening more frequently, as coastal populations increase and formerly depleted marine mammal populations recover under the MMPA and other policies to protect marine wildlife. Harbor seals are one such species whose numbers have increased in recent decades, and at CPB seals are now hauling out and pupping on an urban coastal beach. Because of the recent increase in local seal abundance, arguments regarding their use of CPB often center around whether or not their existence there is ‘natural’, and thus whether or not seal use of this beach should be protected.

The notion of “naturalness” and what constitutes a natural state has shifted over time in wildlife and resource management circles and continues to be contested today, posing ongoing challenges for managers [33]. Similarly, differing stakeholder perceptions of what is “natural” at CPB have contributed to the endurance of the conflict over the appropriate use of the beach. Seal advocates value nature highly, and they want to protect the harbor seal population at CPB as part of nature. They feel that CPB provides a unique opportunity for the public to view seals in their natural habitat. They believe this natural setting is preferable to seeing wild animals in captivity at a zoo or nearby Sea-World. One seal advocate discussed the accessibility of CPB:

“The beauty of these beaches is [that] you don’t have to pay [a] \$50 entrance fee. You don’t have to pay a \$20 parking fee. You don’t have to see them in a swimming pool. You don’t have to see them do tricks for you.”

Beach access advocates argue against this perception of seals, citing that the beach at Children’s Pool developed after the construction of a man-made breakwall, as well as the relatively recent dramatic increase in local harbor seal populations. One La Jolla resident advocating for beach access stated, “We used to have seals; we didn’t have hundreds.” Another explained that his involvement grew as the number of seals at

Table 1

Consistent themes about seals at CPB that emerged from stakeholder interviews with seal advocates and beach access advocates.

Theme	Seal advocates' perceptions	Beach access advocates' perceptions
Shared Use	Current situation is a compromise involving shared use	This is not shared use because people are forbidden from using the beach 5 months of the year
Beach Availability	Humans have other beaches	Seals have other beaches
Vulnerability and Protection	Pupping season leaves seals vulnerable Seals are protected under MMPA	Seals don't need protection; they are overly abundant Wildlife shouldn't get priority over people Seals will take over other places if we let them If we restrict human access in favor of seals at CPB we will lose more access in other places
Children	Seal watching falls under Ellen Browning Scripps's intended purpose as a place for children to enjoy Children would rather see the animals than use the beach	The original intent of use for safe swimming for children should be respected
Uniqueness of Location	Unique beach for seals	The beach is man-made and not natural habitat for seals Children's Pool is unique for people because of its accessibility
Prior Rights	Seal were here before us	People were here first
Beach Use	People want the seals on the beach	People want to use the beach themselves
Pollution and Human Health	Humans pollute more than the seals Bacteria is good and works as fertilizer Seals are not the reason for smell Water is too polluted to swim in anyway	Fecal matter from seals pollutes the water Pollution causes health risks and makes beach unusable Seals cause a horrible smell Water used to be pristine before seals arrived
Tourism	Good for local economy due to tourism	There are plenty of other tourist attractions in San Diego
Wildlife in Urban Settings	Opportunity to watch wildlife for free in its natural habitat	Zoos and Sea World are how urban people can see wildlife
Harassment and Human Behavior	People purposefully harass the seals	Harassment only started when people were denied access
Seal Disturbance/ Flushing	Flushing can cause seal disturbance and pups to get lost from their mothers	Seal activists harass residents trying to use the beach Seals don't always flush and sometimes flush for no reason
Seals Presence as Natural or Unnatural	The seals came to this beach naturally	SeaWorld dropped off rehabilitated seals nearby to create a tourist attraction
Seal Safety	Not safe for people and seals to share beach	We had shared use in the past without harming harbor seals
Coexistence	Interactions are dangerous for the seals Miscarriages and pup abandonment can happen when people flush seals from the beach	Seals flushing and human seal conflict is inevitable Seals should be removed to prevent interactions
Local Community Interests	Rich affluent La Jolla residents want to have the beach for themselves	Seals are habituated to humans There are ways to remove the seals safely Outsiders are making decisions for La Jollans
Ecosystem Interactions	Seals are good for the ecosystem	Non local interests are arguing with emotions and not science Seals eat all the fish Seals are attracting sharks

the beach increased, stating, "My opinions got stronger as they [seals] started to take over." Almost half of the access advocates interviewed also subscribed to the theory that this population of harbor seals was artificially created when rehabilitated seals were released by SeaWorld in the area of CPB. One La Jolla resident explained the ideas that have supported this theory of SeaWorld's role in the creation of the colony at CPB:

"The truth is that SeaWorld and some mayor here in the early 90s got the bright idea. SeaWorld rescued wounded or sick harbor seals, and so the mayor got the bright idea that they should be, when they're healthy, returned to the sea right off the Children's Pool. It's a completely artificial habitat" (Beach Access Advocate).

This perception of their unnatural occurrence and abundance on a manmade beach reinforces beach access advocates' perception that the harbor seals do not belong.

4.4. Threat of change and loss of access

Underlying the arguments of advocates on both sides of the issue is a deep sense of identity as members of the La Jolla community. Those most heavily involved in advocacy on both sides were older and had

long-term ties to the area and a stronger memory of its past. A consistent theme during interviews was a strong sense of place and identifying strongly with La Jolla and the CPB. Over time, the seal population in La Jolla, the overall human population of La Jolla, and tourist visitation to La Jolla have increased. Many beach access advocates identify as long term La Jolla residents and feel nostalgic over what La Jolla used to be.

Table 2

Values mentioned during interviews with stakeholders. Numbers indicate the percent of stakeholders in each category (seal protection advocate or beach access advocate) who mentioned the theme during interviews.

	Seal protection advocates	Beach access advocates
Seals	71%	0%
Safety	29%	9%
Recreation	14%	82%
Protection	29%	0%
La Jollan Identity	57%	45%
Humans	0%	18%
Clean Water	14%	27%
Children	14%	18%
Beach Access	14%	91%
Animals and Wildlife	57%	0%
Nature	86%	0%

There is a strong sense of historical preservation and sense of place connected to CPB [32]. Some statements by beach access advocates interviewed reflect this nostalgia and their unhappiness with the current situation at CPB:

- “Those waters have been closed and they never used to be closed.”
- “Children’s Pool was one of the most pristine places, with easy access, now it’s unusable.”
- “It was always a safe place. I remember how heavily it was used. This is a travesty.”
- “I’m a local boy and I raised my kids to swim there.”
- “It should go back to status quo in both places [CPB and La Jolla Cove], I think. No seals and sea lions, no sharks, no bacteria and pollution and illness.”

The changes at CPB are symbolic of other changes La Jolla has experienced over time. Many beach access advocates expressed a sense of loss of the La Jolla they knew in the past, compounded by a feeling of lack of control over these changes. This is in many ways symbolized by their lack of access to CPB due to increasing restrictions at the beach, which has been overrun by outsiders in the form of seals.

CPB is important to many beach access advocates for its value as an ocean access point to take part in recreational activities, which are also strongly related to their sense of identity. Those submitting public testimony for beach access self-identified most frequently as beach and ocean users, particularly divers and swimmers, while a much smaller

proportion of seal advocates identified as ocean users (Fig. 8). The closure of CPB has restricted coastal recreational activities that take place there, thereby restricting beach access advocates’ ability to take part in something that is important to their identity (i.e fishermen, diver, swimmer), which directly affects their perceptions of seals and their management. This feeling was expressed by a La Jolla swimmer who stated, “It would be a shame. You know, there’s this seemingly missed opportunity, and it’s a beautiful spot. It’s a beautiful spot for water users” (Beach Access Advocate). Another La Jolla resident stated, “The tradition in California, and it’s in the constitution, is beach access” (Beach Access Advocate). Surveys also illustrated a link between valuing beach access and negative perceptions of seals at CPB. Of the individuals surveyed at CPB, respondents who had more negative reactions to harbor seals at CPB were more likely to agree with the statement “Some beaches should be reserved for human use free of harbor seals” ($r(268) = -0.324, p < 0.001$).

4.5. Underlying conflict

Strong emotional investments in the conflict at CPB led to interpersonal conflicts, which escalated as the conflict continued for many years. Individuals on both sides of the conflict described the other side as acting antagonistically toward them as each side fought for their vision of appropriate use of CPB. During interviews, beach access advocates described seal advocates using megaphones to yell at any visitors who approached harbor seals, using public shaming to keep people away from the beach. Seal advocates described beach access advocates engaging in activities to intentionally flush seals from CPB and

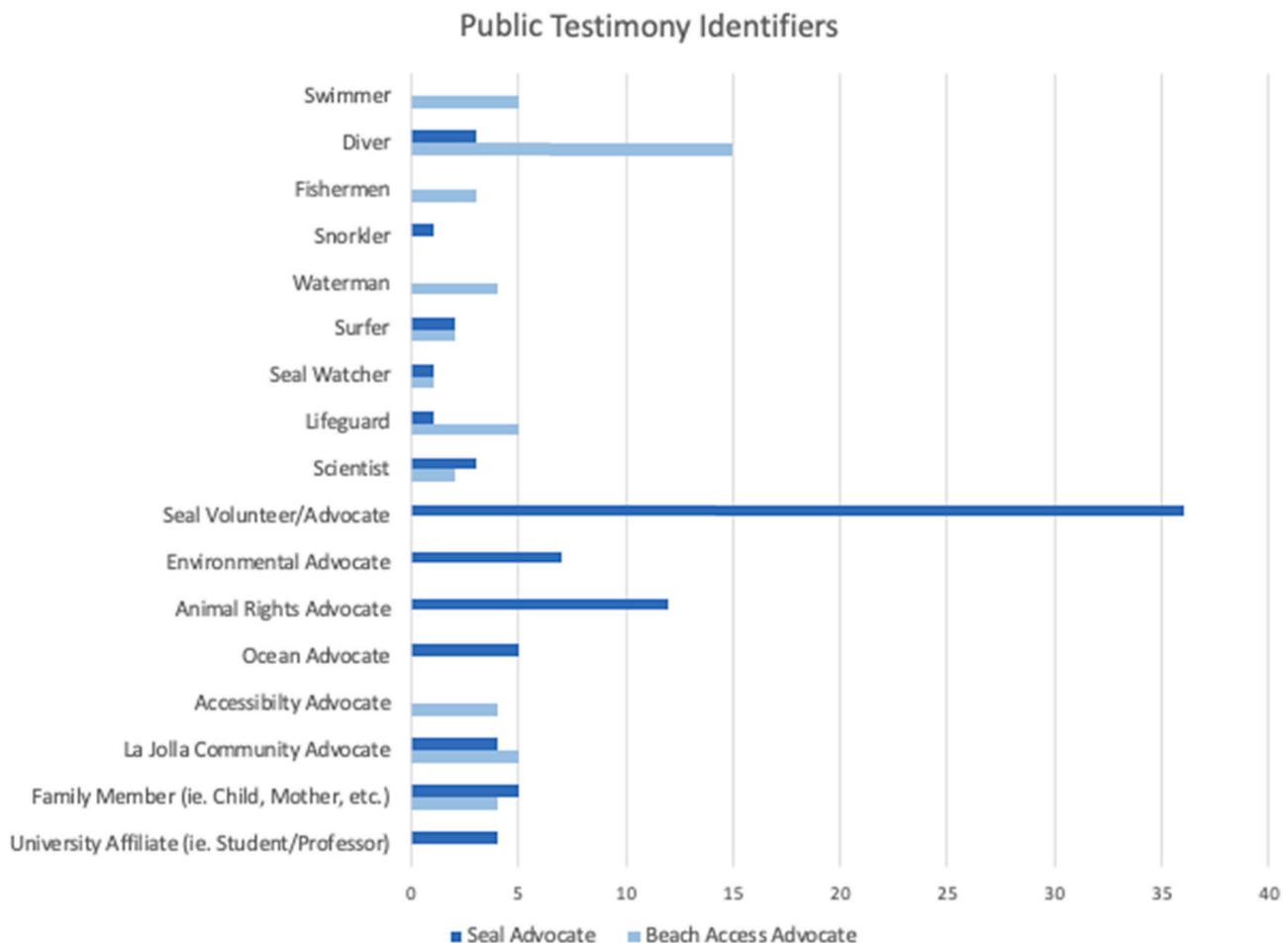


Fig. 8. Self-identifiers provided by beach access advocates and seal advocates testifying in San Diego City Council meetings. Identifiers were grouped and summed based on those who chose to identify themselves.

encouraging visitors to exercise their right to access the beach and ignore the discouragement from seal advocates. The antagonistic behavior of individuals on both sides of the conflict only served to exacerbate the conflict, moving it to a personal level. Advocates on either side argued with each other over megaphones, and negative interpersonal interactions escalated to the point where seal advocates received anonymously emailed death threats, and at one point a stun gun was used by a seal advocate, which he claimed was in self-defense against a beach access advocate at CPB.

As the conflict moved beyond the issue of seals' use of the beach and towards personal attacks and opposition to the other side, compromise and mitigation became more difficult. Activists' extreme emotional investments unintentionally escalated inter-personal conflict and in many instances deepened the entrenchment of their opposition. Of all the collected public testimony, over 25% of testimony expresses negative statements regarding the opposing side. Considering the short (one minute) time allocated for individual testimony, it is striking that one in four people chose to use this limited time to discuss the opposition, illustrating how the conflict was not only about appropriate use of the beach, but also about negative perceptions of the opposing group. One manager explained this deep emotional opposition as a "zero sum game," where opposing sides felt that if they don't fully win, they fully lose.

At this point, the conflict was no longer solely about seals' use of the beach, but had progressed to identity-based, or deep-rooted conflict (Fig. 3) [10]. Advocates on each side saw their vision of the appropriate use of the beach as fundamental to their identity, and neither side was willing to compromise or work toward a shared solution. Once a conflict reaches this level, resolution of the conflict is unlikely, and instead the focus must move toward reconciliation [10], or ongoing conflict management as events progress and relationships grow and change.

4.6. Politicization and inaction

As illustrated above, underlying conflict and a history of unresolved disputes exacerbated the conflict at CPB, making it more difficult to resolve. Over twenty-five years of negative interpersonal interactions between advocates on both sides of the issue and inconsistency in management decisions has stakeholders deeply rooted in their position. Given this conflict's controversial nature and frequent discussion in city council meetings, many politicians included this issue in their platforms when running for city positions. This politicization may have also contributed to increasing emotional investment and animosity between those on opposing sides. Because the conflict was so politicized, managers were hesitant to become involved, and the resulting management inaction enabled the persistence of conflict. During interviews, both managers and community stakeholders stated that local and federal management agencies missed key opportunities for potential conflict mitigation.

City managers had the opportunity to disperse the seals at CPB during the early years of the conflict using section 109(h) of the MMPA, which allows local government officials to take marine mammals for the protection of public health and the nonlethal removal of nuisance animals. However, pressures on city officials from advocates on both sides of the seal issue resulted in inconsistent management strategies and inaction (Fig. 9). During interviews, stakeholders expressed frustration with management inconsistency. A La Jolla resident claimed that that "the indecision and inaction of city government" was responsible for the long-term persistence of conflict (Beach Access Advocate). Similarly, a natural resource manager stated, "I mean, from as early on as you can - when it first started, they [the city of San Diego] ... were not willing to make a decision on people or seals." Ironically, the lack of management intervention, in an attempt to avoid political controversy, served to heighten the conflict and made it more politicized. This was compounded by the challenge of the mixed jurisdictional nature of seal management at CPB. While the Pacific harbor seal colony is managed

and protected by a federal agency (NOAA), CPB is managed by the City of San Diego, and beach closure permits are approved by the state (CCC). The lack of clarity regarding which agency was responsible for decision-making and intervention also contributed to indecision and lack of decisive action regarding seals at CPB.

4.7. Management considerations

The lack of decisive management action during the early phases of the conflict over seals' use of CPB allowed the conflict to expand, become entrenched, and contributed to the conflict's long endurance over time. The mixed jurisdictional nature of the conflict made swift and decisive action more challenging, but the situation at CPB is hardly unique; federally managed marine species make use of state and locally managed beaches throughout the United States. For example, a more recent conflict has emerged over beaches just north of CPB where sea lions are now hauling out and giving birth, with sea lion advocates requesting that human access to some beaches be restricted during sea lion pupping season between June 1 and October 1 [34] or requesting resources for increased ranger presence to limit human interactions with sea lions [35]. Early and decisive management action, coupled with greater coordination and communication between local, state, and federal management entities, could help prevent the escalation of a similar type of conflict over human beach access and interactions with coastal marine wildlife in the future.

Determining appropriate management actions and ensuring public compliance depends, in part, on public perceptions of the acceptability of management actions. Survey results from CPB visitors provided some insight into what types of management actions were most broadly acceptable to both local and non-local respondents (Fig. 10). Overall, survey respondents were supportive of a wide range of potential management strategies. Educational signs, warning signs, and rope barriers had the highest levels of support, so use of these types of strategies as a first step to limit human interactions with coastal wildlife is likely to cause minimal controversy. Fencing and beach closures had somewhat lower levels of support and thus may have the potential to generate more controversy as management measures. However, the majority of both local and non-local respondents still found these management tools to be appropriate, thus they could be considered if stronger actions are deemed necessary to limit human interactions with coastal marine species to mitigate or prevent future conflict.

However, the situation at CPB has illustrated that conflict does not necessarily arise based on the perceptions of the broader public. As such, it is important to be cognizant not only of the stated drivers of a controversy over wildlife (e.g. human threats to wildlife on beaches or wildlife preventing human access), but also of the underlying values that people hold, and that contribute to how people perceive wildlife (e.g. as a part of nature to be protected or as a nuisance to be removed). Acknowledging that people hold different understandings of the meaning of wildlife, shaped by different values around wildlife and competing frames of reference regarding what wildlife represent to themselves and to society, is a first step in developing processes to address underlying sources of conflict between stakeholders. Collaboratively engaging stakeholders in discussions to uncover their values and the frames of reference through which they view a conflict over wildlife could help open dialogue between stakeholder groups. This type of collaborative engagement is likely to be more successful if it takes place separately from legal or policy decision-making processes [8]. While different stakeholders may not find common ground for agreement, facilitating collaborative engagement between individuals representing "opposition" groups could help generate mutual understanding of the values that drive different stakeholders' perspectives, enabling individuals to view members of the opposing side as people holding different values rather than simply an irrational enemy.

In developing solutions, managers might begin by prioritizing common values. In the case of CPB, individuals on both sides of the conflict

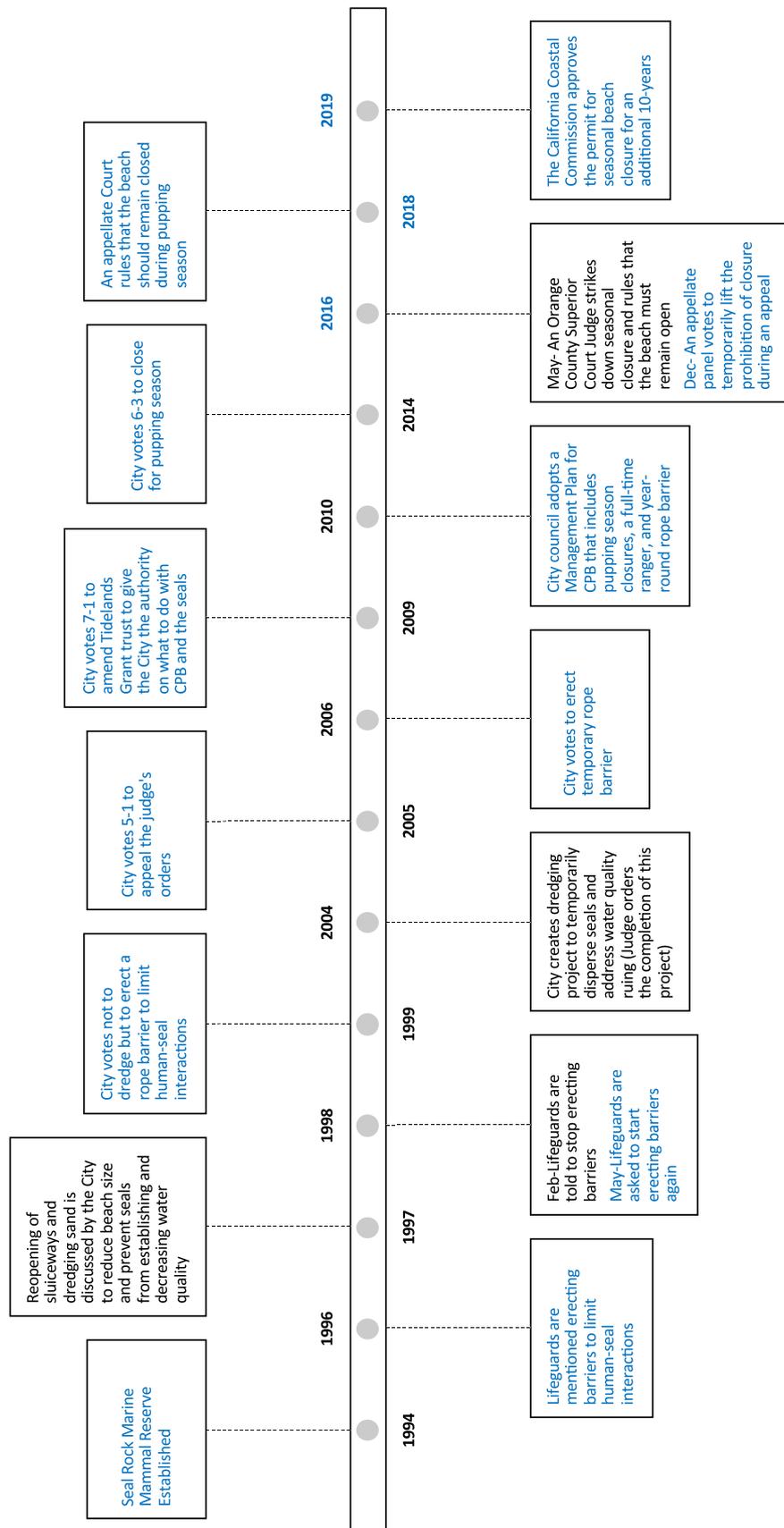


Fig. 9. Timeline representing contrasting decisions regarding management of CPB. Black text indicates decisions favoring beach access rights while light blue text indicates decisions favoring seal protection.

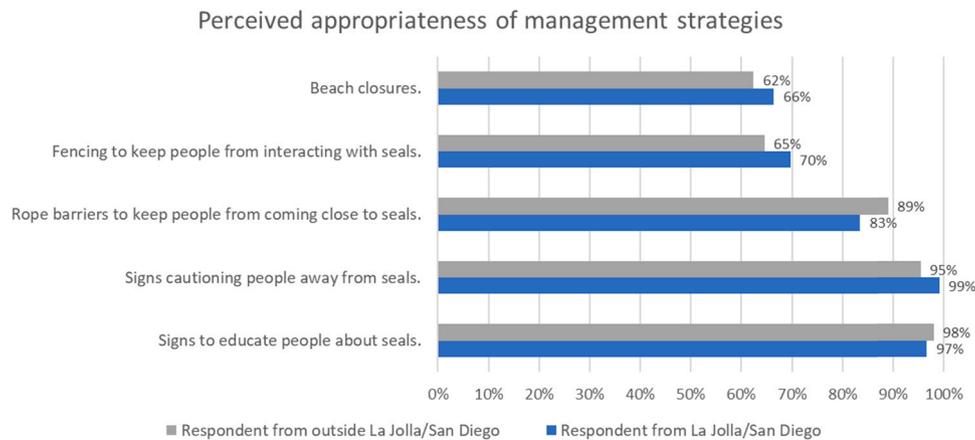


Fig. 10. Percent of survey respondents who indicated that each management strategy was appropriate to limit human interaction with seals at CPB, broken down by non-local and local respondents. Number reflects the total percent of residents who responded to each question with either “very appropriate” or “somewhat appropriate”.

held stated values around children, safety, and local identity, and management solutions that build upon these values might be better received than solutions that appeal to values held primarily by one stakeholder group over another. While it may not be possible to generate solutions that appeal to all stakeholders, understanding the values and cultural frameworks driving conflict is an important first step toward building mutual understanding and generating workable solutions to conflict over wildlife.

5. Conclusions

In order to understand how the conflict at CPB could continue so long and become so entrenched, it is important to understand the perceptions and values driving the beliefs of stakeholders involved in the conflict. Differing perceptions of belonging and what is “natural,” the threat of change and loss of access in La Jolla, differing identity orientations, and the emotional investment of stakeholders have all moved a topical issue to a personal issue, contributing to difficulties in resolving or mitigating this conflict. With such deep commitment and differing identity and value orientations on each side, is conflict resolution even possible? Partial beach closures now prevent access to the beach for five months of the year while seals are pupping, reducing overt conflict in recent years. This can be seen in Fig. 11, which shows the total number of seal related police calls over ten years, before and after the partial closures. Although the interactions and conflict at the beach have greatly decreased, there is still dissatisfaction from those who feel beach closures are a mistake, illustrated through lawsuits filed as recently as the fall of 2018, a public complaint from a beach access group following 2019’s most recent renewal of beach closure permits, and continuing opinion pieces published in local newspapers expressing dissatisfaction with pollution from seal feces and restrictions on human access to CPB.

Given continued lawsuits and complaints, it would be premature to consider this conflict resolved. However, an understanding of the history of this conflict, as well as the interacting drivers that enabled the persistence of conflict over time, can help inform management processes and potential points of intervention in other situations where interactions between people and marine mammals have the potential to become contentious. The history of CPB illustrates how individuals’ sense of identity and different understandings and values relating to seals have played important roles in shaping the perceptions and actions of individuals on both sides of the conflict, and how this level of stakeholder divergence has been difficult to overcome. This was compounded by inconsistent policy decisions during the early phases of the conflict, allowing the conflict to persist and deepen into personal conflict between stakeholders.

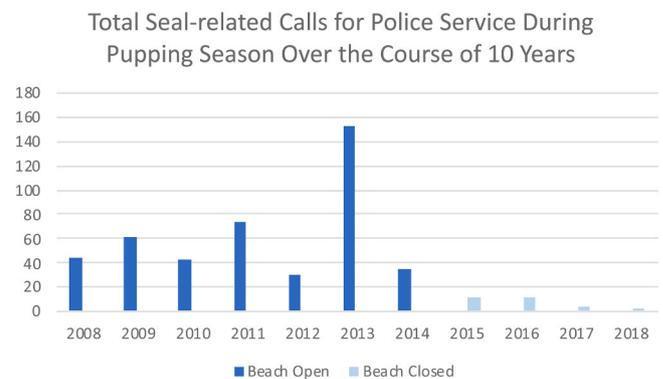


Fig. 11. Total seal-related calls for police service during pupping season over the course of 10 years. Data source is publicly requested SDPD data requested by the Seal Conservancy [22].

Although the majority of the public has a positive perception of seals at CPB, conflict has stemmed from a small number of vocal individuals who feel passionately about the issue, and the failure to resolve or mitigate conflict during its early stages made this conflict intractable. Although not discussed in this paper, social media has more recently expanded the stakeholder base that feels invested in the fate of marine mammals, and ‘selfie’ culture has spurred closer human interactions with wildlife, including seals, providing additional new challenges for management. Conflicts over human-wildlife interactions in marine and coastal systems are likely to become more frequent in the future, as coastal populations grow and marine species recover. Thus, it is critical to understand the fundamental identity- and value-based drivers and perspectives that contribute to these conflicts in order to facilitate stakeholder engagement and inform early management responses that aid in future conflict prevention.

CRedit authorship contribution statement

Leilani Konrad: Data collection and analysis, Data curation, Writing and revising. **Arielle Levine:** Conceptualization, Study design, Supervision, Writing and revising.

Acknowledgments

This work was supported by the California State University Council on Ocean Affairs, Science and Technology (COAST) and the San Diego State University Department of Geography.

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