



**MIAMI  
WATERKEEPER®**

DEFENDING, PROTECTING, AND PRESERVING  
MIAMI AND THE SURROUNDING WATERS  
THROUGH CITIZENS INVOLVEMENT AND  
COMMUNITY ACTION. MIAMI WATERKEEPER  
WORKS TO ENSURE SWIMMABLE, DRINKABLE,  
FISHABLE WATER FOR ALL.

March 14, 2019

**Re: The Ultra Music Festival, and the Environmental Plan**

**Dear Ultra Music Festival Organizers,**

Miami Waterkeeper is a South Florida-based 501(c)(3) dedicated to protecting our coastal environments, Biscayne Bay and the surrounding watershed through citizen involvement and community action. As scientists, advocates and park users we are extremely concerned about not only the adverse environmental impacts of holding the three-day Ultra Music Festival (“Ultra”) on Virginia Key, but the Environmental Plan developed by Ultra which purports to evaluate Ultra’s environmental impacts and to describe mitigation and remediation measures. Given the ecological value of Virginia Key and the waters surrounding it, it is imperative that Ultra and the City of Miami take action to reduce the adverse environmental impacts caused by the festival. We have included several suggestions below. Given that the proposed venues are adjacent to areas designated for wildlife protection, we are extremely concerned over its operation at the current proposed location.

We believe that that the Environmental Plan is insufficient for the following reasons:

1. It makes unwarranted, unfounded, and/or inaccurate conclusions about the impacts of the festival on ecological habitats and wildlife in the area;
2. The biological surveys carried out were completely insufficient to accurately account for the abundance and occurrence of federally and state protected species; and
3. The environmental mitigation methods proposed are insufficient to protect important habitats and species in the area.

We address these issues in more specific detail below and conclude with actions that we believe the festival organizers should take in order to come closer to compliance with applicable state and federal law and Ultra’s stated goal, set forth on page 5 of its Environmental Management and Remediation Plan (hereafter “Environmental Plan”), to “leave the Venues in either the same condition or in better condition than baseline.”



**Miami Waterkeeper**  
2103 Coral Way, 2nd Floor  
Miami, FL 33145

 305.905.0856  
[miamiwaterkeeper.org](http://miamiwaterkeeper.org)

## **The Environmental Plan Makes Unwarranted, Inaccurate, and/or Inaccurate Conclusions About the Impact of the Ultra Festival on Protected Species**

The Environmental Plan acknowledges that many species in the area are protected by both state and federal laws including, but not limited to, the Endangered Species Act, the Marine Mammal Protection Act, Florida's Marine Turtle Protection Act, Florida Manatee Sanctuary Act, and the Migratory Bird Treaty Act. However, the Plan makes unwarranted, inaccurate, and unsupported conclusions about Ultra's purported lack of harm to species protected under these laws.

Some examples include:

### Manatees

Even the limited surveys carried out identified nineteen individual manatees through inshore and offshore waters around Virginia Key (Section 3.5.7.2). Manatees are designated as threatened under the Endangered Species Act (and thus protected from harassment pursuant to the Act and implementing regulations), 16 U.S.C. § 1531 et seq., the Marine Mammal Protection Act, 16 U.S.C. § 1361 et seq., and the Florida Manatee Sanctuary Act, Fla. Stat. §379.2431(2)). Under the regulations implementing the Endangered Species Act, harassment as “an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering.” 50 C.F.R. § 17.3.

The Marine Mammal Protection Act prohibits “taking” manatees without a permit, with “take” defined by regulation to include “any [. . .] negligent or intentional act which results in disturbing or molesting a marine mammal.” Similarly, the Florida Manatee Sanctuary Act makes it unlawful to “intentionally or negligently to annoy, molest, harass, or disturb [. . .] any manatee,” with harassment defined as that “which creates the likelihood of causing an injury to a manatee by annoying it to such an extent as to disrupt normal behavioral patterns which include breeding, feeding, or sheltering.” 50 C.F.R. § 216.3.

Despite these legal requirements, the Environmental Plan itself concludes: “[a]s a result of temporary noise and light associated with the three-day Event, some individuals may leave the immediate area. However, these individuals can retreat to similar adjacent habitats if temporarily disturbed or displaced and should not miss foraging or loafing opportunities during this brief period.”<sup>1</sup> Driving manatees outside of their preferred foraging area through loud noise and light may constitute unlawful “harassment” under both Federal and state law. There is no exemption built into those laws that allow “temporary” harassment. Furthermore, scientific research has established that anthropogenic noise can disrupt manatee behavior significantly, and potentially

---

<sup>1</sup> Environmental Plan, p. 3-11.

lead to reduced ability to meet their nutritional requirements.<sup>2</sup> Finally, driving manatees out into adjacent waters with loud sounds could expose them to a higher risk of boat strikes, one of the primary causes of manatee deaths. In 2018 alone, boat strikes killed an estimated 121 manatees in Florida, a state record.<sup>3</sup>

### Crocodiles

Even Ultra's brief biological surveys for the Environmental Plan captured the presence of an American Crocodile. The American Crocodile is designated as threatened under the Endangered Species Act, and thus protected from harassment and harm. It is also protected by Fla. Stat. 379.409.<sup>4</sup> Famously timid and adverse to human contact, the Ultra festival dates lie within the American Crocodile's nesting season, and any nesting or other crocodile may face significant harassment and harm from the festival, including disrupting its normal behavior. Though the Environmental Plan states that the organizers are proposing to put crocodile "holes" in fences to allow them to move between fenced areas, this is unrealistic (and almost laughable), given crocodiles' avoidance of humans. Additionally, the fences will likely still obstruct crocodile movement between habitat because the likelihood of a crocodile locating and crossing using one of these "holes" is negligible at best.

### Sea Turtles

All species of sea turtles found in Florida waters are listed as endangered or threatened under the Endangered Species Act. Section 1.5.2.1 of the Environmental Plan, "State Regulation on Threatened and Endangered Species" states that "No 'take' of Florida state-listed species as defined under Chapter 68A-27 F.A.C. is anticipated to occur as a result of the Event." Chapter 68A-27 F.A.C. defines "take" to include not only "harass [and] harm," as well as "significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering." The term "harass" in the definition of take is an "intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding or sheltering." Virginia Key serves as an important nesting habitat for loggerhead and green sea turtles, although it is suitable nesting habitat for other sea turtle species as well.

In Section 3.5.7.2 of the Environmental Plan, the "Results" sub-section of the Biological Survey section, Ultra notes that sea turtle "nesting season does *not* begin until spring months (i.e. May)." However, according to the Florida Fish and Wildlife Commission, "there are many exceptions to

---

<sup>2</sup> Miksis-Olds & Wagner, 2011. Behavioral response of manatees to variations in environmental sound levels. *Marine Mammal Science*, 27(1):130-148.

<sup>3</sup> <https://myfwc.com/media/18227/preliminary.pdf>

<sup>4</sup> Rule 68A-27, F.A.C., defines taking to include harassment.

the rule.”<sup>5</sup> The Plan (p. 3-28) also notes that the endangered leatherback sea turtle, which nests beginning March (and which the Florida Fish and Wildlife Commission has found nesting as early as February) could possibly be found on Virginia Key. They have already reported the first leatherback nesting of the season in Florida as of this writing.

### Seaquarium Animals

While the Environmental Report notes that the Miami Seaquarium is in close proximity to the proposed Ultra venue, it does not address the impacts of noise and light to wildlife within the Seaquarium. The Seaquarium is nearly as close to the venue as the SUSTAIN Building at the University of Miami, which the Environmental Plan acknowledges may experience noise in excess of 83 decibels, including in the aquaculture breeding tanks in the building. Given its proximity, the tanks at Seaquarium may also experience similar noise levels, which could stress and harm those tanks’ inhabitants, who are unable to retreat to adjacent habitats. Included at Seaquarium are a number of federally and state protected species, including dolphins, sea turtles, sea lions, manatees, seals, and an orca whale. Sustained noise can stress marine mammals and other organisms.<sup>6</sup> The environmental plan does not include monitoring of the decibel level or stress level of these captive animals.

### Other Marine Mammals

All marine mammals are protected by the Marine Mammal Protection Act; many are also protected by the Endangered Species Act. Marine mammals are often susceptible to noise pollution.<sup>7</sup> Manatees, dolphins, porpoises, and other marine mammals inhabit the waters of Biscayne Bay and may be stressed, disoriented, or frightened by the large amounts of noise generated by Ultra.

### Birds and Other Wildlife

Virginia Key and its surrounding areas are home to numerous resident and migratory birds and other wildlife during the festival time period, many of which are endangered, threatened, or otherwise protected under state and federal law. As with the other wildlife identified, the Environmental Plan pays little attention to the effects of sound on birds or other wildlife. As an example, the Environmental Plan identified a colony of Brown Pelicans, protected under the Migratory Bird Treaty Act, approximately a mile from the venue. Though the Environmental Plan concludes they would not be disturbed due to the distance, the Plan also notes that areas even

---

<sup>5</sup> <https://myfwc.com/research/wildlife/sea-turtles/florida/faq/>. The FWC notes that Leatherbacks have been known to start nesting as early as February.

<sup>6</sup> See, e.g., National Research Council, 2003, *Ocean Noise and Marine Mammals*. National Academies Press: Washington, D.C.; Shannon et al., 2016, A synthesis of two decades of research documenting the effects of noise on wildlife. *Biological Reviews* 91:982-1005.

<sup>7</sup> See, e.g., National Research Council, 2003; Shannon et al., 2016.

further away – such as the sound receptor sites on Brickell and Brickell Key almost two miles from the Marine Stadium – will experience sounds in excess of 60 decibels even with sound mitigation (see Table 3.6.4-2). This is inherently contradictory. Moreover, the scientific literature generally finds wildlife begins reacting to noise at 40 decibels.<sup>8</sup> Due to the lack of adequate surveys, significant numbers of nesting and non-nesting bird species and other wildlife may reside on Virginia Key but remain undiscovered by Ultra’s hired biologists.

### **The Biological Surveys Carried Out by Ultra’s Contractor Were Completely Inadequate**

Despite the size of Historic Virginia Key Beach Park, the potentially impacted adjacent area, and the number of protected species found in its vicinity, there were minimal surveys conducted to determine potential impacts. Section 3.5.7 of the Environmental Plan, titled “Biological Surveys,” describes surveys conducted to establish the “occurrence and relative abundance of those species listed as Endangered, Threatened, or of Special Concern [. . .] protected by the MBTA, BGEPA, or listed by the FWC under Chapter 68A-27 F.A.C. near the site of the event.” The total sum of surveys taken were:

1. A single aerial survey carried out on December 2, 2018.
2. Two pedestrian surveys on December 6 and December 7, 2018.

This is wholly inadequate to establish the occurrence and abundance of protected species, especially given that these factors vary significantly seasonally. For example, the Environmental Plan itself identifies the following threatened or endangered species which may be found on Virginia Key during their nesting or breeding time period: (1) West Indian manatee; (2) tricolored heron; (3) reddish egret; (4) little blue heron; and (5) American crocodile. The times of day the surveys were taken were also not identified; daytime surveys could fail to indicate the presence or absence of nocturnal species altogether.

Furthermore, the one helicopter and two pedestrian surveys were conducted over a limited area of the land. The helicopter survey was conducted at “an appropriate distance [. . .] to avoid disturbance to wildlife,” suggesting that it could have missed threatened and endangered wildlife and plants that were covered by tree canopies or that were too small to see from a distance. Though the Environmental Plan states that biologists did a “pedestrian due diligence survey” on December 6 and 7, this survey did not follow the same track as the helicopter survey (Fig. 3.5.8.1) and avoided entirely wooded and hammock areas where many species would nest or reside. There remain significant parts of Virginia Key that have not been adequately surveyed.

### **The environmental mitigation methods proposed are insufficient to protect important habitats and species in the area.**

---

<sup>8</sup> See Shannon et al., 2016.

Though the Environmental Plan sets forth proposed mitigation methods to prevent damage to habitat, plants, and wildlife, these plans are poorly-defined and/or insufficient to protect the park ecosystems from 165,000 concert-goers. For example, vague references are made to security and restricted areas, but the extent of such mitigation measures are difficult to determine and raise many questions. Therefore, we request you provide the following information and undertake the following actions:

1. The Environmental Plan states marine patrol services from the Florida Fish and Wildlife Conservation Commission and the City of Miami will be provided to ensure safety and protect manatees. How many marine patrol vessels will be present? At what time periods will they be carrying out patrols? Please ensure there are sufficient marine patrol agents and vessels to protect all of the critical wildlife area.
2. Section 2.17, “General Conservation Measures,” states that there is “No beach access” but that “access to coastal dune areas [is] restricted.” What form does this restriction take? How will it be enforced? How many security personnel will be working? How will they be positioned to prevent unauthorized access to the dunes or beaches? How will Ultra prevent boaters from entering from the beaches? Please ensure there are sufficient numbers of security personnel to protect all of the dune and beach areas, as well as all other habitat outside the venue space.
3. Table 4.1, “Summary Table of Risk Mitigation,” states that Ultra will use “environmental monitors” during the setup and breakdown of the Event to address possible impacts to wildlife and plants. How many environmental monitors will be present? Why are environmental monitors only employed before and after the event, and not during? What will they be monitoring for? And how will they conduct this monitoring? Please provide that sufficient environmental monitors are deployed to ensure that any adverse impacts on wildlife are quickly identified and mitigated.
4. If adverse environmental impacts are experienced during the festival, such as protected species deaths, how will Ultra respond? Will the music acts and light shows be stopped? If not, why not? Please ensure that environmental monitors have the authority and ability to stop activities at Ultra that pose a danger to wildlife, protected vegetation, and environmental quality generally.

**Conclusion: The Environmental Plan Should be Improved in order to Address the Deficiencies Identified.**

It is clear that the Environmental Plan offered by Ultra is inadequate to meet the festival organizers’ responsibilities under state and federal law. To comply with these laws and to meet Ultra’s self-

identified goal to “leave the Venues in either the same condition or in better condition than baseline,” we urge the organizers to take the following actions:

1. Conduct significantly more surveys from the present day to the weeks following the event to identify species at risk, develop appropriate mitigation measures, and evaluate the environmental impacts caused by the festival after the fact. Surveys should include not only the venue grounds but also the areas surrounding the venues, including forested areas.
2. Employ environmental monitors, marine patrol, and security in sufficient numbers to adequately monitor the event spaces before, during, and after the event to identify environmental problems, as well as to protect the Critical Wildlife Area and fragile beach dune system.
3. Authorize environmental monitors to stop performances when necessary to protect wildlife from adverse environmental impacts.
4. Reduce noise pollution by further reducing the volume of performances, and by including more physical noise barriers.

Thank you for engaging with us and indicating a willingness to listen to and address our concerns. We appreciate your attention.



Rachel Silverstein, Ph.D.  
Executive Director and Waterkeeper  
Miami Waterkeeper  
305-905-0856

Cc:  
City of Miami Commission  
Village of Key Biscayne  
Virginia Key Advisory Board  
Key Biscayne Community Foundation  
NOAA  
FWC  
DEP