November 8, 2019

Dr. Mark Penning
Vice President, Animals, Science & Environment
The Walt Disney Company

Dear Dr. Penning,

We, the undersigned scientists and experts, are writing to express our strong concerns regarding the proposal by Disney Cruise Lines (DCL) to develop Lighthouse Point (LHP) for the operation of a cruise ship port in South Eleuthera in The Bahamas. Lighthouse Point is a unique natural site containing valuable marine habitats, rich biodiversity, and endangered coral species. The construction and operation of the port would cause irrevocable, long-term environmental, cultural, and economic harm to South Eleuthera and The Bahamas. The current project, if allowed to proceed, would undercut the Bahamian Government's international commitment to protect the oceans and their marine resources.

In May of 2008 The Bahamas officially committed to the Caribbean Challenge Initiative to conserve 20% of its marine and coastal resources by 2020. In September 2018, the Bahamas National Trust, in partnership with The Nature Conservancy, the Bahamas Reef Environment Educational Foundation, National Implementation Support Programme and other key stakeholders, released the 20 by 20 White Paper: Marine Protection Plan, which identifies 18,876 acres of ocean off of LHP as a top priority area for protected status to keep The Bahamas on track to meet their 2020 goals.

In the wake of the devastation caused by Hurricane Dorian and in the face of a rapidly changing climate, the protection of ecologically important places like Lighthouse Point and the surrounding waters is even more important and indeed urgent. It is even more clear that now is the time to place the protection of natural resources as a paramount priority. Marine Protected Areas (MPA's) have been identified as an effective and essential tool to combat climate change and its impacts (Hopkins et al, 2016). MPA's provide a vast array of benefits in the areas of mitigation and adaptation to global warming, ocean acidification, sea level rise, species redistribution, decreased oxygen availability, and more (Roberts et al, 2017). Further, as climate change makes island nations even more vulnerable to increasingly frequent and severe storms, studies have shown that areas near MPA's experience less severe impacts from natural disasters (Murti and Buyck, 2014).

As stated in a 2005 Millennium Ecosystem Assessment, "coastal and island ecosystems are among the most valuable and productive, yet, are highly threatened worldwide." In spite of LHP's proposed protected status, the Heads of Agreement that was released on March 20, 2019 outlines DCL's granted rights to Disney to negotiate a 50-year-lease on the Point's surrounding seabed and seek the permits to build a $250 million 0.6 mile long pier and onshore facilities to handle up to 20,000 cruise ship passengers per week.

A construction project of this scale in a proposed protected area clearly contradicts Disney Cruise Line's commitments to "ensuring a world where wildlife thrives and nature is treasured and protected" and to "minimizing its overall impact on the environment while encouraging and activating environmentally responsible behavior." Lighthouse Point was initially proposed as a Marine Protected Area because of its important ecological, historical, and geological features (e.g., the submerged bridge connecting Eleuthera to north Cat Island), abundant and speciose shark populations, sand/mud flats, sandy beaches, seagrass beds, patch reefs, coral reefs, and deepwater features.

Terrestrial areas on South Eleuthera contain over 200 winter resident bird species. Coastal waters of South Eleuthera provide critical habitat for a high diversity of marine mammals, including fourteen whale and dolphin species (Claridge et al., 2019). They also serve as key migration areas for populations of lemon sharks and bonefish already experiencing increasing threats from habitat alteration as a result of fisheries exploitation and shoreline development (Murchie et al., 2010; Murchie et al., 2013).

Construction and operation of the port will prompt unprecedented local levels of ship and human traffic, as well as pollution, leading to the disruption of marine habitats and displacement of organisms. Potential damage includes, but is certainly not limited to the following causes: invasive species introduction, habitat loss, behavioral changes as species are exposed to cruise ship activity, pollution from sewage dumping and runoff, coral smothering and clouding from turbidity and sedimentation, mortality from collisions, and physical destruction from human-habitat interactions (Moscovici, 2017; Carić and Mackelworth, 2014; Erftemeijer et al., 2012).

The proposed development plan outlines pier construction that is located directly on top of valuable habitats including reefs and unique geological features. These habitats contain diverse coral species, including endangered Staghorn and Elkhorn coral. Dozens of scientific studies have documented losses of up to 80% in coral cover caused by coastal development (Link). Increased concentrations of visitors would also cause irreparable damage to coral reefs from sunscreen use alone. Sunscreen ingredients promote viral infections and cause rapid bleaching

even at low concentrations in coral reefs (Danovaro et al, 2008). A World Resources Institute study has found that such reefs have significant economic value[1] - which would be diminished if construction proceeds.

In addition, the proposed pier would disrupt the movements of important marine species and (perhaps eliminate) bonefish, grouper, and snapper migrations around LHP to spawning sites on the Exuma Sound shoreline. This would certainly negatively impact the local bonefishing industry, an activity that generates over $150 million per year to the Bahamian economy, much less the local spearfishing industry for grouper and snapper.

Furthermore, construction and increased boat traffic results in the suspension of bottom sediments, which can lead to partial or complete mortality of corals that provide energy for the entire ecosystem. This level of vital habitat loss can cause widespread damage across all marine organisms and resources (Hodgson, 1989).

We strongly urge Disney to work with Bahamian citizen groups to locate a different site for their cruise port and to further the precedent of choosing and rehabilitating an already degraded site for any new cruise ship port.

We also strongly urge Disney to pursue a more sustainable development alternative for Lighthouse Point. Disney, in partnership with local organizations, should build upon the proposal put forward last year for land-based, much lower-intensity use of Lighthouse Point for research, educational, and ecotourism purposes. This alternative would avoid the major impacts of the construction and operation of a cruise ship port. It would also provide more sustainable jobs and economic opportunities for the communities in South Eleuthera, without compromising the LHP environment.

Thank you for your attention.

Sincerely,

David P. Philipp, Ph.D.*
Chair, Board of Directors, Fisheries Conservation Foundation
Principal Scientist Emeritus, Illinois Natural History Survey, University of Illinois

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[1] A World Resources Institute study on the economic value of Caribbean coral reefs noted annual net benefits of $312 million from sustainable fish production, $2.1 billion from tourism and recreation, and $0.7-2.2 billion from shoreline protection (Lauretta and Maidens, 2004). Total values for all reef-associated tourism are now estimated at over $7.9 billion of expenditure (Spalding et al., 2018).

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