

Indo-Caribbean Hindu Religious Ecologies in Queens, New York

Reinterpreting Environmental Stewardship through Spiritual Devotion

Acknowledgements

This study had many people spiritually and physically involved. Aminta Kilawan, Rohan Narine, Varuna Sahabir, and Vijah Ramjattan were all integral forces for this research. Their passions and motivations to preserve their cultural heritage and create harmony within and outside of the Indo-Caribbean community are at the heart and soul of their community-driven work. Their efforts to maintain safe and peaceful worshipping spaces at Jamaica Bay for devotees and protect the environment are beyond inspirational – they are spiritual and environmental defenders. None of this research would be possible without the support of these community leaders. My gratitude also extends to the greater Indo-Caribbean Hindu community and all the temples that welcomed me to join them in their ceremonies inside their temples and at the beaches. A big thank you to the United States Forest Service (USFS) team (Sonya, Lindsay, and Erika) that let me on board with this research. During the summer, they offered their time, space, and energy to guide and direct me on this project. I also would like to thank Danica Doroski for helping me in the writing process from start to finish. I would like to acknowledge the Hixon Center for Urban Ecology for supporting this research with community organizations and USFS. I'm indebted to Mary Evelyn Tucker and John Grim who showed me the promise and opportunity in religion and ecology.

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Introduction

“There is a certain emotional draw to praying at the Bay, even if it is just standing there, closing my eyes and chanting a mantra. The world could not survive without our bodies of water; through them life is sustained.”

Globally, populations are increasingly relocating to urban environments (United Nations, 2017). These migrating demographics require careful consideration to allocate, manage, and share public resources (Atkinson, 2003; Roy, 2009). Despite these growing challenges, urbanization also makes way for incoming communities to settle and bring new traditions, religions, and ecologies (Peters, Elands, & Buijs, 2010). These cultural elements are valuable factors when laying a foundation and developing a place informed by reoccurring cultural experiences or memories in an urban environment. Cultural traditions for these incoming communities occasionally need to adapt and transform in order to fit new localities to continue and retain their sense of meaning for their beliefs (Antonsich, 2010). In some cases, these transformations utilize landscapes and natural resources (Anderson, 2014; Berkes, 2012) to act as a proxy for previously ritualized environments. These proxies can be in the form of a public park, a beach, or a forested area in urban landscapes – cultural keystone places¹ (Cuerrier, Turner, Gomes, Garibaldi, & Downing, 2015). These cultural keystone places are constructed with a deeper sense of meaning for a community’s identity based on the interactive human–Earth relations that are created through successive generations (Janowski & Ingold, 2012; Turner, 2005). The reoccurrences of these newly claimed places are rooted in the deep devotional ties that the community develops with it. These natural landscapes that are embedded with religious values can be interpreted as a religious ecology. According to Grim and Tucker, a religious ecology is, “ways of orienting and grounding human communities in the context of rhythms of nature” (Grim & Tucker, 2014). These newly stimulated spaces through ritual become sacred landmarks for communities. Cosmologies from former homelands reacquaint themselves in completely new environments.

In one such case, Indo-Caribbean Hindu communities have laid claim to their religious ecology at the waterfronts of Queens, New York. With the arrival of the Indo-Caribbean community, religious traditions from India, and more recently from Guyana, Trinidad, and Suriname, were adapted to better suit the urban environment. Certain areas of Gateway National Recreation Area within Jamaica Bay emerged as a sacred space for these Hindu communities. Hindu devotees² have been coming to these beaches to pray, perform *pūja* (worship), seek guidance and truth, and bequeath sacred items for the deities at the Bay. Scattered along these beaches, sacred relics vary from fruits, *diyas* (small clay pots), *saris* (fabric), plastic and aluminum items, *jbandi* flags (a flag symbolizing a deity) and *murthis* (statues) of Hindu gods and goddesses. The religious ecology for this community can be perceived as an ecology of environmental destruction (littering) for others. This situation gives way to the issue of performative deification of these items and environmental defilement of the natural setting. A discord between Indo-Caribbean community groups, Jamaica Bay residents, and government officials has emerged in the past 30 years due to the sacred items being left at the

¹ A cultural keystone place is defined as “a given site or location with high cultural salience for one or more groups of people and which plays, or has played in the past, an exceptional role in a people’s cultural identity, as reflected in their day to day living, food production and other resource- based activities, land and resource management, language, stories, history, and social and ceremonial practices.”

² When the terms devotee or devotion are used, the concept and practice of *bhakti* is intended. *Bhakti* refers to the Hindu religious practice of a loving commitment to a manifestation of the unified divine in the material, phenomenal world.

beaches (Van Hooreweghe, 2012). This type of conflict is not entirely unexpected for new religious ecologies. Consequently, the presence of unfamiliar practices, reconstituted in urban environments can lead to fear or xenophobia. However, natural resource managers in urban ecosystems may then need to develop new approaches for engaging with multiple users who construe these areas in diverse ways. With the emergence of sacred spaces in cities, communities and managers should revisit their role not just in the realm of natural resources but also in the realm of cultural resources.

Within the Indo-Caribbean Hindu community, a sub-group of individuals and organizations, such as Sadhana³ and United Madrassi Association⁴, are pushing the boundaries of their own religious practices at the beaches to explore the interface between spiritual and environmental accountability. Both of these organizations organize clean-up efforts⁵ (Sadhana) in partnership with the National Park Service and other community groups. These organizations reach out to various temples and other Indo-Caribbean organizations to promote environmental awareness at the beaches while collecting sacred items and disposing of trash. In this exploratory study, we ask what values drive these individuals and organizations, without compromising their spiritual vitality and devotion, to actively invoke environmental stewardship as a form of their spiritual experiences at Jamaica Bay? However, even with outreach efforts and behavior change mechanisms from these individuals and organizations, they acknowledge the fact that sacred items will continue to be left at these beaches due to the nature of their religious ecology. It is clear that one strength of this community is their deeply interwoven connections to their religious ecologies. Therefore, part of the mission of the Indo-Caribbean Hindu environmental groups is to promote an understanding of the intimate sensibilities their community has for their cultural keystone places with natural resource managers and other communities who use the same space for recreation. In this study, we explain our mixed-methodological approach. Then, we highlight the cultural context of the community followed by a presentation of our results incorporated into our discussion.

Within the Hindu cosmology, deep spiritual connections to the Earth and natural resources, specifically including obligations to water, are not a new phenomenon (Agoramoorthy, 2015; Framarin, 2011). Yet, as religious ecologies are transferred to new places, there is a need to shift traditional practices. In the case of these Indo-Caribbean Hindu individuals and organizations, religious transformations give rise to a re-articulated set of values. These new paradigms can provide valuable knowledge on cultural competency. It also highlights the necessity to protect sacred spaces for surrounding communities. Moreover, natural resource managers can reference this study in order to address other culturally-sensitive environmental issues. This study presents the values that drive a sub-group within the community to merge worship and environmental stewardship. The situation at Jamaica Bay is not unique. This is just one case study that has the opportunity to reveal values which can ignite environmental change in other areas. For example, other initiatives attempting to reclaim the environmental purity of sacred rivers (Ganga, Yamuna, Narmada, Bagmati and others in India)

³ “Sadhana is a 501(c)(3) registered non-profit coalition of Hindus worldwide wanting to assert a progressive Hindu voice into the public discourse of our times. Sadhana is a mechanism and a platform for progressive Hindus to speak up and act for progressive social values and social justice.” For more information on Sadhana: <https://www.sadhana.org/>

⁴ “The United Madrassi Association (UMA) is a 501(c)(3) registered non-profit organization committed to bringing about UNITY IN THE COMMUNITY within the Madrassi diaspora and across other community groups. Via active community participation, volunteerism and meaningful humanitarian work, UMA will de-stigmatize and de-ostracize the *Shakti*-worship aspect of Hinduism. UMA intends to lead by example and restore a positive light on the worship of *Maha Shakti Kali Amman*.” For more information on UMA: <https://www.madrassi.org/>

⁵ Sadhana organizes a monthly clean-up called Project Prithvi. Prithvi represents the Hindu Goddess of the Earth. These clean-ups are held near the North Channel Bridge beaches.

are facing similar issues of defilement and deification (Alley, 2002; Haberman, 2006; James, Grim, & Tucker, 2011). Our study helps to understand the transformations that take place among communities, NGOs, and governmental institutions as they work to foster more environmentally-responsible practices within densely populated urban environments.

Methodology

Setting

This research took place in the Borough of Queens, New York, United States within the Gateway National Recreation Area (managed by National Park Service (NPS) along with other jurisdictions in this area) of Jamaica Bay. Various spots within Jamaica Bay and other waterways in New York City, are used for worship.

However, our research examines four main areas.

Figure 1 depicts the four main sacred spaces where worshipping predominantly occurs. These sacred areas were chosen due to their relatively high level of

engagement by devotees. These beaches from north to south are called Spring Creek⁶ (Spring Creek beaches), two beaches at North Board Channel Beaches⁷ (parking lot beaches), and North American Broad Channel⁸ (baseball field beaches). Below are descriptions of the beaches.

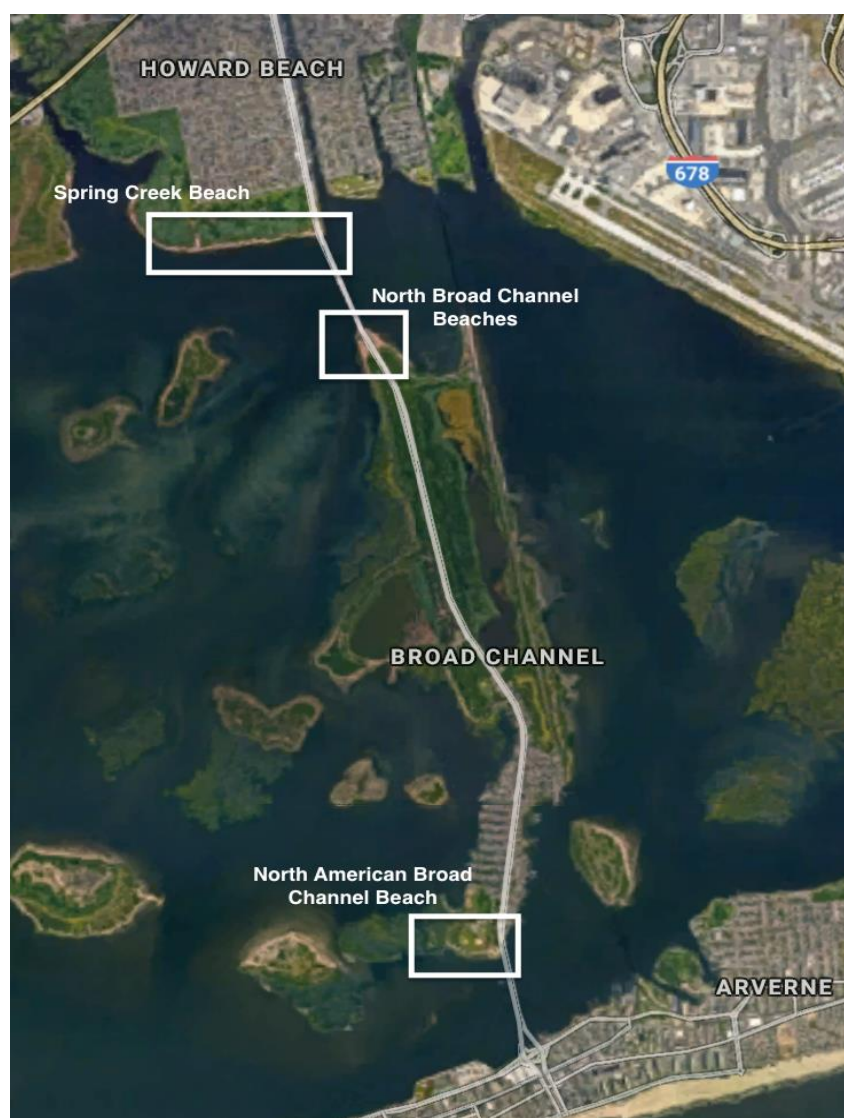


Figure 1 is a map of the research areas in Jamaica Bay, Queens, New York. From north to south in the white squares, the areas are Spring Creek Beach, North Broad Channel Beaches & North American Broad Channel Beach. These areas sit along the highway that connects to the Far Rockaways nestled in Gateway National Recreation Area.

⁶ Spring Creek Coordinates: Lat. 40.646655, Long. -73.840572

⁷ Eastern beach at North Broad Channel Coordinates: Lat. 40.637232, Long. -73.832730

Western beach at North Broad Channel Coordinates: Lat. 40.638209, Long. -73.831272

⁸ North American Broad Channel Coordinates: Lat. 40.595440, Long. -73.822270

Spring Creek Beach

This area sits at the north end of the Joseph P. Addabbo Memorial Bridge (Cross Bay Boulevard). On the eastern end of the bridge, the jurisdiction of this land belongs to Metropolitan Transportation Authority (MTA). Whereas the beachfront on the southern and south-western fronts are the responsibility of NPS. Accessibility for the beaches can be complicated – on either side of the bridge there is limited access. One major feature of this area is that the bridge covers a strip of the beach, providing privacy for worshippers to commune (Figure 2). On the eastern side of the bridge, individuals can park on the highway. Or, individuals can park on the highway or street parking on the eastern side of the bridge. Both sides from the highway or street parking have small man-made paths which guide the user to the beachfront. The eastern path to the beaches is fairly wooded. By comparison, the western path is more open without much woody vegetation. The stretch of beachfront at Spring Creek is 0.9 km. Apart from worshippers, recreational users such as fishermen, couples, water-sport users can occasionally be found at this beach. As of August 2018, trash receptacles are not present at this beach.



Figure 2 is a panoramic view of Spring Creek Beach underneath the Joseph P. Addabbo Bridge. On the left side of the photo, there is the open beach area controlled by NPS. On the right side of the photo shows the strip of land controlled by MTA. Some devotees worship underneath the bridge or on the open western beaches (left side of the photo). In the foreground, items left by various park users can be seen.

North Broad Channel Beaches

This area which is at the end of the Joseph P. Addabbo Memorial Bridge (Cross Bay Boulevard) is split into two areas. Jurisdiction for these areas fall under the NPS. One beach resides on the western side and another is on the eastern side. Both beaches possess a parking lot that can fit roughly 30 – 40 vehicles. The two beaches are connected by a small strip of narrow land underneath the bridge – this area is low-hanging and not welcoming for individuals to easily pass underneath. Due to the nature of Gateway National Recreation Area, the main open beach areas are for various gatherings, *pujas*, picnics, parties, etc. Further south and inland, these strips of beach become heavily vegetated and forested areas for wildlife.

Western Area of North Broad Channel

This area has a small concrete gazebo structure to the northern end. Worshippers occasionally have ceremonies at the gazebo (Figure 3). In front of this structure, there are two post boards that contain a variety of information for worshippers, fishermen, and general recreational users. This beach area stretches for 0.4 km. Across from the beach are protected areas for nesting birds – the vegetative and forested area in far left of Figure 3. There are 8 trash receptacles as of August 2018 along the parking area.



Figure 3 is a panoramic view of the western part of North Broad Channel. The gazebo at the right of the photo is shown. The beach front is open and easily accessible from the parking lot.

Eastern Area of North Broad Channel

This beach has a similar outlay to its western counterpart. Although, the eastern area does not have a gazebo structure. This stretch of beach faces John F. Kennedy Airport with planes taking off every few minutes. This beach stretches for 274 m. The opposite side of the beachfront is forested area. There are 6 trash receptacles as of August 2018 in the parking area.



Figure 4 is a panoramic view of the eastern part of North Broad Channel. This beach front is a frequented site for devotees to commune. This strip of beach is open and accessible for devotees to worship. On the other side of this beach, across the water, resides John F. Kennedy Airport.

North American Broad Channel Beach

This area sits about 6.1 km south from the other worshipping areas. North American Broad Channel Park is at the beginning of Cross Bay Veteran's Memorial Bridge. There is a parking lot at the northern edge of the park. From the parking lot, there is a concrete pathway that leads to three baseball fields. From these concrete paths, footpaths develop and they lead straight to the water. There is a small trek through grasses that eventually turn to a sandy cove – a private and ideal place for worship. An interesting feature of this park is that it is managed by different entities. The park area is managed by the New York City Department of Parks and Recreation (NYC DPR), while the beach fronts are the responsibility of the NPS. Like the other beaches in Jamaica Bay, the bridge provides privacy for worshippers. The stretch of beach is fairly short – 360 m.

For devotees at these sacred spaces, worship is generally done in the morning. This is because of morning *surya* (sun) oblations and because it is less populated with people who could potentially disrupt the *puja*. Ceremonies vary depending on the time of year and circumstance. For the Indo-Caribbean Hindu community, many of these sacred spaces are used to perform these ceremonies. Depending on the size of the ceremony, many of the larger gatherings require a permit – this is the case for many events that take place at these beaches. Permit prices differ based on gathering size and whether an NPS staff member is needed on the premises during the event.



Figure 5 shows a small path leading from the park to the beaches where devotees worship at North American Broad Channel Beach.



Figure 6 is a photo of sacred items (coconuts) left at the beach at Spring Creek.



Figure 7 shows sacred items (statues, neem leaves, *kheer* & *saris*) left at the western beach at North Broad Channel.

Devotees find themselves worshipping weekly or monthly to commune with the gods. Apart from these worships, the sacred relics being bequeathed to the water vary as well. Among these sacred items seen at the beaches, items left for the divine include: fruits (bananas, limes, coconuts), milk, leaves (neem), *kheer* (rice pudding), incense, ghee, cane juice, *saris*, *murthis*, *jbandi* flags, *jbandas* (bamboo sticks), and flowers. There are other items left in the vicinity as well. However, one cannot definitively pinpoint other non-Hindu items as items being left by the community. Another aspect of the sacred items is that there are some that are not definitively Hindu. Due to the multiuser interface at these beaches, various spiritual and religious individuals and groups (Spiritual Baptist, Shango Baptist, Santeria practitioners, and Voodoo and Hoodoo practitioners and followers) practice ceremonies and also bequeath items to the ocean at Jamaica Bay (Vertovec, 1998).

Community

For this study, we interviewed 9 individuals from the Indo-Caribbean Hindu community who regularly worship at Jamaica Bay (3 women and 6 men). The two distinct denominations in Indo-Caribbean Hindu culture were represented, *Sanataan*⁹ and *Shakti*¹⁰ (some self-identified as *Madrassi*) worshippers. Of the Indo-Caribbean individuals that were interviewed, all of them have experienced worshipping, praying, and conducting rituals at the beach for a majority of their lives. Indo-Caribbean Hindu organizations gave us the names and contact information of as many Indo-Caribbean Hindu temples in the Borough of Queens. Interviewees were selected by contacting these *Sanataan* and *Shakti* temples to see if anyone was available to speak about worshipping practices at the beaches. After contacting these temples, a list of individuals who frequently pray at the beaches and a list of community leaders were given. It should be acknowledged that this study had an uneven gender distribution of interviewees (3 women vs. 6 men). The reason for this is due to cultural

norms within the community, it was simpler contacting and meeting with men than conducting interviews with women.

In addition to the interviews mentioned above, one pandit (*Sanataan* priest) from Chennai, India was also interviewed (man). One worker from NPS and one community organizer from Jamaica Bay were interviewed (2 men). Obtaining further interviews with individuals from NPS, NYC DPR, and

⁹ *Sanataan* devotees are more fully attentive and adherers to the Vedanta scriptures.

¹⁰ *Shakti* devotees are more attentive to the later Puranic scriptures and oriented more overtly to *bhakti* (devotion).

MTA were difficult. There was repeated hesitancy to authorize and participate in the interview process from government entities. Also, there were transitions in some departments which made it difficult to find time to discuss. We made sure to contact via email and phone to department heads at NPS, NYC DPR, and MTA to gather any information on these worshipping areas in Jamaica Bay and management plans for the beaches.

Data Collection

There were three intervention strategies we used for our exploratory research: interviews, a survey, and observable data. Interviews were conducted with Indo-Caribbean Hindu individuals and leaders from organizations looking to transform and reeducate traditional water worshipping practices. By comparison, the survey was a diverse conglomeration of many Indo-Caribbean individuals. Survey data was intended to substantiate claims from interviewees.

Interviews were conducted either in-person or over the phone. These interviews were semi-structured. The suggested list of questions can be found in the [appendix](#) of this document. Individuals who participated in the interviews were contacted via Indo-Caribbean Hindu organizations or temples. Interviews were recorded on a recording device. They were then downloaded to a closed and locked network. Interviews were then transcribed to word documents and then they were locked in a closed folder.

Quantitative data was developed on Qualtrics. Mass circulation of this survey was done via social media. This process was a snowball effect – gathering as many participants as possible through these social media platforms. Questions for this survey included four major sections: general religious beliefs, worshipping at Jamaica Bay, environmental attitudes, and demographics. A copy of this survey can also be found in the [appendix](#).

Last, observable data was based on visits to each of the beaches more than 25 times from May 22nd, 2018 until August 19th, 2018. Photos of the beaches, surrounding areas, and contents left by worshippers of various faiths and recreational users were taken. Detailed ethnographic notes were taken after trips to the beaches and community events.

Analysis

For this exploratory case study, analyses were done on qualitative data (semi-structured interviews), observable data based on participation (invitations to religious events, temples, etc.), and quantitative data. Qualitative data was analyzed across emergent themes among interviewees. Coding was based on popular phrases or words that were commonly used throughout the interviews. After identifying these words and phrases, the context in which these expressions were conveyed was examined. These expressions were then placed in larger themes described in the discussion section of this paper.

As for the quantitative study, all answers were transferred to Microsoft Excel. The total number of surveys completed was 127; however, 2 of these were “I do not consent”¹¹ and 9 surveys were below 4%¹² completion – these surveys were excluded from the analysis. Moreover, 28 of these surveys

¹¹ “I do not consent” submissions were not included because these individuals did not participate further from this initial question.

¹² 4% completion implies that the individual completed 3 – 4 questions out of 57 questions.

were outside of the New York Metropolitan area based on the IP address. These surveys were also not included in the analysis, because this project was aimed to understand local impacts on the area. Therefore, analyses were limited to 88 participants. All correlations were done in R-software (R Core Team, 2013). Due to the exploratory nature of this study, we correlated the majority of the survey questions to understand patterns and trends in the data. More rigorous statistical analysis has not yet been completed. It is important to point out that correlations and further statistical analysis are not based on a random sample set.

After observable data was collected, weekly debriefs with USFS research partners were also conducted to discuss these notes. Temples and other religious and spiritual events were documented and then synthesized based on our observations. These observations were primarily to have a solid background of cultural elements of the community in order to justly interpret and communicate competently with Hindu temples, leaders, and community members in a well-intentioned manner.

Discussion

Returning to the main question of what values drive these individuals and organizations, without compromising their spiritual vitality and devotion, to actively invoke environmental stewardship as a form of their spiritual experiences at Jamaica Bay is the basis of the following discussion section. Based on the qualitative data collected, first, people are driven by the spiritual experience within their denominations to commune at the water. This first aspect emphasizes the feminine divinity which is the source of life. Second, considering the individuals and organizations engaging in conversations to environmentally protect these areas, there are thematic parallels based on the spiritual experience undertaken at the waters of Jamaica Bay. Correspondingly, there are environmental values embedded and informed by the spiritual experience for these individuals and organization missions – the elements to this topic are one's relationship to place, a heightened sense of environmental hazards/perceptions, spiritually-driven environmental participation, and knowledge exchange. In discussion of these emergent themes, correlations from quantitative data will be included to deliver general information on the theme being presented.

Spiritual Experience at Jamaica Bay

As a simplified question to this connection at Jamaica Bay, we ask, how are people connecting to Jamaica Bay? In short, this question could be answered in various ways depending on the community – in general, the Indo-Caribbean Hindu community connects by worshipping, praying, healing, and manifesting their deities. From our survey and interviews, we outline our findings from these responses and use anecdotal historical information to confirm these findings. Before our findings are introduced, it is important to understand the cultural, religious, and historical background of this community to fully acknowledge and understand the spiritual resilience and vitality that has persisted.

Cultural, Religious, and Historical Background

In 1838, after the abolishment of slavery in Britain, to fund the growing sugarcane plantations in the British Caribbean colonies, the British established an indentured servitude system in which forcibly removed Indians to work in the Caribbean territories under vague labor agreements (Younger, 2010). This form of indentured slavery continued until 1917. With the influx of Indian communities in countries such as Guyana, Trinidad, and Suriname, these Indian communities brought with them their sense of home in the form of traditions, cultures, religions, and ecologies (Verma, 2008). Indo-Caribbean communities exemplified their resilience by adapting and transforming to this new

environment – re-articulating their religion to inevitably reflect a new religious ecology. Surrounded by the *Kali Pani* (Black Waters), the ancestral home was a long way, yet the power of beliefs sustained, until one incident occurred in Guyana which changed the religious landscape (Mahabir, 2010). Jamsie Nadioo, a prominent *Shakti* priest from Guyana, orated this story to Stephanides in the 1980s, it tells the emergence of the Mother coming to her children (Stephanides & Singh, 2000). The excerpt below is a translation of the story from Naidoo:

“The people who came from India brought the book with them. They came to Albion Estate as ‘bound coolies’ and worked six days a week. One or maybe two months after they arrived, one of the children became sick and no doctor could find the remedy. When they were not working on Sunday, they all went to the river bank to chant to the Mother Goddess. They prayed to Mother Ganges:

‘Divine Mother Ganges, we left India and came so far. We came to a different country and we have problems. Will you please listen to our prayers and shower us with your blessings. Oh Mother Ganges, please come to us. We have problems.’

Then Mother Ganges came, and one of the gurus began to read the mantra from the Mariamma Talatu and one of them became ecstatic with her presence. Mother entered his body and everybody prostrated themselves before her and asked her:

‘Divine Mother, can you tell us what is wrong?’

‘You have all forgotten me and you have neglected my worship, so I made this child sick. Now, go to a clean place where there are plenty of cattle, and make my temple there and pray to Mother Kali. Get a bucket of water with turmeric, neem leaves, and flowers, bathe the child with it, and the sickness will pass away.’

They did so and the child got well. They then promised to worship the Mother from that time on. That is how *puja* came to this country.”

This ancestral anecdote is one that is retold today in many *Shakti* temples. The memory of worshipping at the waterfronts of the powerful and sacred rivers in India, such as the Ganga, are realized and stimulated by these Hindu communities, but the healing effects of the Mother from this anecdote created a critical moment in the shaping of how water worship remains an intimate process for the Indo-Caribbean Hindu community.

In the late 1960s and early 1970s, after immigration reform in the United States, which made it relatively easier for immigrants to settle in the United States, there was a migration north from the Caribbean (Roopnarine, 2003). At this point, Indo-Caribbean communities began settling in the borough of Queens in New York, predominantly Richmond Hill, Ozone Park, and Jamaica. As twice-migrants, the divine reality that existed for these Hindu communities in the natural world accompanied them (Min, 2013). In New York City, the connection to the supreme, as stated from the data, one could worship at any body of water, with the notion that all bodies of water are connected – “I believe that one body of water on this Earth that flows through all rivers, seas and oceans. I believe all bodies of water is sacred, without it, we won't be able to live.” This quote is emphasized from our survey data where 30 out of 51 individuals believe Jamaica Bay is sacred. Waterways become a proxy for the sacred Ganga river based on the interconnectivity of flowing

water. This ancestral lineage has persisted and culminated in distinct expressions and direct experiences that have traveled across oceans and lands.

Worshipping, Communing, and Healing

“The Ganga Maa is in my heart, the purity of the divine Mother is in my heart, and all of the Devatas and Devis, Christ, and Allah, they’re all in my heart. I could just close my eyes and be anywhere in the world.”

For many of those interviewed, when asked how long they have been coming to the beaches to worship, they stated that they have been coming as long as they can remember. This pattern is one that runs deep within the devoted community – the water at Jamaica Bay is a spiritual liquid that contains the ritual memory of ancestral traditions. Ways of worshipping at the beach vary from devotee to devotee – arguably each individual *puja* that is performed is unique. At other times, larger groups will gather at the water to perform for special ceremonial occasions such as *Visarjan*¹³, *Durga puja*¹⁴, or *Karagam puja*¹⁵. Another aspect of these events are filial events, *sanskaars* which are Hindu ritual celebrations of life, performed from birth to death. These events can hold special significance in one’s life. These reoccurring ceremonies enacted at the waterways of Jamaica Bay speak to the way this religious ecology has grounded and oriented devotees for years.

One unique feature is the religious demographics in the community. Two forms of worship dominate this community – *Sanataaan* and *Shakti* worship. Both of these forms of worship follow the Vedic texts (Hindu scriptures). It is not to say that there is not overlap between these groups – many people subscribe to certain rituals from both worships; however, there are worshippers who strictly adhere only to *Sanataaan* or *Shakti* worship.

Strict *Sanataaan* worship conforms to the Vedanta scriptures and the deities within those texts. *Sanataaan* worship could be simplified as being more of a symbolic semblance of the pantheon of deities within the Vedas. For example, when *Sanataaan* worshippers commune at the beaches, mantras will be read and there is a symbolic offering of items to the water – fruits, flowers, and other small sacred articles.

In *Shaktiism*, which also includes Vedic-related deities, it also incorporates South Indian folk deities (Mariamma, Kateri, Sangili Karuppan, i.e.); and for some *Shakti* temples in Queens, they include a wide range of spiritual figures such as the prophet Mohammed, the prophet Jesus, and Buddha. What distinguishes *Shaktiism* from *Sanataaan* worship is the centrality of the Mother – the female energy of the Mother, particularly Mother Kali. As in the anecdote from *Pujari* (*Shakti* priest) Naidoo, the strong sense of the Mother manifesting on the beach at that moment was a tale of the nascent of *Shaktiism* in the Caribbean. In addition, manifestation of the deity in the body of a human is a significant feature in *Shakti* worship. In a *Shakti* worship at the beach, *tappu* drums (South Indian snare drums) will beat fiercely while rituals are performed to guide the deity into the human vessel – blessed coconut milk, turmeric, and ocean water are mixed to provide a concoction of energetic power which is poured over the deity’s head to stay connected to the vessel. At this point the

¹³ *Visarjan*: a worship of Lord Ganesh where his image is immersed in water.

¹⁴ *Durga puja*, a worship in late October to commemorate the defeat of evil by Goddess Durga.

¹⁵ *Karagam puja*, a South Indian worship where the energy of Mother Kali is harnessed from the water and brought throughout the community for healing purposes.

devotees, one-by-one approach the divine and ask for guidance and healing; this interaction is known as “looking after.”

Natural Resource: The Mother

“[Mother to a devotee:] *My child, I am always one step ahead of you.*”

The image of the Mother takes various personal forms for devotees, just as the Mother, herself takes various spiritual forms. One may hear her name as Mariamma – which is the South Indian folk goddess. It is believed that the characterization of Mariamma gave rise to Mother Kali (McDermott & Kripal, 2003). Therefore, there is the tradition of conceptualizing both of these goddesses as one; and then, the other forms (Ganga and Kateri) radiate from the centrality of Mariamma (Kali). When asked, “which deities do you pray to?” in the questionnaire, respondents answered with a multitude of deities – Mother Ganga, being the most frequently answered, followed by Mother Kateri, Kali, Shiva, and Sangili Karuppan.

A popular form of the Mother that takes shape in *Sanataán* and *Shakti* worship is Mother Ganga. Mother Ganga is the presiding deity over the Ganga River in India (Chapple & Tucker, 2000) – her symbolic presence is encapsulated in the waters at Jamaica Bay. She is known as the healer of blockages, sustainer of life, and a force of absolute purity. Water is an aspect of Mother Ganga’s absolute purity – in this way, the water is a purifying force for the devotee as well. This purification for the devotee takes shape in cleansing oneself with the water. In *Sanataán* worship, common offerings to Mother Ganga include items from *pujas* or by-products from prior *pujas* – these items (ex. *havan* ritual can include any of the following: seeds, incense, ghee (clarified butter), milk, or curd) cannot be disposed of in the trash; therefore, these *puja* items are taken to the waterfronts at Jamaica Bay.

Apart from *Sanataán* worship, a popular *Shakti* manifestation of the Mother at the waters is in the form of Mother Kateri, also referred to as the “Little Sister.” Mother Kateri is depicted as black, because she is able to penetrate the deepest darkest places of a human being. For illnesses within a devotee, Mother Kateri is usually consulted to cure these impurities.

Another form which appears at the waters in the *Shakti* tradition is Sangani Baba or Da Master (Sangili Karuppan, known as his South Indian name). Sangani Baba is not a form of the Mother, but he is regularly evoked at the beaches. Sangani Baba is another folk deity that watches over the “boundaries.” He protects his devotees as an older brother. Sangani is a “strong” man and he is depicted yielding a sword and a chain.

Nonetheless, when invoking deities in the physical or symbolic sense for devotees, there is an understanding that the direct link to the supreme, in any form, takes place at the waters. The devotional pilgrimages either daily, monthly, or yearly are based on an intimate cause and effect relationship with the deity. Devotees share with the deities what is causing them pain in their lives, either in the symbolical or manifested (physical) form of the deity. The action of communicating with the deity through *pujas*, prayers, or bathing elicit a spiritual need fulfilled in the urban environment (Svendsen, Campbell, & McMillen, 2016). From the questionnaire, participants mentioned a variety of gains from the divine, which include: blessings, inspiration, protection, peace, success, happiness and enlightenment. For example, Mother Ganga is represented in the Indo-

Caribbean Hindu community as a goddess of fertility. For devotees wishing to conceive, prayers to Mother Ganga bring the hope that conception will occur. In a broader sense of this relationship, irrespective of religion or spiritual pathway, there is a hopeful relationship based on the religious cosmology to which people subscribe. It cannot be understated the healing properties that are stimulated by these manifestations at the beaches, but there is also a relationship component that accompanies the bond formed by devotee and deity, that is motherly love. This relationship takes the form of “the Mother” which illustrates the filial reciprocity that is being developed. The Mother in all senses is an all-powerful entity that provides strength, guidance, and healing.

Environmental Values informed by the Spiritual Experience

Based on these spiritual experiences encountered at the waters in Jamaica Bay, the individuals and organization leaders within the Indo-Caribbean community are actively attempting to educate and rearticulate a new sense of understanding and interacting with their religious ecology. With the notion of the natural elements already being incorporated into the spiritual experience, this aforementioned group is taking it a step further to discuss and merge environmental accountability in terms of their spiritual beliefs. These environmentally-driven spiritual values align devotees to become active environmental stewards in a more centered and grounded sense of the term. The obligation of environmental stewardship encircles the obligation to the Earth and the Universe enriched by a religious cosmology and beliefs that uphold it. From the qualitative data, four elements of these environmental transformations are highlighted below.

Elements to Environmental Transformations

People-Place Relationship

“I want them to know a lot of us West Indians are doing this damage, there are West Indians who are trying to clean it up, I don’t want us to be viewed in any which way that we are bad people.”

The importance of the waters is spiritually valuable, yet, the cultural keystone place, itself for these worshippers is important as well. There is a sense of ownership for Jamaica Bay for devotees based on the spiritual experience – for these transforming individuals and organizations, they emphasize the historical legacy and resilience of worshipping at the waters in the Caribbean and in Queens, and most importantly the future of worshipping at these religious ecologies (McMillen, Campbell, Svendsen, & Reynolds, 2016). There is a strong sense of love and respect for the area, as one individual expressed, “I want mainly, I want to see the beach cleaned because of the religious and spiritual and emotional feelings I have towards it.” This strong sense of people-place relationship gives way to how devotees shape their experience by understanding the cultural capital that has been received and given in these spaces.

Ownership over one’s community, traditions, and consequently, sacred items that are left are also a part of this religious ecology. In the questionnaire, when asked about the most serious environmental issues at the beach, respondents mentioned the religious items being left at the beach was one major environmental issue. For many trying to spiritually and environmentally transform, there is a larger discussion around communal transgressions at the beaches. There is a sense of ownership and guardianship over the sacred items being left because the items are a part of the community. It is an accountability of the microcosm for the macrocosm – a sentiment of accountably for one’s own sacred space, people, and sacred items. As one *pujari* mentioned the

ownership they feel they have over their temple overflows to the worships at the beaches which reflect their values, “But now, you know it’s my people, so I make sure that they pick up after themselves, I’m very strict on it now...” This sense of guardianship over one’s congregation connects to the environmental attitudes this *pujari* holds to ensure that this place of worship remains free of items. The individuals and organizations interviewed focus on the sheer importance of their worshipping space – a religious ecology where their grandparents and parents worshipped. There is an ancestral tie to this space that must not be forgotten, must be respected and sustained.

Heightened Sense of Environmental Hazards/Perceptions

“People don’t know these things and I think with communication and awareness, then they’ll realize the effect that they’re having on the environment. But they are thinking, oh, my little bit of, my one yard of cloth or whatever, what damage can it do?”

From the interviews gathered, there were a number of environmental perceptions of the effects sacred items and general pollution had on flora and fauna. For instance, one thought is that *prasad*, a religious offering, which can be in the form of rice, fruits, or other blessed foods given to the water eventually become food for wildlife at Jamaica Bay. For these devotees, this act of giving forth these blessed offerings are, in fact, feeding and nourishing the Earth and its creatures. Whereas, some devotees believe that leaving any food item at the waters disrupts the ecological cycle for flora and fauna due to the pesticides and other residual chemicals on these foods. This sets up a contentious issue where there is a spectrum of what can and cannot be left at the beaches. Regardless of this spectrum, there is an intrinsic obligation to nature that is heightened by the way animals are treated at the beaches. From our questionnaire, a number of respondents wrote about leaving items in the water and leaving them for the animals. The answers to the question “what do you do with items after worshipping on the beaches?” received mixed answers – either leaving some items or not leaving items at all on the beaches. Individuals and organizations interviewed say not to leave items because it hurts the ecosystem – there are good intentions on both parts, but with the sub-group, they strive to educate that the good intention placed at the waters is good enough – the physical act of feeding these animals is not necessary.

Another aspect is the general issue of pollution, one individual expressed coming to worship one day and then seeing that the same garbage from the following week was left there. It was a moment for this devotee to begin thinking of the impacts of slow-accumulation. Another devotee expressed similar thoughts that if everyone brought a sacred item one weekend – the cumulative impact on the beach would compromise the ecosystem.

There is a strong correlation between the sanctity of Jamaica Bay and perceived pollutant levels gathered from our survey. There are conflicting perceptions of deification and defilement at the waterways. Understanding this dynamic split equips groups within the community to use this information as a means to foster discussions on the accumulation of items and the relationship between being sacred and polluted (Sachdeva, 2016).

Spiritually-driven Environmental Participation

“Because you’re at the water, the Mother is right next to you. Pray to her while you’re doing these things, certain things that you’re picking up - just pray to her while you’re doing it.”

For these individuals and organizations, a large part of their work has been around spiritually-driven environmental participation. In this religious cosmology, everyone is endowed with their own deity inside of themselves. When communing at the beach, a devotee acknowledging a deity is a greeting of one's own inner ecology with that of the religious ecology. During this greeting, if environmental efforts are undertaken at the beaches, the devotee is doing a service on behalf of the deity and the deity's divine Earthly creations. Consequently, the devotee is also benefitting because their own spirit is gaining fulfillment by providing a devoted love to the deity.

From one worshipper, this sentiment was beautifully captured, "You see the Mother, you see the ocean, you're looking for this truth, you have to find it - but without realizing it, it's in you." It has been a way of accessing a new pathway of guiding other devotees to partake in caring for the environment as a part of spiritual devotion. The sense of *bhakti*, which is "devotion to a god in the Hindu tradition. This devotion takes various forms, emotional outpouring in song or ecstatic dance, literary production, or exchange with images of a deity" (Grim & Tucker, 2014). It evokes the reciprocity of the Mother-child relationship where the Mother looks after the child and the child looks after the Mother. When environmental outreach programs are completed, such as cleaning the beaches, they incite the symbolic acknowledgement of appreciation from the Mother for having done a service unto her, the Earth, and oneself. These individuals and organizations urge devotees to trust based on the notion that the divine wants the worshipping area clean. This trust also extends to respecting the pantheon of deities through respecting nature.

Seva, defined as a "loving service," in this context, is an environmental service unto many (Haberman, 2006). As one devotee described, "...we worship Mother Earth, we worship Mother Ganga, these are elements in our environment and we, if we are true Hindus, we should be respecting our environment, in the truest sense – not just in words but in action." A larger and more encompassing environmental take on *bhakti* and *seva* are placed within the discussion – as one individual had described, "I say devotion in motion. I let that be my way of pray – active worship. I feel like that purpose is higher." These feelings of environmental stewardship are spiritually-driven to the extent that worship and environmental stewardship for these sub-groups become one in the same. All of these actions taken to transform, are reminiscent of the duty given by the divine to be a caretaker of the Earth – we as guardians, protectors, and advocates of the Earth. In this case, the spiritual experience gives rise to the larger cosmologically-driven environmental participation that occurs for this community.

Knowledge Exchange

"I mean Mother Ganga knows your mind, she knows your heart, even before you're offering she knows your clean mind and heart. You really don't need to leave these offerings there."

This element of change challenges the status quo by reimagining the deities. There have been discussions in these communities of reworking how deities are viewed and perceived. For example, as one *Shakti* worshipper explained the connection between Mother Ganga taking various divine forms at the beach and the various molecular forms she can also take – H₂O: liquid, solid, and gas. With this reinterpretation, there is a reemergence of the Mother and her direct being as water. This perspective could reformulate how water, in general, as a healing power, must also be respected and cleaned in all forms. There is a new relationship created whereby the spiritual entity of Mother

Ganga, not only resides in the water, but she, herself, is the water. This reworking can take shape in how devotees perceive bequeathing items – rather than offering tangible items to the water (Mother Ganga) and harming the water (Mother Ganga), offering an intangible “clean mind” could be sufficient devotion. In the above example, there is a blending of the scientific and Hindu cosmology that is shared to increase this convergence of the two cosmologies.

Knowledge exchange also comes in the form of pamphlets and social media. As for Sadhana’s approach, they developed comprehensive handouts to share with both worshippers and NPS staff. These pamphlets, found in the [appendix](#), highlight what should and should not be left at the beach. Not only are these pamphlets given to devotees that come to the beach, but Sadhana has been delivering this information to temple congregations as well. United Madrassi Association has been using social media videos as a means of showing what items are left at the beach and how these sacred items can negatively impact the ecosystem and beach users. Thousands of viewers have watched these videos and it sparks hundreds of comments. These two strategies are gaining public attention by creating discussion on the issues that are happening at the beaches. These approaches enlighten people on the impacts of leaving items.

Environmental Values

“So it’s not only a Hindu issue, it’s a human issue, it’s a society issue, it’s a Jamaica Bay issue, Jamaica Bay is made up of everybody, not only Hindus.”

The Hindu devotees in the Indo-Caribbean community have delivered an important lesson for our planetary community – how do we form a relationship with nature? Through *bhakti* and *seva*, there is an obligation to reciprocally commune with the deities and the environment. This level of environmental commitment fostered by the spiritual relationship is so closely woven together, especially in an urban cityscape such as New York. There is an urgency for all communities to become accountable, devoted, and serve with a specific purpose. These exact words may not be the same, but the values of responsibility, loyalty, and volunteerism are becoming entrenched within the Indo-Caribbean community in terms of the spiritual relationship previously established. How can these values be placed on a much larger context for the macrocosm of cities? When we consider environmental stewardship, are there values from a sacred reality that can be brought into non-secular communities? Naturally, the intrinsic feelings one may have for the environment can be sacred.

Opportunities for further research

Present studies have focused on migration patterns, *Shakti* (Kali) worship, and cultural attachments to India within the Indo-Caribbean community. However, there is a lack of research on environmental attachments within the unique spiritual dimension of this community, given their close ties with nature. Further research for community groups, NGOs, and government institutions to utilize in their efforts to protect worshipping spaces and the ecosystem would include (a) a quantitative assessment of definitively Hindu items bequeathed in these areas compared to general litter left at the beach. The comparison of the number of sacred items versus general litter may evoke discussions on the social patterns that threaten new or black/brown communities for already-existing problems perpetuated by older communities; (b) a larger investigation of other spiritual systems engaged at Jamaica Bay and their environmental attitudes for the Bay – some of these spiritual systems include: voodooism, hoodooism, Shango Baptist, and Spiritual Baptist; (c) another

exploration with Indo-Caribbean individuals and organizations in Canada, Florida, and California. From this research other groups in the locations mentioned above have expressed the necessity for community-based structures to promote environmental agendas due to worshipping practices at waterbodies.

Conclusion

This exploratory study demonstrates that there are shared values among a sub-section of Indo-Caribbean individuals and organizations. These groups are looking to merge the environmental intuition along with the prevailing spiritual vitality at the waterfronts at Jamaica Bay, Queens. These environmentally-inspired values are being kindled amidst temples, personal discussions, and over social media. Many of these values are outlined in this study, yet personal and familial values for these water worshipping practices transcend this study – this study intends to understand more intimate relationships with nature in a religious ecology. Reshaping and re-articulating environmental values within a spiritual-context, where nature is already worshipped, is one route for environmental promotion, like in the case of Indo-Caribbean Hindu devotees. However, this path speaks to the alternative – for those who are environmentally-steeped in science, where does the spiritual relationship, like the one in which many Indo-Caribbean devotees inherit and live, reside among people outside of the community? This exploratory study opens doors to understanding the intersections of science and spirit. For some Indo-Caribbean Hindu devotees the convergence of scientific sensibilities and the Hindu cosmology take form in unison at Jamaica Bay, Queens, which inspires others to commune with nature in a more sustainable manner.

Appendix

Key Informant Interview Questions

General Questions

What is the connection between your community and <Body of water, either Jamaica Bay or Flushing Bay>?

Who uses Jamaica Bay?

What is the purpose of Jamaica Bay?

Have you personally conducted rituals by the water, here in New York or elsewhere?

How often do you visit this waterbody?

Why do you pray at the beach?

What is the importance of praying at these beaches?

Is it your personal devotion?

If yes, what is the significance of conducting rituals by the water?

Do you visit the waterbody for any purposes other than conducting rituals (e.g. recreation, fishing)?

Significance of this body of water?

Do you think that there is any relationship between the uses of the bay here in New York and the Ganga River in India?

Do you believe the waters of <Jamaica Bay or Flushing Bay> are sacred?

What types of relationships are you building at Jamaica Bay?

Positive, negative, neutral relationships?

With deities, family, or friends?

Does your priest suggest or require you to pray at the beach? When you perform worships on the water in Jamaica Bay, what manifestations are you trying to evoke?

Are there certain items that you use to evoke certain deities?

Are there general prayers that are done regularly at the beach?

Have you ever witnessed any divine manifestations at Jamaica Bay or elsewhere?

Do worshippers have to prepare before coming into contact with the water at Jamaica Bay?

What do you need to prepare before darshan at the Bay?

What do you need to do after darshan at the Bay?

Do you seek guidance or truth from praying at Jamaica Bay?

Are there forms of creation and destruction that occur after you pray?

If you don't pray at the Bay, will there be divine dissatisfaction?

Water is an important aspect to prayers in West Indian Hindu communities. Are there other areas in and around Jamaica Bay that are just as sacred?

Who is Maa Ganga for you?

Environmental Questions

Have you heard or observed pollution in the water around New York, such as at Jamaica Bay?

If yes: What are your thoughts on it?

What role might Hindu practices play in either improving or worsening this pollution?

By leaving items at the beaches, do you believe these items are, in any way, environmentally beneficial for the area?

If yes, what items benefit the environment?

If no, how are these items not benefiting the environment?

Many groups participate in clean-ups, do you believe there are repercussions spiritually or physically by removing these items from the beach?

If yes, what are these repercussions?

If no, why do you think someone would be apprehensive to remove these items?

If the Parks Department is upset with items being left on the beaches, how do you believe they should move forward? Do you believe that the Parks Service have a problem with items being left at the beach? Are there any local groups or neighborhoods that have a problem with this?

Stewardship Questions

Why do you support or participate in the monthly cleanups at Jamaica Bay?

How do you see your role as a steward, or in increasing the engagement of the broader community in environmental practices?

What does the word “stewardship” mean to you?

Are you involved in any other groups that help take care of the environment?

If yes, please name them – what year did you get involved?

If no, any particular reason why not?

Are there any other social causes that you care deeply about?

Sacred Connections in Jamaica Bay - SURVEY

The goal of this survey is to understand how religious beliefs affect environmental motivations and behaviors. In particular, we are interested in looking at how people are using Jamaica Bay and other New York City waterways for religious purposes.

Participation in this study is completely voluntary. You are free to decline participation, end participation at any time for any reason, or refuse to answer any individual question(s). All of your responses will be held in confidence. No one will be retaining any personally identifiable information. A link to the full consent form is located [here](#).

If you have any questions about the study or study procedures, you may contact me, Sonya Sachdeva or Zach Garcia, at sonyasachdeva@fs.fed.us or zach.garcia@yale.edu.

By clicking "I consent," you are agreeing to participate in this survey. By clicking "I do not consent," you will exit the survey.

I consent.-I do not consent.

Block: General Religious Beliefs

Intro In the first section of this survey, we will ask you a few questions about your religious beliefs. Feel free to skip any questions you do not wish to answer.

Q1: Do you consider yourself to be religious?

Yes-No

Q2 Do you believe in God?

Yes-Uncertain-No

Q3: Do you pray?

Yes-No

Q4: How often do you pray at home?

Never-Daily-Weekly-Monthly-Yearly

Q5: How often do you visit a place of worship?

Never-Daily-Weekly-Monthly-Yearly

Q6: Please specify place(s) of worship:_____

Q7: Do you belong to a particular sect/group/sampradaya?

(e.g. Sanataana, Shakti, Arya Samaj, Hare Krishna, etc.)

Q8: Are there any deities that are particularly meaningful to you and your family?

Yes-Uncertain-No

Q9: Who are these deities? (e.g. Vishnu, Shiva, Durga, Kali, Ganesh, Hanuman, etc.)
Feel free to list in any order.

Q10: Do you have an Isht deity that you pray to?
Yes-Uncertain-No

Q11: Who is your Isht deity?

Q12: Do you consider yourself to be superstitious?
Definitely superstitious-Superstitious-Uncertain-Not superstitious-Definitely not superstitious

Q13: Do you believe in religious or spiritual magic? (e.g. jadoo, nazar, tantrism, etc.)
Definitely yes-Yes-Uncertain-No-Definitely no

Block: Worship at Jamaica Bay

Intro In the second section of this survey, we will ask you a few questions about worshipping at or around Jamaica Bay.
Feel free to skip any questions you do not wish to answer.

Q14: Have you ever prayed on the beaches around Jamaica Bay?
Yes-Uncertain-No

Q15: How often do you worship in these areas?
Never-Daily-Sometimes-Monthly-Yearly

Q16: Which deities do you pray to at the beaches?
Feel free to list in any order.

Q17: What do you hope to achieve from these worships?

Q18: Do you feel comfortable worshipping at the waterfront?
Yes-Uncertain-No-Feel free to explain your answer further here: _____

Q19: Do your prayers or rituals require you to leave items at the waterfront?
Yes-Uncertain-No-Feel free to explain your answer further here: _____

Q20: What items do you use to pray at the beaches?

Q21: Who are these items for?

Q22: What do you do with items after worshipping on the beaches?

Q23: Do you agree that people should remove religious/spiritual items from the beaches?
Strongly disagree-Disagree-Neither agree nor disagree-Agree-Strongly agree
Feel free to explain your answer further here: _____

Q24: How sacred is Jamaica Bay?
Very sacred-Sacred-Neutral-Not sacred-Not very sacred

Q25: How sacred do you think the water is at Jamaica Bay?
Very sacred-Sacred-Neutral-Not sacred-Not very sacred

Q26: Is the presence of Mother Ganga apparent in Jamaica Bay?
Yes-Uncertain-No-Feel free to explain your answer further here: _____

Q27: Do you believe the water at Jamaica Bay is the same water in the Ganges River?
Yes-Uncertain-No-Feel free to explain your answer further here: _____

Q28: If you were to move, would the nearest body of water work for your prayers?

Yes-Uncertain-No-Feel free to explain your answer further here: _____

Q29: Have you ever witnessed any divine manifestations at Jamaica Bay?

Yes-Not sure-No-Feel free to explain your answer further here: _____

Q30: Do you feel that you need to provide a religious service to the bay?

Strongly disagree-Disagree-Neither agree nor disagree-Agree-Strongly agree

Q31: Are all rituals performed at Jamaica Bay done with positive intentions?

Always-Sometimes-Never-Feel free to explain your answer further here: _____

Q32: How devoted do you consider yourself to be to Jamaica Bay?

Very devoted-Devoted-Neutral-Not devoted-Not very devoted

Q33: For your religious/spiritual worships, do you believe that the beaches need to be clean?

Strongly disagree-Disagree-Neither agree nor disagree-Agree-Strongly agree

Block: Environmental Attitudes

Intro In the third section of this survey, we will ask you a few general questions about the environment. Feel free to skip any questions you do not wish to answer.

Q34: Describe your relationship with the environment.

Very positive relationship-Positive relationship-Neutral relationship-Negative relationship-Very negative relationship

Q35: Do you feel you are living in harmony with the environment?

Yes-Uncertain-No-Feel free to explain your answer further here: _____

Q36: What do you think about the current ecological conditions at the beaches in or around Jamaica Bay?

Very clean-Clean-Neutral-Not clean-Not very clean

Q37: How concerned are you for the ecological conditions at the beaches?

Very concerned-Concerned-Neutral-Not concerned-Not very concerned

Q38: What do you think are the most serious environmental issues at the beaches?

Q39: Do you think that we, as humans, need to be ecologically responsible?

Yes-Uncertain-No

Q40: Do you believe leaving items at the beaches, in and around Jamaica Bay, affects the environment?

Yes-Uncertain-No

Q41: In what ways do you believe it affects the environment?

Q42: Have you heard of people saying the beaches around Jamaica Bay are polluted?

Yes-Uncertain-No

Q43: Do you think the beaches around Jamaica Bay are polluted?

Yes-Uncertain-No-Feel free to explain your answer further here: _____

Q44: How clean do you think the water is at Jamaica Bay?

Very clean-Clean-Neutral-Not clean-Not very clean

Q45: Do park rangers effectively communicate with the Indo-Caribbean Hindu community that pray at the beaches?

Yes-Uncertain-No-Feel free to explain your answer further here: _____

Q46: Has law enforcement, not the park rangers, ever reprimanded you for praying at the beaches?

Yes-Uncertain-No

Q47: Do you feel the park rangers respect your prayers at the beaches?
Yes-Uncertain-No-Feel free to explain your answer further here: _____

Block: Demographics

This is the last section of the survey. We will ask you three brief questions.

Q49: I ethnically identify as: _____
(Guyanese, Surinamese, Trinidadian, Haitian, Fijian, Nepali, Indian, Bengali, Jamaican, Mauritian, etc.)

Q50: What is your age?
18 - 29 years old-30 - 39 years old-40 - 49 years old-50 - 59 years old-60 + years old

Q51: What is your gender?
Male-Female-Feel free to write in your gender: _____

Q52: Is there anything else you would like to add?
Please feel free to use the space below to explain further.

Thank you for your participation. Please share this survey with your social network.

Performing Eco-Friendly Pujas

A Guide from Sadhana: Coalition of Progressive Hindus



A leaf, a flower, a fruit, or water; if any of these are offered with love and devotion, I will accept them.

– Lord Krishna, Bhagavad Gita 9.26

Murthis

- Take the murthi back home after immersing it.
- See if your temple can install a tank or large tub for devotees to immerse their murthis and perform puja.
- Use murthis made entirely of **soft** clay, with no paint. These will dissolve almost immediately in the water, causing no harm.
- Use a coconut as your murthi, and when the puja is over, cook or eat the coconut as prasad.
- **Do not** place murthis or any objects which are not completely biodegradable into the bay.

Bamboo Sticks

- Use them as needed in your puja, and then take them home with you.
- Burn them in your backyard -- this will nourish your garden and will also keep mosquitoes away.
- Use them as fencing or as supports for your house and garden plants.

Fruits & Flowers

- Please use them as needed in your puja and then eat as prasad, or use to decorate your home altar.
- Even though they are technically biodegradable, the U.S. National Park Service requests that we do not place them in the water. They wash up on the beach, and the beach is then lined with rotting bananas and flowers that were likely sprayed with pesticides.

Saris and Fabrics

- Use saris and fabrics as needed in your puja, but take them home with you.
- Wash and press them the used saris, and give them to a needy or elderly person who could use them.
- Give them to Sadhana. We will find a way to get them to needy people here or in India or the Caribbean.
- **Do not** place saris and fabrics into the bay.

Diyas (Lamps)

- Use them as needed in your puja and then take them home with you, even if they are clay. Once hardened clay diyas break due to the elements, they are harmful to the living creatures of the waters and sea.
- If you want to let them float on the bay, please make sure they are made of dried leaves rather than clay.

Other Religious Items

Ghee: Donate to your temple or use to make your own diyas at home.

Agarbatti/Incense: Light them at home for prayers or as an air freshener.

Lentils & Rice: Soak them in water for two hours and feed to birds.

Sindoor, chandan, & dhoop: Bury in a dedicated space in your garden, perhaps near a special tree.

Attar: Can be used as an air freshener or for aromatherapy by placing it in diyas in your home.

If you must put offerings into the water, it is best to do so far from the shore. Anything placed into the water should be completely biodegradable, with no paint.

Join us in seva at our monthly **Project Prithvi** beach cleanups from April through November, on the first Saturday of the month at Jamaica Bay's North Channel Bridge from 10am-1pm. Garbage bags, gloves pickers, and a light lunch are always provided! If you are part of an organization or temple that would like to co-sponsor a cleanup, let us know!

Please show your devotion to Prithvi Maa (Mother Earth) by ALWAYS taking your puja materials home with you!

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