CARNIVAL GRAND BAHAMA INVESTMENTS LIMITED

GRAND PORT PROJECT

FREEPORT, GRAND BAHAMA ISLAND

PUBLIC CONSULTATION VIRTUAL TOWN HALL MEETING AUGUST 4, 2021



Prepared by



Envirologic International Ltd

and



SEPTEMBER 2021 Revision 1

CARNIVAL GRAND BAHAMA INVESTMENTS LIMTIED GRAND PORT PROJECT

FREEPORT, GRAND BAHAMA ISLAND

PUBLIC CONSULTATION VIRTUAL TOWN HALL MEETING AUGUST 4, 2021

Submitted to THE DEPARTMENT OF ENVIRONMENTAL PLANNING AND PROTECTION

Prepared by



Envirologic International Ltd

and



September 2021 Revision 1

Table of Contents

1.0	INTRODUCTION	4
PART	1. Transcript from August 4, 2021 Virtual Town Meeting	6
PART	1A. Additional Responses to August 4, 2021 Virtual Town Meeting	66
PART	2. WRITTEN QUESTIONS RECEIVED DURING AUGUST 4, 2021 VIRTUAL TOWN HALL MEETING AND RESPONSES	68
	3. WRITTEN QUESTIONS FROM PUBLIC CONSULTATION PROCESS RECEIVED BY CARNIVAL CORPORATION FROM ITE AND RESPONSES.	
	4. WRITTEN QUESTIONS RECEIVED BY THE DEPARTMENT OF ENVIRONMENTAL PLANNING AND PROTECTION FROI UBLIC CONSULTATION PROCESS.	

Appendices

Appendix 1: Tourism Economics – Technical Appendix

1.0 INTRODUCTION

This document covers the public consultation process for the Carnival Grand Bahama Investment Limited (CGBIL) project for a proposed cruise port and recreational facility in Freeport, Grand Bahama Island. The details of the project were submitted in the Environmental Impact Assessment (EIA). Environmental management of the project for both construction and operation were detailed in the Environmental Management Plan (EMP). It is universally acknowledged that the EMP is a "living document" and subject to revision based on conditions and need.

According to the Environmental Impact Assessment Regulations, 2020 there is a prescribed public consultation process outlined in paragraph 7, see below:

"7. Obligation to consult.

Upon successful completion of the application for preliminary review, the project proponent shall conduct a consultative process as specified in regulation 11, the details of the outcome of which shall be provided in any form as may be prescribed by the Director."

The Consultative process is outlined in paragraph 9.

- "9. Conduct of consultative process.
- (1) The mode and procedure of a consultative process shall be determined by the Department.
- (2) During the consultative process, the project proponent shall-
 - (a) provide detailed information-
 - (i) concerning the proposed project and the potential environmental, social, economic and cultural affects, including adverse effects as defined in the Act;
 - (ii) on any possible impacts to adjacent properties and communities to the proposed project and
 - (iii) on any significant impacts by the proposed project to adjacent properties and communities.
- (b) provide an opportunity for any public concerns to be addressed
- (c) make a written record of all concerns raised for inclusion in the EIA or EMP consultation process."

Copies of the EIA and EMP were made available to the public by placing electronic copies on the carnivalgrandport.com webpage. Hard copies of the EIA and EMP were made available at 1) Department of Environmental Planning and Protection office in Nassau 2) Grand Bahama Port Authority office in Freeport and 3) Callenders & Co office in Freeport.

To fulfill the above mentioned criteria, a virtual Town Hall Meeting was held using Zoom – Video Conferencing on August 4, 2021. The Director of the Department of Environmental Planning and Protection (DEPP) was the moderator. The meeting started at approximately 6:00 pm and ended at 8:00 pm. The panel for the developer consisted of David Candib (Vice President, Development & Operations, Global Port & Destination Development Group), Armando Corpas (Senior Director, Development & Operations, Global Port & Destination Development Group), Dr. Michael Jenkins, PhD, P.E. (Applied Technology and Management), and Lloyd Cheong (Envirologic International Ltd.) Opening remarks for Carnival Corporation were made by Giora Israel (Senior Vice President Carnival Corporation) and Maria Mckenzie (Vice President-Global Ports at Carnival Corp).

This report is divided into 4 parts, which represents the capture of all questions or comments derived from the public consultation process. The public had up to September 2, 2021 at 5:00 pm to submit questions in writing. The 4 parts are listed below:

- Part 1. Transcript from August 4, 2021 virtual town hall meeting and additional responses
- Part 1A: Additional responses from August 4, 2021 virtual town hall meeting
- Part 2: Written guestions received during August 4, 2021 from the virtual town hall meeting and responses
- Part 3. Written questions from public consultation process received by Carnival Corporation from website and responses.
- Part 4. Written questions received by the Department of Environmental Planning and Protection from the public consultation process.

PART 1. TRANSCRIPT FROM AUGUST 4, 2021 VIRTUAL TOWN MEETING

Carnival Grand Port Project 1

- 1 (Meeting commenced at 6:05 p.m.)
- 2 CARNIVAL REPRESENTATIVE: Hello everyone.
- 3 I hope you guys are having a good evening.
- 4 CARNIVAL REPRESENTATIVE: Let's go ahead
- 5 and mute everybody.
- 6 MS. ROCHELLE NEWBOLD: Good afternoon,
- 7 everybody. And thank you all for making yourselves
- 8 available for this Public Consultation Meeting today,
- 9 with regards to the Carnival Grand Port Project
- 10 targeting Grand Bahama, that's proposed for
- 11 Grand Bahama.
- My name is Rochelle Newbold. I am the
- 13 Director for the Department of Environmental Planning
- 14 and Protection. And I will be facilitating this
- 15 meeting this afternoon.
- I have with me other officers from within
- 17 the Department who are here with me. And on the other
- 18 end will be representatives from Carnival Grand Port
- 19 and their team.
- 20 That being said, I want to go through a few
- 21 House Rules, and I will not be using my camera for the
- 22 duration of this meeting, as you all know. We are
- 23 going to have bandwidth issues, and I prefer that you
- 24 are able to hear the information rather than look at
- 25 me, such that we can be assured that everybody has the

Public Consultation Meeting

Carnival Grand Port Project 2

- 1 best possible experience on this platform as possible.
- 2 The meeting is starting at 6:05, and at
- 3 this time we have about 43 persons already on the
- 4 platform.
- 5 As I said, my name is
- 6 Director Rochelle Newbold. I will be facilitating
- 7 this meeting.
- I want to put down a few House Rules with
- 9 respect to how we will conduct this Town Meeting.
- 10 And I see from the names in the platform
- 11 that some of you would have gone through some other
- 12 Town Meetings before, so that's good.
- 13 The Town Meeting will run no longer than 90
- 14 minutes from the time that we have started. The whole
- 15 purpose and objective of the Town Meeting is to have
- 16 individuals express any concerns, raise any questions,
- 17 point out any gaps or deficiencies that they may have
- 18 found in the Environmental Management Plan, or the
- 19 Environmental Impact Assessment Document that is
- 20 associated with this Project, and that's available on
- 21 the website.
- 22 These documents will remain on the website
- 23 for the duration of this Project, until such time as
- 24 the Department may request for them to be removed.
- 25 And the public has, during the course of this whole

Carnival Grand Port Project

- 1 review process, the opportunity to go and to review
- 2 those documents, and to provide comments and feedbacks
- 3 The way the process works, by law we are to
- 4 engage the public in a public consultation effort. At
- 5 21 business days from that date the public has the
- 6 opportunity to review the information that has been
- 7 presented, or having been exposed to the information
- 8 that is presented, in light of the documentation
- 9 that's available, they have the opportunity to provide
- 10 by way of e-mail, which in this COVID environment
- 11 would be the most expedient way to do it, any
- 12 questions, comments, or concerns. By law that any
- 13 communication from the public with respect to the
- 14 Project must be shared between the Developer and the
- 15 Department. That being said, if anybody e-mails the
- 16 Department on any questions or concerns in the
- documents, the Department will acknowledge receipt of
- 18 said question and will share that exact e-mail with
- 19 the Developer. Such that it will be captured in the
- 20 Public Consultation Report that is to be presented not
- 21 less than the 22nd day after this date. And that
- 22 would be for this Project, the 21st day would be
- 23 September 5th, if I am correct -- sorry, it is
- 24 actually September 2nd. So the general public has
- 25 until 5:00 p.m. on September 2nd to provide any

Carnival Grand Port Project

- 1 additional comments to Carnival or the
- 2 Department of Environmental Protection and Planning
- 3 relative to information that is presented today,
- 4 and/or that they may find during the review of the
- 5 documentation that is available online.
- 6 That being said, for the purposes of this
- 7 meeting, please note that we now have 47 individuals
- 8 on the platform. Each of you have the right to pose a
- 9 question. Please note that you have a maximum of two
- 10 minutes to provide your question. So it doesn't
- 11 really give opportunity for long speeches, because we
- 12 really need to get to the heart of the matter.
- We do encourage you to use that opportunity
- 14 to identify, as I said, any gaps, deficiencies, or
- 15 anything, concerns relative to the documentation.
- 16 There will not be a tally of who is for or against the
- 17 project. We will not be running a plus and minus
- 18 tally with respect to individuals who may or may not
- 19 want the Project. So it is really a very focused
- 20 approach to it.
- 21 That being said, if there is anybody for
- 22 any reason who does not conduct themselves
- 23 appropriately during the course of this meeting, I
- 24 will eject you from the room. I will give you fair
- 25 warning that your behavior is not acceptable and ask

Carnival Grand Port Project

- 1 you to please comply in a respectful manner with the
- 2 proceedings. Should you not or should you fail to
- 3 comply, you will be ejected from the meeting. One
- 4 good thing is, during the course of all the meetings
- 5 that we have had, we have never had to do that, and I
- 6 am hoping we don't have to break that trend during
- 7 today's meeting either.
- 8 So, without further ado, I am going to now
- 9 introduce Mr. David Candib from the Carnival team who
- 10 will then take us through the course of this evening
- 11 with respect to the presentation.
- MR. DAVID CANDIB: Hi.
- 13 Thank you Director Newbold.
- Good evening, good afternoon, everyone.
- 15 Thank you for joining us.
- My name is David Candib. I work for
- 17 Carnival Corporation. And in this role of the
- 18 Grand Port Project, I am the Project Manager.
- 19 I would like to introduce some of the team
- 20 members that are here. We obviously have an
- 21 incredible team supporting us. Not everyone will be
- 22 speaking or joining us tonight as part of that. So, I
- 23 would like to quickly introduce some of those that you
- 24 will be seeing, communicating with you in talking
- 25 about the Project. So to my left, I would like to

Carnival	Grand	Port.	Project	6
Cariiraa	OI GIIG	- O - C	110,000	0

- 1 introduce Armando Corpas.
- 2 MR. ARMANDO CORPAS: Hi, everyone. How are
- 3 you?
- 4 Thank you for participating today.
- 5 My name is Armando Corpas, Senior Director
- 6 of Carnival Corporation. I'm responsible for
- 7 permitting, design permitting, and development of this
- 8 facility. And again I welcome everyone.
- 9 And I would like to transfer it over to
- 10 Marie, please, Marie McKenzie.
- 11 MS. MARIE McKENZIE: Sure.
- 12 Good evening, everyone.
- My name is Marie McKenzie and I lead
- 14 Caribbean Government and Community Engagement for the
- 15 Carnival Corporation Group of Brand, eight of which
- 16 cruise the Caribbean Region.
- 17 Thank you for joining us today.
- 18 MR. DAVID CANDIB: Then I would like to
- 19 introduce Giora Israel, who leads our team. And then
- 20 we would also start the presentation.
- 21 Giora, on to you.
- MR. GIORA ISRAEL: Hi, good evening.
- 23 My name is Giora Israel. And I am with
- 24 Carnival Corporation, and I am the person overall
- 25 responsible with Carnival Corporation overall global

Carnival Grand Port Project

- 1 port destination engagements that we have in many
- 2 countries around the world.
- 3 Director Newbold, thank you very much for
- 4 hosting this event. And I am looking forward to
- 5 continue.
- 6 Okay, so let me start by again thanking
- 7 everybody who has an interest in Grand Bahama, and in
- 8 The Bahamas in general. As it relates to this
- 9 Development, we are really excited to be here today.
- I want to start by telling you, I am
- 11 actually on a ship. The ship is moving, we are
- 12 leaving port as we speak, and I hope to be able to
- 13 maintain the bandwidth that I currently have, and I
- 14 hope it will stick around for us, at least for my
- 15 part. If I disconnect, then I am sure David, and
- 16 Armando, and Marie, and everybody will take on this as
- 17 well.
- 18 I am actually on the Carnival Mardi Gras,
- 19 which is Carnival's newest ship. It's the first
- 20 cruise ship in the western hemisphere that is fueled
- 21 actually by LNG. And we are proudly carrying Bahamian
- 22 flag. It's a magnificent ship, that will be arriving
- 23 for the first time ever to a Bahamian port on Friday
- 24 morning. So I am actually looking forward to arrive
- 25 on that magnificent ship into Nassau early morning

Carnival Grand Port Project

1 Friday.

- I would like now just to give you a very
- 3 brief introduction of the Project and then move on to
- 4 my colleagues to continue this discussion.
- 5 So, David, if you want to move to the next
- 6 slide.
- 7 The Grand Port, which by the way is our
- 8 working name for this Port, has been in discussion, in
- 9 consideration by Carnival for numerous years now. We
- 10 felt that the current location of the Port, which is
- 11 mainly an industrial port, is not necessarily
- 12 conducive to very successful cruise-port operation.
- 13 We wanted to have a port that is close to the
- 14 populations, centers, over a large Island.
- 15 And we have looked at the southern shore of
- 16 Freeport for many years, myself, going back at least
- 17 20 years. We ultimately allocated one location then
- 18 another, and finally we have zoomed into a location
- 19 which is commonly know as Sharp Rock, or everything
- 20 east of Sharp Rock to develop this Project.
- 21 We have selected the Project based on the
- 22 fact that it is close to the population. Once or
- 23 twice we have looked at very far away from population,
- 24 Project on the east side of Grand Bahama, and finally
- 25 it zoomed on to this one. The major consideration is

Carnival Grand Port Project

- 1 that in that area there is no outer reef. This area
- 2 of Sharp Rock also, in order to allow the berthing of
- 3 large ships, it is very conducive from the maritime
- 4 condition. Because some dredging will have to be done
- 5 to bring the pier as close as possible to the land,
- 6 but not too close, and we selected this Project.
- 7 The Project is designed to be a uniquely
- 8 Bahamian project. It will likely to be the largest
- 9 spectacular destination that will be not only in
- 10 The Bahamas, but hopefully also in the Caribbean.
- 11 It will also be the focal point of the
- 12 reintroduction of Grand Bahama to become a world's
- 13 premier cruise destination. As you know, Nassau is a
- 14 very well-established, very successful, cruise
- 15 destination already. But we need in The Bahamas more
- 16 than just Nassau. So it will be introducing
- 17 Grand Bahama, that needs it, that needed it for a long
- 18 time, not only the cruising, but tourism destination
- 19 as a whole.
- 20 And we are creating a very unique and
- 21 exciting and a different type of economical engine for
- 22 Grand Bahama. Sometimes different what some of the
- 23 other ports that have been developed recently in
- 24 The Bahamas.
- The next slide, please.

Carnival Grand Port Project

- 1 What we -- that is the slide from Marie --
- 2 So, I just wanted to say that the project will include
- 3 one pier, one pier that will be able to accommodate
- 4 two ships, any ships. It can accommodate very small
- 5 ships, medium size ships, and also very big ships.
- 6 But it has been designed, technically, so it can
- 7 accommodate any type of ship of any size, that either
- 8 exists, or may be built in the future. And it
- 9 accommodates these two ships simultaneously on only a
- 10 single pier as you can compare from both sides of the
- 11 pier.
- 12 We will, once the people are getting off
- 13 the ships, they will have a huge selection of
- 14 opportunity, what to do on land at the Port, as well
- as an offering of shore excursions by Bahamian tour
- 16 operators. We do not operate any tours outside of the
- 17 Port. They will all be operated and offered to our
- 18 guest by Bahamian operators, both by sea and by land.
- 19 And there will be a transportation hub there as well
- 20 to allow for transportation by a rent a car, or
- 21 obviously a major taxi dispatch to take people
- 22 wherever they want to go, or if they have bought a
- 23 tour from us.
- There will be also a lot of retail and F&B.
- 25 We will not be operating the F&B operation; the F&B

Carnival Grand Port Project

- 1 operation will be operated by Bahamian operators. And
- 2 we also have retail, again, Bahamian retial
- 3 operations.
- And we are trying to make the place so it
- 5 fits into The Bahamas. It's a Bahamian place. It is
- 6 not fixed up in Orlando and put into The Bahamas. It
- 7 is rather designed by and working for, and telling the
- 8 story and the history and the culture of everything
- 9 that represents Bahamas.
- 10 We are very excited about this project, as
- 11 some of you have seen me talk about it when we
- 12 introduced the project in February, 2019. And of
- 13 course the process of obtaining permits is a prolonged
- 14 process, which we fully understand, and expect it to
- 15 be thorough. And we encourage thorough vetting of any
- 16 project including ours.
- 17 But we also lost time during COVID. We are
- 18 committed to the project; we may have to do some
- 19 project adjustments. But we are very excited and
- 20 ready once the project is fully vetted to proceed with
- 21 the project.
- 22 And I thank you very much for the
- 23 opportunity to make this introduction.
- David, back to you.
- MR. DAVID CANDIB: Thank you.

Carnival	Grand	Port	Project	
----------	-------	------	---------	--

- 1 Marie, if you would just like to share on
- 2 that, what we have been able to do, and what you have
- 3 led working with the Bahamian community, more
- 4 importantly, Grand Bahama.
- 5 MS. MARIE McKENZIE: Sure.
- 6 Hi, good evening again, everyone.
- 7 I am not sure how many of you here on the
- 8 call today were present on February 4th when we had an
- 9 event to share with everyone our intent for the
- 10 Project.
- I would like to say that while today's
- 12 meeting and this forum is required by law, we have
- 13 always felt as a Company that it is very important
- 14 that any project that we are developing, whether in
- 15 The Bahamas or any where else, that the community
- 16 absolutely understands what we are doing, and we have
- 17 an opportunity to hear any concerns.
- And so, on February 4th, 2019, when we
- 19 launched this Project, our intent was again to share
- 20 with the broader community. But we also had a few
- 21 focus group meetings. And we identified some key
- 22 groups to start with, with the absolute intent to
- 23 continue engaging throughout the community.
- But we did meet with, there was a press
- 25 meeting; we met with the Chamber; we met with the

Carnival Grand Port Project

- 1 Christian Council; we met with an environmental forum
- 2 group that's focussed on environmental matters. And
- 3 our intent moving forward was to maintain that
- 4 engagement, while of course working with Government
- 5 and the relevant Ministries to obtain approval to do
- 6 the Project. Because that process is important, we do
- 7 recognize the importance of the voice of the broader
- 8 community as well, not just the process that we do go
- 9 with Government.
- 10 So, unfortunately there was the hurricane.
- 11 We are living, we continue to live through the
- 12 challenges of COVID. So things did slow down a bit.
- 13 But, I can tell you as a Company we are hopeful that
- 14 we will get the approvals needed from Government. But
- 15 recognize that there is work to do to get there, and
- 16 that's what we are doing today.
- 17 So, we have had a few other events, but not
- 18 as many as we would have liked, considering the
- 19 challenges that we have faced over the past two years.
- 20 But I just wanted to definitely share a
- 21 message that we do consider engagement with the
- 22 community to be extremely important as a part of the
- 23 process as we seek to gain approval from the
- 24 Government and the relevant Ministries.
- Thank you very much, David.

	Carnival Grand Port Project 14
1	MR. DAVID CANDIB: Thank you Marie.
2	So here as you have heard us, and Giora
3	shared a little bit more, our team has vast experience
4	in developing ports really around the world. But on
5	this slide we are highlighting four of those that we
6	have done in the region, that we not only developed,
7	but we have been operating for, some on accumulative
8	basis for 20 years; Costa Maya, Cozumel, Grand Turk
9	and Turks & Caicos. Costa Maya and Cozumel,
10	Grand Turk and Turks and Caicos. Costa Maya going
11	back welcomes about two million passengers a year.
12	Grand Turk welcomed about a million passengers a year.
13	Mahogany Bay again welcoming two ships just off the
14	mainland of Honduras, welcomed about six hundred
15	thousand passengers. And Abaco where you and the
16	Carnival team are today, opened in 2005 to our newest
17	port facility in the region. And it is growing from
18	zero guest in Puerto Plata region to about 600,000 and
19	growing there.
20	You can see kind of the tier design in the
21	bottom right at Amber Cove. The ship Giora is on
22	today is the Mardi Gras, the flagship; so to give you
23	some prospective, so she is alongside in that similar
24	scale of what we are looking to do in The Bahamas and

Public Consultation Meeting August 4th, 2021

25 the Freeport Project.

	Carnival	Grand	Port	Project
--	----------	-------	------	---------

- In addition to these projects, we have also
- 2 worked and helped developed ports around the world,
- 3 including destinations such as Japan, Australia, Spain
- 4 and Dubai.
- 5 Next slide.
- 6 So here, as Giora alluded to before, this
- 7 is the chosen location for the Grand Port Project. It
- 8 is about four miles east of the Grand Lucayan Canal.
- 9 And as you heard or may have been aware, we shifted
- 10 from a location that was much further east, to what we
- 11 found as a more optimal location, not only for the
- 12 marine and the development side, but more importantly
- 13 for the experience of the guest, and working and
- 14 finding employment and opportunities for
- 15 Grand Bahamians.
- Next slide.
- 17 Again, just to give you an overview on what
- 18 we are envisioning for this amazing Development, you
- 19 know, it's a brand new cruise facility in
- 20 Grand Bahama. Again it's a pier that's capable of
- 21 accommodating up to two ships simultaneously, with a
- 22 variety of sizes. You can have one of the largest
- 23 ships alongside a ship from any other flag within our
- 24 brand of Companies.
- 25 And we're looking to establish here a short

Carnival Grand	Port	Project
----------------	------	---------

- 1 excursion pier for sea-based operations, which would
- 2 be unique and new to Grand Bahama. This would
- 3 facilitate our guest making their way right off the
- 4 ship, directly to another vessel in and around the
- 5 waterways and tours that are offered in Grand Bahama.
- 6 We are also going to focus heavily on a
- 7 transportation hub that would allow us the capability
- 8 to offer all the land-based tours that guest are
- 9 utilizing today in Grand Bahama on their tours. Also
- 10 giving the opportunity for taxis and rental cars. And
- 11 this gives the opportunity to have additional tours
- 12 and growth with the product from within there.
- 13 You may have heard it -- well, we're keenly
- 14 focused on having these amenities interwoven. It is
- 15 really important that this Project and the Port
- 16 resonates with a Bahamian design, and featuring the
- 17 culture, and everything that we are able to offer our
- 18 guests and crew as they visit this great destination.
- We would like to highlight some of the
- 20 socioeconomic impact that we believe the Project will
- 21 bring forward. We have broken that down in some of
- 22 the phases as we are kind of engaging in today as a
- 23 predevelopment phase, working with various architects,
- 24 engineers and landscapers. And as we move through the
- various permitting, and licensing, and approval

Carnival Grand Port Project

- 1 process with the Bahamian authorities, we believe
- 2 during those relevant construction phases, we will
- 3 have about up to a thousand Bahamian jobs at any given
- 4 time in various phases and scoping of the work there.
- 5 A keen or important note again is that, you
- 6 know, our Development, we don't envision operating any
- 7 retail or food and beverage within that facility, so
- 8 there are huge opportunities for working with Bahamian
- 9 entrepreneurs, those that are already in the tourism
- 10 or retail food and beverage, or those who have
- 11 interest in doing that.
- In addition, as I have mentioned, we are
- 13 going to keenly focus on the ability to have new and
- 14 expanded tours. We are going to provide a sea-based
- 15 tour excursion dock to give that ability for
- 16 entrepreneurs and tour operators today. And also
- 17 plenty of avian room adjacent to the facility that
- 18 provides easy access for land-based tours closer to
- 19 the destination in Grand Bahama, so it should be
- 20 relatively easy to make your way in and out, and our
- 21 guest have that experience.
- During the operational phase, once we have
- 23 completed construction, taking into account all of our
- 24 direct and indirect jobs, we envision about a thousand
- 25 new jobs will be generated by the Port, and our local

	Carnival	Grand	Port	Project	18
--	----------	-------	------	---------	----

- 1 partners that will have that.
- 2 Again, it is very important for us in this
- 3 location that the passengers and guest will have the
- 4 capability to easily leave the Port, travel into the
- 5 greater Grand Bahama area, and again do that by tours,
- 6 taxis, or rental cars.
- 7 Next slide, please.
- 8 So with this I would like to turn the slide
- 9 over to Armando Corpas, who will lead us to the next
- 10 slides and introduce our EIA Study team.
- MR. ARMANDO CORPAS: So, wanted to
- 12 recognize, take a moment and recognize our study team,
- 13 which has great depth of knowledge in the
- 14 environmental process itself. Our lead Bahamian
- 15 Environmental Consultant is Lloyd Choeng. He owns a
- 16 company by the name of Biologic International; 25 plus
- 17 years experience in processing Bahamian EIA studies.
- 18 Also Michael -- came all the way down for
- 19 us; thank you Lloyd.
- 20 And then also Applied Technology,
- 21 Michael Jenkins, our Coastal Engineer, he is with us
- 22 today as well; 25 plus years in processing Bahamian
- 23 EIA Study Assessments.
- 24 Caribbean Coastal, which a lot of you may
- 25 know, which I believe their name now is broad; ten

Carnival	Grand	Port	Proj	ect
----------	-------	------	------	-----

- 1 plus years experience business with us with the
- 2 Vegetation Study.
- 3 And then RC Minning Associates, which is
- 4 Bob Minning has 20 plus years hydrological experience.
- 5 And Continental Shelf, which has 30 plus
- 6 years of experience in -- studies as well.
- 7 And somebody who is not listed on here, who
- 8 is actually on our team, but spent countless amount of
- 9 hours in assisting us, is a gentleman by the name of
- 10 Dr. Fernando Perez Monteagudo, who is actually a
- 11 member of our team. And he has assisted us at all of
- 12 our ports in drafting and implementing or has
- 13 guidelines. Apart from that, he assisted us with the
- 14 hydrological studies here as well.
- So I wanted to shout out to everyone and
- 16 thank you for a job well done and the comprehensive
- 17 product that you put out.
- 18 And the next slide, please.
- 19 The Environmental Impact Assessment, is one
- 20 of our first. As a part of that we worked with
- 21 different departments in getting our terms of
- 22 references approved. Once we had that, we jumped
- 23 immediately into drafting the EIA. This was developed
- 24 in consultation with DEPP and GBPA. The study actually
- 25 accessed a range of potential impacts associated with

Carnival Grand Port Project

- 1 the Project and develop strategies to avoid minimal --
- 2 in mitigating Project impacts.
- 3 EIA included a wide range of field studies.
- 4 Some of these field studies were hydro-geotechnical,
- 5 water quality, benthic, the wind-wave analysis study,
- 6 which actually took us almost six months to complete,
- 7 because we wanted to capture the different seasons and
- 8 its effect on wind-wave and currents. Once we had
- 9 this study completed, we immediately jumped into what
- 10 we call the Simulation Studies, which we actually own
- 11 a simulation center in Almere in the Netherlands. I
- 12 actually wanted to provide you the website,
- 13 Csmartalmere.com; you will find it very interesting.
- 14 We do all sorts of simulations there. Not only does
- 15 due diligence studies, but we do operational studies
- 16 as well. So I do encourage all of you to go to that
- 17 website.
- Once we were done with the actual
- 19 Simulation Study, we knew exactly how to lay out the
- 20 pier and its rotation and its recurrent layout today.
- It is very important that we mention that
- 22 obviously the EIA was done to specific international
- 23 standards as well.
- 24 The Environmental Management Plan which was
- 25 board from the EIA itself, the Environmental

Carnival	Grand	Port	Project
----------	-------	------	---------

- 1 Management Plan which was also drafted by the same
- 2 team that I mentioned earlier, has been developed for
- 3 all the aspects of the project, construction and the
- 4 operational phase.
- 5 The EMP, we understand, is a living
- 6 document will be revised and updated on a -- basis
- 7 with consultation with the DEV and GBPA.
- 8 The Environmental Management Plan was
- 9 developed based on accepted international standards,
- 10 practices, specific conditions of the Project.
- 11 Next slide, please.
- Just a general overview. The whole Project
- 13 there itself, there is an access road of approximately
- 14 two miles long that joins the main highway, leads to
- our property boundaries of 329 acres. Of that of
- 16 which we are conserving 103 acres of wetland
- 17 conservation area. And there is also another 55 acres
- 18 of nature trail.
- 19 Next slide, please.
- 20 So, as I mentioned before, it is a total of
- 21 329 acres, and the conservation commitment is 103
- 22 acres of wetland habitat be preserved.
- It is where -- we are going to develop
- 24 approximately 148 acres of the area of which these
- 25 148 acres also include 34 acres, which will be used

Carnival	Grand	Port	Project	
----------	-------	------	---------	--

- 1 for, which will be landscaped with mostly native
- 2 vegetation.
- 3 An arterial waterway is also, was also
- 4 going to be constructed for recreational and guest
- 5 transportation. Basically this waterway is needed
- 6 because of the breath of the size of the property
- 7 itself. It is a way of transporting our passengers to
- 8 land from the eastern and western boundaries of the
- 9 property.
- 10 Next slide, please.
- 11 We also have water, utilities will be
- 12 primarily provided by the GBUC, and also Grand Bahama
- 13 Power Company.
- 14 Safeguards and redundancies will be
- 15 implemented which show reliable infrastructure. We
- 16 will have back-up generators, salt-water RO, the
- 17 plants as well as solar power will be introduced.
- 18 So, it is important here in the sequencing,
- 19 right. So, if you see in the bottom left-hand there
- 20 is a pier. That pier also has a hatched line, which
- 21 represents the dredge area that we are going to be
- 22 dredging. The sequence in this, first thing we need
- 23 to do, that dredger in the next slide, also has some
- 24 coral mounds that we will be moving and relocating.
- 25 As well as some additional coral. Within that

Carnival Grand Port Project

- 1 footprint, we have a pier which is approximately
- 2 816 feet long. And it also, with the breasting
- 3 dolphins that are alongside, the total pier length is
- 4 about 1,300 feet. And then we have a trestle that's
- 5 1,022 feet long.
- As you can see, the actual dimensions of
- 7 the actual pier is over to the right. It would be a
- 8 five pile system for the pier. It's an open, it is
- 9 important that I mention it's an open pile system, so
- 10 which allows the water to flow freely underneath it
- 11 with no diverting of water and so forth.
- 12 Next slide.
- The dredge area has two resites that were
- 14 chosen based on the depth and the conditions. So, as
- 15 you can see, the dredge footprint that's over to the
- 16 left, which is its hatch-line, we are dredging to
- 17 -11 meters, which was also simulated, and that is the
- 18 minimal amount, that is minimal draft that's required
- 19 for this vessel, which is the largest vessel that we
- 20 have, in order to come alongside safely.
- 21 Actually you will see these little dots,
- 22 these red dots that you also see outlining the
- 23 boundaries of the hatch-line, those are all the
- 24 geo-technical studies that we did prior, which is also
- 25 included in the field studies for our EIA.

Cariirvar Grana rore rro Cee	Carnival	Grand	Port	Project	
------------------------------	----------	-------	------	---------	--

- 1 The mitigation reads, the over to the left,
- 2 that says "mitigation reef site", that reef site is reserved
- 3 for individual coral, coral colonies. That reef site is
- 4 approximately 5.3 acres just to give you an idea of
- 5 the size of that location. And that artificial reef
- 6 will be 650 away from the coastline.
- 7 And then over to the right, we have the
- 8 mounds of mitigation reef. Which are these actually
- 9 reef mounds, which we will be actually picking up
- 10 these mounds with floating bags, so that we can float
- 11 it to these locations out of that dredge footprint.
- 12 And that location is about, approximately six acres
- 13 large, and it would be located about 1,600 feet from
- 14 the coastline as well.
- So it is important that I mention that
- 16 prior to any type of activity here, we will do another
- 17 baseline survey before any removal and relocation of
- 18 any of these corals.
- 19 And the next slide then, please.
- These are just some examples of the
- 21 construction that we have done at other sites you will
- 22 see. This is actually a pier that we, an additional
- 23 port that we were building in Cozumel, in Mexico. And
- 24 actually the pier is being built approximately
- 25 80 meters away from Paradise National Park, which is

Carnival Grand Port Project

- 1 an official National Park. The pile-driving, you can
- 2 see is, any pile-driving activity, just like in this
- 3 Project, we will have a turbidity barrier, apart from
- 4 obviously monitoring, continuously monitoring these,
- 5 daily monitoring twice a day. These turbidity
- 6 curtains are placed around any work that is being done
- 7 consistently throughout the day. So right now, the
- 8 area that is being worked on, is encapsulated by this
- 9 turbidity monitor.
- Next line.
- 11 We have moved away, as we continue to
- 12 developing these projects, we learn more about using
- 13 pre-cast elements. We learn that the pre-cast
- 14 elements decrease the amount of weight in the rig
- 15 during construction. So it is something that we are
- 16 going to be introducing and actually increasing the
- 17 amount of pre-cast units in order to speedup the
- 18 process. And, more importantly, to reduce waste of
- 19 debris.
- 20 We will also be using pre-casts walls and
- 21 slabs and columns as well for the upland facilities
- 22 for this Project.
- Next point.
- 24 Then the -- it is important that, I
- 25 mentioned before that we were going to be

Carnival Grand Port Project

- 1 transplanting coral colonies as well as coral mounds.
- 2 We have done this before all over the world. And we
- 3 got 20-plus years in experience in coral mitigation,
- 4 and transplantation and restoration for corals.
- 5 Previous projects have exhibited rates of coral
- 6 survival, high rates of coral survivorship and
- 7 recruitment.
- 8 Grand Port would utilize proven coral
- 9 mitigation, transplantation, and monitoring practice.
- 10 Not only the ones that we learned from doing it, but
- 11 even additional ones that we have implemented in this
- 12 Project.
- Next slide.
- MR. DAVID CANDIB: So, Armando, thank you.
- I know that we had kind of a window to
- 16 provide some of the Project Summary and the Overview.
- 17 There is certainly a lot of information provided here
- 18 today. There is a lot information by our website. As
- 19 Marie and Giora alluded to, we had a very in depth
- 20 presentation on the Project in February, 2019. There
- 21 is the capability to view that on You Tube, the entire
- 22 two hours, which may provide some more background and
- 23 insight for those that are interested, that weren't
- 24 able to attend those sessions.
- But in summary of some of the information

Carnival Grand Port Project

- 1 that you have heard here, this is a project our team
- 2 and Company is extremely excited to work on and work
- 3 with the Bahamian authorities and certainly the
- 4 Grand Bahama community to bring this forward, because
- 5 really it is a commitment to what we see as really a
- 6 bright future for Grand Bahama. We believe we have
- 7 the experience and the background to create what is
- 8 here the largest cruise port in the region to help
- 9 boost the economy with additional arrivals, that
- 10 presents jobs and business opportunities during all
- 11 phases of the Project.
- 12 As you have heard from Armando and
- 13 obviously the experts that we have here and online,
- 14 and if you utilize, we really have focused on the
- 15 rigorous studies that were conducted for all of the
- 16 Environmental Impacts. The studies are designed, all
- 17 of these elements are spending countless hours and
- 18 time to ensure that we have kind of this best
- 19 practices from a global scale. And we really feel
- 20 comfortable that that has been delivered here.
- 21 And again, highlighting, it is about a
- 22 third of the property as you know is going to be
- 23 preserved within that wetlands conservation area.
- 24 So with this, Director Newbold, I think you
- 25 can go to the next slide. We have concluded our

Carnival	Grand	Port.	Project	

- 1 presentation, and turn it back to you,
- 2 Director Newbold.
- 3 MS. ROCHELLE NEWBOLD: Okay.
- 4 So most of you are quite familiar with the
- 5 ZOOM platform, so if you have a question, or if you
- 6 want clarification on any matter, please just raise
- 7 your hand by pressing the reaction emoji, and you will
- 8 be called upon.
- 9 There are now 59 persons in the meeting.
- I see no hands, no request for the floor.
- 11 And I see -- I am sorry, we do have Dr. Davis' hand is
- 12 up. Dr. Davis, please open your mic.
- MR. ANCILLENO DAVIS: Hi, good evening
- 14 everyone. I am Dr. Ancilleno Davis from
- 15 Science and Perspective.
- I have a few questions, but right now I
- 17 think the most pressing ones for your EIA. I am
- 18 concerned with what type of effort was used for your
- 19 terrestrial surveys, particularly for the avian fauna.
- 20 You only record 12 bird species, but there are 125
- 21 species recorded in that area of Grand Bahama. It
- 22 seems like your surveys were only conducted in the
- 23 summer months, based on the species that you have
- 24 there. And I think you're missing a huge amount of
- 25 important bird species that are particularly protected

Carnival	Grand	Port	Proj	ect
----------	-------	------	------	-----

- 1 under Migratory Bird Treaty, or Endangered Species Act
- 2 in the U.S., and listed on the IUCN list.
- 3 And so if you could clarify what type of
- 4 effort was done there, and if you do intend to make
- 5 more effort.
- And my next question is, you actually
- 7 mentioned in your EIA that the Lucayan National Park
- 8 is the most visited park in Grand Bahama. But you
- 9 intend to make trails and stuff on your property. How
- 10 do you envision that impacting The Bahamas National
- 11 Trust and the delivery of their work. And maybe the
- 12 visitation or revenue to their properties. And are
- 13 you working with them to mitigate that impact on their
- 14 conservation activities in that area.
- MR. DAVID CANDIB: Dr. Davis, thank you.
- This is David.
- 17 I'll start on there and then defer to
- 18 somebody.
- 19 I'll answer the second question first. We
- 20 have met with The Bahamas National Trust. We believe
- 21 that it is going to be an important partner in the
- 22 Development, and certainly the ongoing operations.
- 23 For, just to give you an overview on what
- 24 we were envisioning, for the conservation area that we
- 25 mentioned, that's not going to be developed. The

Carnival Grand Port Project

- 1 55 acres of what we are calling nature trails, would
- 2 be an amenity for the guest within there. But we
- 3 don't envision that to be very high traffic, or really
- 4 and experiential element like you would have in the
- 5 current parks and areas that The Bahamas National
- 6 Trust has.
- 7 So our view is, we have started with that
- 8 engagement. We will continue with that. We have made
- 9 it a commitment to try to highlight those experiences
- 10 in Grand Bahama. And certainly with the additional
- 11 level of guest and increase in calls, we believe there
- 12 is an opportunity to work collectively with them on
- 13 that.
- 14 So that would be an ongoing standpoint. We
- don't view the nature trails really as a big
- 16 experience similar to what you have in a current
- 17 National Park or visited sights.
- 18 Relative to the survey of the species and
- 19 birds, I will see if Armando has that or wants to
- 20 defer to our --
- MR. ARMANDO CORPAS: We are going to go
- 22 ahead and defer to Dwight, please.
- MR. MIKE: Yes, I would note that you are
- 24 correct in your observation that the surveys were of
- 25 limited duration. Additional surveys are structured

Carnival	Grand	Port	Project	31

- 1 within the Environmental Management Plan.
- 2 You are absolutely correct in your
- 3 assertion that seasonality is very important. A lot
- 4 of the bird species are migratory, and some those are
- 5 going to occur during construction as well.
- I would note that some of our surveys
- 7 occurred around Hurricane Dorian. And you know there
- 8 are impacts associated with Dorian, that have
- 9 influenced, certainly influenced this site in terms of
- 10 habitat and habitat quality.
- In addition, regarding the EMP, it is a
- 12 living document. So part of that is to ensure that
- 13 we, going to the future, including through operating
- 14 phases, that we are doing what we can to minimize and
- 15 encourage the environment and species used.
- One thing that is additionally included in
- 17 this, and it's important relative to migratory bird
- 18 species, is the 103 acre wetland conservation area.
- 19 That is an area that is critical habitat to many of
- 20 those species. So there is preservation within the
- 21 existing program of critical habitat for many of those
- 22 species.
- 23 And again, concur with the observation that
- 24 only limited studies were done regarding bird species.
- 25 But again, additional studies will be ongoing.

Carnival	Grand	Port	Project	32
Carnivar	Grana	LOLU		J 2

- 1 MR. DAVID CANDIB: Thank you, Mike (sic).
- 2 Hopefully that answers your questions,
- 3 Dr. Davis.
- 4 MR. ANCILLENO DAVIS: Yes. After Rashema
- 5 (phonetic), I may have some more.
- 6 MS. ROCHELLE DAVIS: Ms. Ingraham, if that
- 7 is your mic, you are not coming through clearly.
- 8 MS. RASHEMA INGRAHAM: Good evening to all.
- 9 I just had a few questions to whoever.
- 10 Maybe I will ask two and depending -- my first
- 11 question is based on the fact that there is some
- 12 wetland area that is going to be developed on the
- 13 property, either for water-taxis or other sources of
- 14 transportation, as well as flowing out into the ocean.
- So I wanted to know how concerned, or what
- 16 were some of the monitoring efforts that Carnival has
- on the consumption or the usage of the water. Whether
- 18 it's in the wetlands or in the marine area.
- 19 Particularly because that area has been so impacted by
- 20 many different hurricanes, and we are losing a lot of
- 21 our pine forest in that area. So I just wanted to
- 22 know your thoughts.
- I know that in your report you did refer to
- 24 some of GBUC's fresh water wells. But I just wanted
- 25 to know which one of those wells you will be tapping

Carnival Grand Port Project

- 1 into, and how that will affect the flow of water for
- 2 household consumption. And just to kind of put a
- 3 number to the total amount of daily usage of the
- 4 water. So that's my first question.
- 5 The second one is also related to some of
- 6 the work that I know The Bahamas National Trust has
- 7 ongoing in terms of on-the-ground-work and getting
- 8 some of the smaller communities and businesses to look
- 9 at eco-based businesses in that area. And so whether
- 10 or not you have either contacted them, all those small
- 11 businesses, to see how they would be impacted by
- 12 either the pier or this Development and how they can
- 13 be involved in the process of a partnership with
- 14 Carnival.
- 15 MR. DAVID CANDIB: Thank you for your
- 16 question.
- I will start again maybe with the second
- 18 question first. So, we believe as the progress of the
- 19 Project moves ahead, we are going to continue the
- 20 engagement with the community and various operators,
- 21 both to understand what we are envisioning and
- 22 understand from them some of the ideas that they have.
- 23 We will bring certainly the team that has the
- 24 experience and the expertise relative to the
- 25 adventures and tours. And to meet with these local

Carnival Grand Port Project

- 1 entrepreneurs and operators to give them the foresight
- 2 and understanding of what these opportunities are with
- 3 growing passenger arrivals. Certainly the eco-tourism
- 4 and elements like that are very popular today. So we
- 5 envision that continuing. And we certainly will host
- 6 kind of forums and meetings to listen to the operators
- 7 and share with them some of the insight that we have,
- 8 that we believe are the opportunities once the Port is
- 9 developed and our guest want to experience all that
- 10 Grand Bahama has to offer.
- 11 Relative to the wetlands and the area, I
- 12 will ask Armando's team to highlight any information
- 13 that we have today, or if we need to come back here on
- 14 any of them.
- 15 MR. ARMANDO CORPAS: Sure. So I'm going to
- 16 defer to Lloyd. But just to go back, we did a
- 17 complete hydrological study of the area. We even had
- 18 wells outside of the property in order to confirm our
- 19 studies, conclusion.
- 20 We worked closely with Grand Bahama Utility
- 21 Company, GBUC, in order to make sure our study was
- 22 being done and executed in a manner that they felt
- 23 comfortable with.
- But I will let Lloyd, because he physically
- 25 did a lot of the well work himself.

	Carnival Grand Port Project 35
1	MR. LLOYD CHOENG: Good evening, Rashema.
2	From the very beginning, we knew that water
3	issue on the canal; the canal that would be water
4	issue. So from the very beginning, we drafted up a
5	scope of work for the study and the methods of and the
6	Utility Company and they approved of what we were
7	doing for our study and at times they came out and
8	looked and we told them what we were doing.
9	So we did extensive hydrogeological work,
10	and that's all in the hydrogeological study.
11	There are a number of consumption, water
12	consumptions to the site, that is in the document; I
13	can't remember that number off the top of my head, but
14	it is there. As well as we're still going to have to
15	have ongoing talks with the Utility Company because
16	obviously W-6, which was the main well-field for
17	Grand Bahama Island that provides, you know, after the
18	was under 20 foot of salt water from the storm
19	surge in Dorian. And that water also made its way all
20	the way to the site. And as you drive out there you
21	see the impact because all of the pine trees are dead
22	on the north side and the south side of the highway,
23	as well as on the site they are all dead as well.
24	So, as part of the Project they propose
25	putting in a SWRO to meet the needs of the site.

Carnival Grand Port Project

- 1 However GBUC is spending five million dollars to put
- 2 in a RO system to upgrade the water for the local
- 3 distribution system.
- 4 The GBUC wants to bunker water to the
- 5 cruise ship. So it all depends on where the GBUC is
- 6 in their efforts to produce better quality water than
- 7 they are right now with the RO plant. According to
- 8 the GBUC, hopefully by the end of this month they will
- 9 have that RO plant operational. And then we can take
- 10 it from there and continue discussions with them,
- 11 based on them being able to meet water quality needs
- 12 for the Project.
- MR. DAVID CANDIB: Thank you, Lloyd.
- MS. ROCHELLE NEWBOLD: Okay, we have a
- 15 question in the chat:
- 16 "Has any flood modelling being conducted
- 17 for the Project particularly as it relates to
- 18 construction of the mile-long channel; and can the
- 19 modelling results be shared publicly."
- 20 MR. DAVID CANDIB: I am willing to defer to
- 21 Mike who is our Coastal Engineer.
- 22 MR. MICHAEL JENKINS: The answer to that
- 23 is, yes, a hydro -- model of that channel was
- 24 conducted. One of the main focuses was to, two-fold.
- 25 One to make sure that the channel would be adequately

Carnival Grand Port Project

- 1 flushed to preserve water falling within the canal.
- 2 But also to ensure that the water quality outside of
- 3 the canal and the ocean would also be preserved. So,
- 4 yes, there was a numerical model study of that and it
- 5 is referenced within the study. It is within an
- 6 Appendix of the main study.
- 7 MS. ROCHELLE NEWBOLD: We have 63 people on
- 8 the platform.
- 9 Mr. Petra, you could un-mute your mic,
- 10 please.
- MR. SAM TEICHER: Hi, everyone. Apologies,
- 12 I'm outside and its windy so I will try to be brief.
- 13 First of all, it is great to see that you
- 14 guys are taking corals and coral health under
- 15 consideration. Just a few questions with that in
- 16 mind. One is, when do you expect to sort of open up
- 17 any proposals for the local businesses to participate
- 18 in those restoration efforts -- engagement --
- 19 Second, based on the drawings, I saw that
- 20 the, sort of, again appreciating it is a rendering,
- 21 one of the ships was sort of having, one facing the
- 22 shore, one facing away from the shore. And I know
- 23 that in other cruise ports around the world there has
- 24 been some significant sedimentation issues caused by
- 25 ships backing into the shore as depths gets shallow.

Carnival Grand Port Project

- 1 And given the proximity of Peterson Cay National Park,
- 2 the remediation site that you talked about in your
- 3 presentation, as well as the nature of the
- 4 Grand Lucayan Waterway, and how it can kind of trap
- 5 excess sediment in the area of Barbary Beach. Does it
- 6 have to be backed in, or is there an opportunity for
- 7 both ships to come in facing the shore.
- 8 And then the last one is the project of the
- 9 wetlands sort of restoration or efforts; is there also
- 10 consideration being given to mangroves.
- Thanks very much.
- MR. DAVID CANDIB: Sam, good to hear from
- 13 you. Thanks for joining us on the call today.
- 14 As you are aware, we spent some time with
- 15 you, Gaitor and the team on that.
- 16 I think relative to the timing of how we
- 17 can work together and the sequencing really is how we
- 18 continue to work with the relevant Government
- 19 authorities as we progress with the permitting and the
- 20 licensing of the Project.
- I think as Armando alluded to earlier, for
- 22 us there is some sequencing when we are talking about
- 23 the overall Project and the Development. As you are
- 24 aware from the marine side, we need to look at, you
- 25 know, the coral relocation, the dredge, and then

Carnival Grand Port Project

- 1 utilizing some of the dredged coral for some of the
- 2 upland development. So that is one of the first
- 3 segments or phases of the Project. So as soon as we
- 4 are further along with Government in this permitting
- 5 process, that would be one of the first elements of
- 6 the marine work that we have to undertake relative to
- 7 that.
- 8 So, we would work with you and any other
- 9 interested parties if that comes about.
- 10 I will turn to Armando relative on our ship
- 11 modelling and simulations and that exercise.
- MR. ARMANDO CORPAS: Sam, hi, how are you
- 13 again.
- 14 To your question regarding whether the ship
- 15 has to come in stern, bow to, the vessels will
- 16 basically, primarily come in as the Captain needs
- 17 because it needs to make its approach into the
- 18 position.
- 19 It is basically whatever the current winds
- 20 at that point and time, or the projected winds and
- 21 current. At debarkation he will make that choice at
- 22 that point and time. So, yes, these vessels in our
- 23 simulations included coming in bow view, stern view,
- 24 as you see it here.
- 25 Regarding any sediments and suspensions

- 1 that you mentioned, basically that's the reason why we
- 2 opened up and the whole dredge box itself will be
- 3 dredged to 11 meters in order to address that concern.
- We are today, as I mentioned before during
- 5 that construction slide that was in Costa Maya, which
- 6 was Cozumel, we today are operating at eight meters
- 7 away, which is roughly 260 feet away from a
- 8 National Park. So we are not concerned about any
- 9 sediment suspension due to vessels coming in, stern
- 10 in.
- 11 Regarding the monitoring and so forth of
- 12 the corals, I will defer over to Mike so that he could
- 13 weigh in on that.
- MR. MICHAEL JENKINS: Well, we have a
- 15 monitoring program, and I would again defer to the EMP
- 16 regarding that. I would note that the selection of
- 17 the mitigation sites was done with knowledge of the
- 18 Operation Unit. We wanted to make sure they were
- 19 sufficiently distanced away; that was one of the
- 20 operational parameters for choosing those sites.
- 21 There were a number of operational factors regarding
- 22 where the best place for mitigation reef, including
- 23 specie selection, depth, currents, anything of that
- 24 nature. But one of those selections was to make sure
- 25 they were sufficiently away from the operations that

Carnival Grand Port Project 41

- 1 we would not see some kind of secondary impact.
- I would additionally note we were keenly
- 3 aware of the National Park throughout this Development
- 4 process. I would again defer to the EIA. We had very
- 5 extensive -- assessment of that, that is the very good
- 6 baseline scientific information regarding
- 7 Peterson Cay. We will continue to do monitoring of
- 8 Peterson Cay throughout the Project. But note that it
- 9 is, the boundary of Peterson Cay is about a mile and a
- 10 quarter from the edge of this dredge box. So, you
- 11 know, part of the site selection was done with
- 12 understanding of how close we were to Peterson Cay,
- and the need that there be a sufficient bumper between
- 14 the ships and the -- resources might be.
- MR. DAVID CANDIB: The question relative to
- 16 the wetlands and the mangrove.
- 17 MR. MICHAEL JENKINS: Yes. Keep in mind
- 18 right now, hundreds of the acres is designated for
- 19 conservation. We are evaluating what opportunities
- 20 there may be for enhancements.
- 21 We would note that Hurricane Dorian has
- 22 impacted much of Grand Bahama including this area.
- 23 And the original assessments that were made of that
- 24 environment, we see degradation associated with
- 25 Hurricane Dorian. And there likely are opportunities

Carnival	Grand	Port	Project	42
----------	-------	------	---------	----

- 1 for enhancement and that's an ongoing discussion
- 2 regarding the EMP. Those discussions are an
- 3 opportunities is in process. We clearly saw some
- 4 degradation associated with Dorian, and there are
- 5 opportunities for enhancing the mangrove habitat
- 6 there.
- 7 MR. SAM TEICHER: Thanks everyone.
- 8 And good to see you guys, how you have been
- 9 keeping all these past few years after everything that
- 10 has happened in the world.
- MS. ROCHELLE NEWBOLD: Thank you.
- 12 Moving right along guys.
- 13 Comment in the chat:
- "Not hydrodynamic modelling; flood
- 15 modelling was the question that was asked previously."
- 16 And it says:
- "Is construction going to compound flooding
- 18 affects on the land?"
- 19 So they are saying, not the water quality
- 20 modelling was the question, but the flood modelling
- 21 with respect to the --
- 22 MR. ARMANDO COSTUS: We did do a flood
- 23 analysis which was included in that Appendix as well.
- One of the main reasons we have also looked
- 25 at using the dredged material in order to elevate the

Carnival Grand Port Project

- 1 site up to 13 feet. And that was based on the actual
- 2 conclusion from that study, because the study is --
- 3 itself.
- 4 MS. ROCHELLE NEWBOLD: Mr. Carey, your hand
- 5 is up; please un-mute your mic.
- 6 MR. CAREY: Yeah, I almost forget, you took
- 7 so long to come to me. But that's okay, Director.
- 8 Good afternoon Giora, et cetera, everybody
- 9 from Carnival.
- 10 It is exciting to see this Project moving
- 11 forward, in whatever direction it ends up. I know it
- 12 was a lot of pent-up demand for, a lot of questions
- 13 about what's happening with this Project. We get a
- 14 lot of questions about it, so I am pleased to see that
- 15 there is movement one way or another however it ends
- 16 up with respect to Government's approval or not.
- I wanted to talk about the corals. I
- 18 noticed in the EIA there was a plan, and you just
- 19 referenced it, a plan to create artificial reefs. And
- 20 I was wondering whether, Lloyd, you might recommend
- 21 that they consider, since this Project went into a
- 22 state of dormancy because of the onset of the height
- 23 of the pandemic, we have had the issue of the stony
- 24 coral tissue loss disease that is impacting
- 25 Grand Bahama. And whether or not there has been any

Carnival Grand Port Project

- 1 consideration instead of creating these artificial
- 2 reefs from relocated corals from your site, that maybe
- 3 you might need to work with the teams or the, the
- 4 results of the assessment for stony coral tissue loss
- 5 disease, and maybe do out-plantings in some of these
- 6 areas rather than some of these artificial sites that
- 7 you are considering creating.
- 8 Thank you.
- 9 Mike Jenkins: Well, that is a good
- 10 suggestion and something that we have been
- 11 considering. There will be corals of opportunity as
- 12 -- from this Project, right, we will have corals that
- 13 we will want to save and transplant.
- 14 The original idea of mitigation, we are
- 15 still, that is still an appropriate mitigation
- 16 mechanism, right, because we would be then adding
- 17 additional habitat, additional substrate for coral.
- 18 But you are absolutely correct; there are
- 19 likely some opportunities here for out-planting to
- 20 potentially -- keep in mind we also need to keep on
- 21 track of the stony coral tissue loss disease, and
- 22 whether it is appropriate, you know at this site or
- 23 other sites. But that opportunity for out-planting to
- 24 restore coral at impacted sites from stony coral
- 25 tissue loss disease is something we are aware of. And

Carnival Grand Port Project

- 1 right now we can't say it will, say that for sure we
- 2 will do it. But we certainly are aware of that
- 3 concern and that opportunity.
- 4 A lot of it is going to come down to not
- 5 just this site, but other sites and how they are
- 6 impacted by stony coral tissue loss disease when we
- 7 come time to do the transplantation.
- 8 MR. ARMANDO CORPAS: And I think it will --
- 9 in consultation with the GB -- and the other
- 10 Government Ministries.
- 11 Mike Jenkins: Right. But we are
- 12 certainly aware of the concerns regarding stony coral
- 13 tissue loss disease. It is a major issue, and we
- 14 certainly are looking for opportunities where we can
- 15 help to mitigate that impact as well.
- 16 MS. ROCHELLE NEWBOLD: Okay we have another
- 17 question in the chat and it reads:
- 18 "The EIA states that the dredge area
- 19 footprint covers 76.6 acres. And the turbidity
- 20 curtain would be utilized where practicable; how will
- 21 this be done?
- 22 What impact from the sedimentation do you
- 23 anticipate to Peters (sic) Cay and other sensitive
- 24 nearby coral reef both from the dredging phase and the
- 25 operational phase, maneuvering and docking of ships?"

Carnival Grand Port Project

- 1 And I think to some extent this may have
- 2 been addressed, spoken to. But, please answer.
- 3 Mike Jenkins: Right, again, the
- 4 primary concern is during construction. Operation is
- 5 not as a concern, but the primary concern is during
- 6 construction.
- 7 You will note that while the whole dredge
- 8 area is several acres, the immediate dredge area is
- 9 not. And we will bear half of containment with
- 10 turbidity curtains, the well practicable is associated
- 11 with sea conditions. At times, these curtains, you
- 12 have to deal with the good conditions, waves at times,
- 13 there are issues with curtains and waves.
- 14 Regardless of that, we will have turbidity
- 15 monitoring programs throughout construction that will
- 16 be monitoring throughout construction turbidity
- 17 levels, and if they exceed the requirements in the
- 18 EMP, dredging will be ceased until they are within
- 19 compliance.
- So we have a program in place to ensure
- 21 that we have maintained turbidity levels to a level
- 22 where we minimize impact.
- 23 And again, those measurements are well
- 24 within the area of influence of the Project. And we
- 25 will be monitoring the turbidity pool within the

25

Carnival Grand Port Project 47 Project area. So, well before any of that turbidity 1 could reach Peterson Cay. 2 3 MS. ROCHELLE NEWBOLD: Thank you. 4 Dr. Davis -- Mr. Carey, your hand is up, is that because you have another question, or residual? 5 Dr. Davis. 6 7 MR. ANCILLENO DAVIS: Yes, so I have some followups. The wetland habitat that you mentioned is 8 103 acres out of the 155 wetland that you have that 9 will be kept or protected. I wanted to know what are 10 you plans for not changing the hydrology of that. 11 Because it seems right now that that wetland is not 12 13 actually open to very strong tidal-flow in and out. 14 But once you open that up or dredge through any part of that, that is going to significantly change the 15 16 hydrology inside there. So that's one thing. 17 The next thing is, there is a new protected species list apart from what you have inside your, 18 19 what you have mentioned inside your EIA. But inside your EIA and EMP you mentioned that Florida is close 20 enough and have enough large-scale nurseries to supply 21 22 with similar species of plants. 23 In may experience and my understanding

Public Consultation Meeting
August 4th, 2021

that's a dangerous proposition for the sensitivity of

the Grand Bahamian habitat, considering all of the

Carnival Grand Port Project

- 1 invasions that we have going on in The Bahamas right
- 2 now that are often attributed to horticultural
- 3 introduction. So things like Cuban knight anole,
- 4 green iguanas, snakes, cane toads, being introduced
- 5 from Florida.
- And I know that we also have local
- 7 Bahamians who can grow those.
- 8 So what is your opinion, or how are you
- 9 going to address making sure that most of your plants
- 10 maybe come from The Bahamas; or are not shipped in a
- 11 way that can increase the risk of invasion species.
- 12 CARNIVAL REPRESENTATIVE: Regarding the
- 13 landscape, Doctor, we envision a good portion of this
- 14 land acreage that we have, we are going to start
- 15 growing, immediately we will start our own nursery in
- 16 there.
- So a lot of the materials we think
- 18 mostly -- vegetation, a lot of the material that we
- 19 envision in order to supply the 35 acre within the
- 20 Project, will be grown locally. So, that is the idea,
- 21 that is the vision that we have.
- 22 Regarding an importation of any of those
- 23 plants, obviously we will work with the Department in
- 24 order to make sure that these plants that are being
- 25 brought in, are certified and acceptable in order to

Carnival	Grand	Port	Project	
----------	-------	------	---------	--

- 1 be brought in, into --
- 2 But we envision, the majority of this, one
- 3 of the first steps that my colleagues and us will do,
- 4 the first activity of the, apart from anything else
- 5 there on the land-side, is to grow our own landscape
- 6 on site. We have slated approximately, I think
- 7 appropriately like 28 acres for this activity, so just
- 8 to give you a magnitude of what we envision. So
- 9 that's the landscape version.
- 10 On the fauna, regarding the wetlands and
- 11 the canal activity --
- MR. ARMANDO CORPAS: I am sorry; I was out
- 13 of the room so I missed part of your question. But I
- 14 did hear some of it about, a concern about importing
- 15 plants. And I think, during Hurricane Dorian, I mean,
- 16 most of the north-shore, from East End all the way
- 17 into Freeport and into town, was all flooded with salt
- 18 water. So, I think the Project would love to get
- 19 locally grown plants, but I don't know how well that
- 20 will go given the circumstances of Dorian and we are
- 21 still in the recovery. We are still recovering from
- 22 Dorian and then we add the COVID-19 thing. But I
- 23 think every effort will be made to use local people
- 24 wherever possible for that vegetation part of it.
- 25 Also, there is a process, I think, with

- 1 approval to bring in plants; you have to go through
- 2 the Department of Agriculture. So I think all of that
- 3 will be streamed.
- 4 And I missed your first question.
- 5 CARNIVAL REPRESENTATIVE: Hydrology --
- 6 MR. ARMANDO CORPAS: I think it is just
- 7 going to be just as it is right now. I mean there was
- 8 some impact from Hurricane Dorian to that 103 acres as
- 9 part of the beach that eroded away. I think it was in
- 10 the EIA, and I stand to be corrected, is that we would
- 11 try to preserve some of that area and then use the
- 12 mangrove restoration in that area, west-side of the
- 13 site where the sand has eroded away.
- MS. ROCHELLE NEWBOLD: Ms. Ingraham.
- MR. ANCILLENO DAVIS: Sorry, Rochelle.
- 16 Just in regard to the numbers or acres that are being
- 17 used, I also wanted to point out that their numbers
- 18 don't add up to the 329 that they mentioned. So for
- 19 their habitat table, if they could review that.
- 20 CARNIVAL REPRESENTATIVE: That will be
- 21 noted.
- Thank you.
- MS. ROCHELLE NEWBOLD: Ms. Ingraham.
- MS. RASHEMA INGRAHAM: So, my last point is
- $25\,$ $\,$ that, not a question but a statement. And I am sure

Carnival Grand Port Project

- 1 that you can see just based on some of the
- 2 participants on the call that many of us are really
- 3 concerned with impacts that may happen on ecosystems
- 4 especially because a lot of the groups, large and
- 5 small, have been monitoring and have programs and
- 6 activities related to monitoring whether they be
- 7 mangroves, water quality, flora and fauna for many
- 8 years.
- 9 And so just to kind of reemphasize the
- 10 point that Dr. Davis was making, rather than importing
- 11 any species, you have groups in here that have data
- 12 and have the resources and should be really considered
- 13 as you're looking through your EMP and trying to get
- 14 those on stream.
- Your EMP does talk about a mangrove
- 16 restoration project. But I don't know if that's
- 17 referring only to Roatan. I don't know if I
- 18 overlooked where it spoke to the Project on
- 19 Grand Bahama, so.
- 20 CARNIVAL REPRESENTATIVE: There is
- 21 opportunity.
- 22 Rashema, the consultation process will be
- 23 NGO; that had stopped. I mean we have had COVID-19
- 24 and we will continue to reach out to the BNT, to
- 25 Save the Bays, the Waterkeepers as we go on and keep

Carnival Grand Port Project	Carnival	Grand	Port	Project	
-----------------------------	----------	-------	------	---------	--

- 1 them abreast of this situation.
- 2 And so there will be ample opportunity for
- 3 you guys to sit down with us and discuss the Project.
- 4 And we would like to move together and work together
- 5 as a team to resolve all of this.
- 6 We all know the impact from Dorian. And
- 7 all of the mangrove, pretty much all of the mangrove
- 8 on the north-shore is dead. So there is opportunities
- 9 to possibly do planting in other areas other than this
- 10 site. But that is something that we can talk about in
- 11 the future.
- MR. DAVID CANDIB: I think that we will
- 13 welcome that. And as we develop it, as Armando and
- 14 the team said, the EMP is a working document. And we
- 15 certainly would welcome the opportunity to work with
- 16 local knowledge and source locally when we can. So
- 17 that is critical to us.
- MS. ROCHELLE NEWBOLD: Ladies and
- 19 gentlemen, just for clarity, the Environmental Impact
- 20 Assessment is supposed to address the biological
- 21 impacts that are associated with the intended work.
- The Environmental Management Plan is
- 23 supposed to address the mitigative actions that are to
- 24 be taken by the Project to minimize those intended
- works.

	Carnival Grand Port Project 53
1	So let us keep things in their proper
2	boxes. And if additional information is required to
3	one or the other, to make sure that the documents is
4	addressed in that light.
5	We have another question in the chat:
6	"The EIA references a document, the
7	economic impact of proposed Carnival Cruise Line
8	expansion on Grand Bahama Island. By tourism
9	economics, where might we be able to view this
10	document."
11	MR. DAVID CANDIB: It should be referenced
12	within the Appendix 8. Within the EIA, it is in
13	Appendix No. 8, I believe.
14	MS. ROCHELLE NEWBOLD: We have another
15	question:
16	"Good evening. What is the intended
17	procedure if ruins are found on the site?"
18	MR. ARMANDO CORPAS: That is addressed as
19	well in the EMP, that immediately work will stop and
20	we will consult with the Antiquities, Monuments, and
21	Museums.
22	MS. ROCHELLE NEWBOLD: Now we have 64
23	persons on the platform.
24	I see no further comments in the chat.

Public Consultation Meeting August 4th, 2021

Dr. Davis, I see your hand is still up; if

Carnival	Grand	Port	Project	54
Carnivar	Grana	LOTC	110,000	J 1

- 1 you have another question you can un-mute your mic.
- 2 MR. ANCILLENO DAVIS: I don't have anymore
- 3 questions at this time. Thank you.
- 4 MS. ROCHELLE NEWBOLD: It is now 7:21.
- 5 There is 64 persons at the meeting.
- I see no comments in the chat; I see no
- 7 request by hands for the floor.
- Now I see a hand --
- 9 MR. ANCILLENO DAVIS: Yes, I am back.
- 10 Inside the EIA, you say that you have the
- 11 capacity for up to 11,000 guests and 2,000 crew
- 12 members, as well s 1,000 people working at the
- 13 facility.
- You do indicate that this is, you're
- 15 expected to take five years to wrap-up to maximum ship
- 16 arrival.
- But I would like to know, have you done a
- 18 capacity assessment of that area for the waste. And
- 19 how many people can you actually handle; and would
- 20 that, the residual impact, or build-up impact would be
- 21 for having that maximum amount of guest.
- 22 Often Cruise Ship Developments indicate
- 23 what their maximum amount of passengers and crew is.
- 24 But they do not really do a clear job of saying how
- often that maximum will be over-filled.

Carnival Grand Port Project

- Also for the 1,000 Bahamians, for the 1,000
- 2 people working at the facility, how many of them will
- 3 be Bahamian; and what percentage of that cruise
- 4 revenue is expected to stay with those Bahamians that
- 5 are working on that Development.
- 6 MR. DAVID CANDIB: Well, let me try to see
- 7 if I can answer all of your questions. Relative to
- 8 the opportunities and the employment, we envision the
- 9 vast majority, certainly both from our team who will
- 10 operate the Port, but that is really the back of the
- 11 house management, security and maintenance, the vast
- 12 majority of the employment at the Port will come from
- 13 local Bahamian entrepreneurs that are working the food
- 14 and beverage, the retail, and the water sports areas;
- 15 we envision the 90 plus percent routed to that from
- 16 Bahamian locals and the communities within the Port.
- 17 Relative to the capacity component, really
- 18 an answer is maybe taking a step back that, you know,
- 19 we're planning to develop the Port certainly in an
- 20 environmental responsible way. We're looking to
- 21 introduce, early on and even from the beginning
- 22 working with our contractors. It is an ongoing
- 23 commitment to low carbon footprint, very low waste
- 24 generation, high standards of waste management in
- 25 working through World Health Organization Guidelines

Carnival Grand Port Project

- 1 for public health and environmentally responsible kind
- 2 of operational choices.
- 3 The idea from that, is that the capacity
- 4 comes from, you know, two of the largest ships
- 5 simultaneously that could welcome 6,000 guests, 5,000,
- 6 6,000 guests at the same time with crew.
- 7 So we use that within the capability of at
- 8 one time. We are not envisioning that taking place,
- 9 when the Port opens. The first ship from the Carnival
- 10 fleet is just on its inaugural sailing this week. We
- 11 have the second ship coming next year, and then the
- 12 year after that. So we are envisioning working with
- 13 the cruise lines to ensure that the Port is able to
- 14 manage that.
- We believe given the scope of the property,
- with 320 acres, the capability to manage 11,000 plus,
- 17 we are capable to do that. We have been doing that in
- 18 similar numbers in our existing Ports in other regions
- 19 and are comfortable in doing that.
- But I think what's to note is that we want
- 21 to take under this environmental stewardship, from the
- 22 very beginning, when we are looking at the design,
- 23 ensuring that we are understanding all the best
- 24 environmental practices out there, working with
- 25 construction companies on minimizing waste that's

Carnival Grand Port Project

- 1 coming into the property. And more importantly that
- 2 we find those operators in food and in the retail to
- 3 ensure we work with them, what is the input that we
- 4 can do to minimize that, the waste and generated
- 5 within the cruise port.
- But we feel within the development plan
- 7 that you have seen, the capabilities to grow over
- 8 time, we don't envision any capacity challenges from
- 9 our side.
- 10 MS. ROCHELLE NEWBOLD: Dr. Davis, I see you
- 11 have posted something in the chat.
- MR. ANCILLENO DAVIS: Yes, in the chat, I
- 13 put the Appendix 8. I accidentally posted the
- 14 Appendix from the EMP, but then I posted the
- 15 Appendix 8 from the -- because people were asking in
- 16 the chat where is the Appendix, and they are posted
- 17 separately on the website. I just happen to have them
- 18 all downloaded as I was reading them.
- My question was, if there was an
- 20 Environmental Carrying Capacity Assessment done
- 21 though, and I don't think that was really answered.
- 22 Although you said how many people you -- I
- 23 feel like there wasn't a, inside the documentation I
- 24 didn't see an assessment of how much waste water, or
- 25 how much -- can be tolerated by the environment.

Carnival Grand Port Project

- 1 MR. DAVID CANDIB: So we will work with the
- 2 team here to answer that and direct you to
- 3 specifically maybe what's within the document, and
- 4 anything missing within there, we will table as a
- 5 follow-up response to that point.
- 6 MR. ANCILLENO DAVIS: Okay, thank you.
- 7 CARNIVAL REPRESENTATIVE: In regards to the
- 8 waste water, I believe there was some numbers
- 9 projected from another facility. And so that was done
- 10 and also the -- technology and all of that stuff is in
- 11 the document.
- MR. ANCILLENO DAVIS: There will be more
- 13 clarification on that needed, I think, for end-of-life
- 14 waste. You have some pretty good stuff on how you
- 15 process it, and what you do with it. But then, the
- 16 final products from that waste processing, where does
- 17 that go; do you take it back on your boat and ship out
- 18 of the country, stuff like that.
- 19 Ultimately you still will have some waste.
- 20 And I know some of your waste water treatments you do
- 21 have laid out really well, but there are still going
- 22 to be some residuals that you can't put into the
- 23 environment.
- 24 MR. DAVID CANDIB: So if you put your
- 25 question in writing, we will be more than happy to

Carnival	Grand	Port	Project	59
Callitval	CIGILA	LOTC		

- 1 respond to it.
- 2 MR. ANCILLENO DAVIS: Thank you.
- 3 MS. ROCHELLE NEWBOLD: It is now 7:29.
- 4 There were 57 people on the platform. I see no
- 5 further comments in the chat. I see no, other than
- 6 Dr. Davis' residual hand, I see no other hand seeking
- 7 the floor.
- 8 Okay, I see a question:
- 9 "Would it be possible to see the actual
- 10 report that has some detail on methodology, not just
- 11 the summary Power Point of the Economic Assessment
- 12 with respect to the original question regarding the
- 13 Economic Report."
- MR. DAVID CANDIB: We will review that
- 15 question and answer that as well. We will take note
- 16 and see what we are able to provide or point to with
- 17 information already provided.
- 18 MS. ROCHELLE NEWBOLD: It is now 7:30.
- 19 There were 57 persons still on the chat. I see no
- 20 other questions in the chat box -- fifty-seven persons
- 21 on the platform. I see no request for further hands.
- 22 Ladies and gentlemen, I want to thank you
- 23 for your participation in this meeting this afternoon.
- Once again we have kept the streak of not having to
- 25 eject anybody from any of the meetings; I like that.

Carnival	Grand	Port	Project	
----------	-------	------	---------	--

- 1 And I wish you all a safe -- who is this
- 2 coming in at the last minute.
- 3 Dr. Davis is just putting his question in
- 4 the chat for prosperity, so it will be captured. But
- 5 nonetheless, all questions that have been highlighted
- 6 this afternoon, are to be reflected in the
- 7 Public Consultation Report.
- 8 And as was stated at the beginning of the
- 9 meeting, should there be any additional questions, the
- 10 public at large have until September 2nd to provide
- 11 those questions in writing via e-mail. Those
- 12 questions can be submitted to the Department of
- 13 Environmental Planning at enquiries@dept.gov.bs; or it
- 14 can be provided to Carnival, and Carnival's e-mail
- 15 address for questions and inquires,
- 16 info@carnivalgrandport.com.
- So either addresses you can use. And as I
- 18 stated, by law should Carnival receive any requests
- 19 for information, they must provide same to the
- 20 Department. And should the Department receive any
- 21 questions, it must provide same to Carnival. Such
- 22 that, on the 22nd day, no earlier than the 22nd day
- 23 should the Public Consultation Report be produced,
- 24 individuals can flip through the document and find
- 25 their question and make sure that their question has

	Carnival Grand Port Project	61
1	been duly documented and fully addressed.	
2	Ladies and gentlemen, thank you for your	
3	time this afternoon. And I wish you all a safe rest	
4	of the evening.	
5	Please be COVID aware.	
6	Good night.	
7	MR. DAVID CANDIB: Thank you everyone.	
8	Thank you, Director Newbold, appreciate	
9	your help with this.	
10	(Meeting adjourned at 7:30 p.m.)	
11		

Public Consultation Meeting
August 4th, 2021

PART 1A. Additional Responses to August 4, 2021 Virtual Town Meeting

Dr. Ancilleno Davis: Bird Survey Question

Response: In Section 9 (page 30) Management of the Terrestrial Environment the following commitment is made:

"Post construction ecological surveys of the upland project area will be conducted on an annual basis during the winter to capture potential use by migratory birds for two years following project construction. Surveys will identify flora and fauna present within the project area, in particular any listed or protected species. Surveys will be conducted by a biologist or ecologist with relevant experience with the habitats and species present within the project area. These surveys will provide an assessment of habitat loss and fragmentation and identify any possible corrective or mitigative actions to minimize impacts."

Rashema Ingraham: Water Consumption to Households

Response: We do not anticipate that the project will have any impact on potable water supply to Grand Bahama. CGBIL will have to meet with the Grand Bahama Utility Company (GBUC) to discuss for the provision of potable water to support the facility and water bunkering for the cruise ships. The GBUC will

need to meet the CGBIL's drinking water quality standards. The details of water consumption and provision of water are discussed in the EIA and EMP.

Dr. Ancilleno Davis: Habitat Table does not add up to 329 Acres.

Response: The Habitat Table 8.2 presented in the EIA adds up to a total of 321.87 acres and the site is approximately 329 acres more-or-less The difference of 7.13 acres is due to a nursery that will be constructed on the north side of the property boundary in the Pine Woodland.

Table 8.2. Habitat Communities and Acreage

Habitat	Acres
Broadleaf Coppice Forest	25.48
Casuarina dominated Coastal Shrubland	26.43
Coastal Shrubland	13.98
Fire Impacted Coppice	3.96
Mangrove Forest and Wetland	155.18
Pine Woodland	21.61
Sabal Woodland	41.56
Semi Permanently Flooded Wetlands	20.23
Silver Palm-Bracken Fern Shrubland	13.44

Rashema Ingraham: Statement on Cooperation with local NGO's

Response: Once approved, CGBIL will reach out to the local NGOs to keep them informed on the status of the project. Particularly, CGBIL will keep BNT informed of reef survey's, dredging operations, turbidity control, and turbidity monitoring given the location of Peterson Cay National Park. CGBIL will also seek input from and collaborate with the local NGOs on potential projects such as mangrove planting and other appropriate projects.

Dr. Ancilleno Davis: Carrying Capacity

Response: Responded to in written comments from virtual town hall meeting. See Part 2. Question 9.

PART 2. WRITTEN QUESTIONS RECEIVED DURING AUGUST 4, 2021 VIRTUAL TOWN HALL MEETING AND RESPONSES

1. Stacey Moultrie

Question:

Has any flood modelling been conducted for the project, particularly as it relates to construction of the milelong channel? And can the modelling results be shared publicly?

Response:

Flood modeling of the development has been conducted and is detailed in Appendix 6 of the EIA. Modeling included hydrodynamic analysis of the canal system.

2. Stacey Moultrie

Question:

Not hydrodynamic modelling. Flood modelling. Is construction going to compound flooding effects on land?

Response:

Modeling included evaluation of flood risk associated with storm surge. As the site will be raised significantly through beneficial use of dredge spoil, there is a reduced potential for storm surge impacts within the project area.

3. Casuarina Mckinney

Question:

The EIA states that the dredge area footprint covers 75.6 acres, and that turbidity curtains will be utilized "where practicable". How will this be done? What impacts from sedimentation do you anticipate to Peterson Cay and other sensitive nearby coral reefs both from the dredging phase and the operation phase maneuvering docking ships?

Response:

Turbidity control measures will be implemented within the active area of construction (around the working dredge) These are further detailed within the EMP. Best Management Practices include deployment of turbidity curtains and turbidity monitoring throughout construction. Assessments of coral resources will be additionally conducted throughout the construction process. Impacts to Petersons Cay are not anticipated from construction due to the distance from the active work area to Peterson's Cay (which is over a mile) and the turbidity control and monitoring measures which will be implemented. Impacts during the operational phase from ship operations are not anticipated, as the project will implement a safe approach for all vessels. Specific details for use of Turbidity Curtains, Oversight and Monitoring during Marine Construction, Turbidity Monitoring, and Benthic Surveys during Construction can be found in Sections 10.4.11 – 10.5.3. of the EMP.

4. Casuarina Mckinney

Question:

The EIA references a document: "The Economic Impact of the Proposed Carnival Cruise Line Expansion on Grand Bahama Island" by Tourism Economics. Where might we able to review this document?

Response:

This document is found in Appendix 8 of the EIA. The technical appendix to that presentation is attached in Appendix 1 of this report

5. Casuarina Mckinney

Question:

Appendix 8 is not part of the document. Is it somewhere else?

Response:

Note there are two documents, the Environmental Impact Assessment (EIA) which includes the referenced Appendix 8 (Tourism Economics Presentation) and the Environmental Management Plan (EMP) which has separate appendices

6. Casuarina Mckinney

Question:

Would it be possible to see the actual report that has some detail on methodology, not just the summary ppt of the economic assessment?

Response:

The technical appendix to that presentation is attached in Appendix 1 of this report.

7. Dr. Ancilleno Davis

Question:

What was the methodology in the Economic assessment? that is necessary to evaluate the validity.

Response:

See Attached Tourism Economics Technical Appendix in Appendix 1 of this report

8. Karen Panton

Question:

Good evening. What is the intended procedure if ruins are found on the site?

Response:

See from EMP page 42 below:

"Historical, Archeological, and Cultural Resources: If during construction activities, the CONTRACTOR observes items that may have historical or archeological value, such observations shall be reported immediately to the Engineer, so that the appropriate authorities may be notified and a determination made

as to their significance and what, if any, special disposition is required. The CONTRACTOR shall cease all activities that may result in the destruction of these resources and shall prevent his/her employees and subcontractors from trespassing on, removing, or otherwise damaging such resources. The Grand Port will have an Environmental and Safety Awareness Orientation for all contractors prior to the beginning of work. The contractors will be informed of possible artifacts that have been found in the past on Grand Bahama near West End. These artifacts were related to the Lucayan Indians."

9. Dr. Ancilleno Davis

Question:

My question on the environmental carrying capacity: How will the residual solid waste be treated? how much of it will be delivered to the landfill or removed from the island.

Response:

The waste management plan for the facility can be found in Section 7 on page 20 of the EMP. Additionally, Environmental Management of Waste Vendors can be found in Section 11. Section 7 covers trying waste reduction technologies, recycling, and disposal of batteries and used oil. Sanitation Services Company Limited operates the Pine Ridge Landfill. It is noted that Sanitation Services Company is a subsidiary of Waste Management Inc. The Landfill has 195 acres of available land for use but currently only occupies less than 30 acres. According to Sanitation Services they will be able to accommodate the waste produced from the facility.

As stated in the EMP:

- "Environmentally sustainable collection and disposal of all solid waste generated by the operation of the Port will be in coordination with Sanitation Services Company Ltd. (SSC) with the goal of minimizing the wastes disposed of to the Pine Ridge Landfill located on Rock Plant Rd. SSC is responsible for the collection and disposal of solid waste in Freeport."
- "No ship waste will be accepted at the Port for disposal in Freeport."
- "If is not possible to implement advanced waste reduction technologies at the initial stage of the operation of the facility, a recycling program will be implemented considering the lack of recycling facilities in Grand Bahama Island. Sands branded beer bottles could be recycled in Freeport, but other recyclables would be embarked to the corporate cruise ships based upon the experience of the pilot project currently being carried out at GTCC (see below, GTCC Waste Generation Summary, where all wastes generated by this port in several days are logged and also the recyclables embarked in several Carnival cruise ships). For this purpose, proper equipment such as glass crushers, can densifiers, waste compactors, etc., will be installed. All waste generated from gardening maintenance will be used to create compost heaps, based mainly upon the experience at Mahogany Bay Cruise Center (see Appendix 7)."

Therefore, it is expected that most waste will be able to be disposed at the Pine Ridge Landfill. The Pine Ridge Landfill is a lined landfill with a leachate collection and treatment system. The Pine Ridge Landfill is one of the most modern landfill facilities in the Bahamas.

The waste water treatment system is discussed in the EIA in Section 9.4 page 176. It states the following:

"Consequently, Carnival Corporation's Global Port and Destination Development Group has installed in three of Carnival's Caribbean ports AWWTPs with MBR technology. This technology is designed to provide a very high quality of water capable of operating within varying and at higher pollutant loading. Biologically treated wastewater is filtered using MBRs to produce reuse quality effluent. Based upon the excellent performance of the MBR systems currently installed, Carnival has decided to install an MBR system in Grand Port, with treatment requirements intended to exceed the standard set in The Bahamas and the U.S. At this preliminary stage of Grand Port's design, an average day flow of approximately 30,000 gallons is estimated.

To minimize the fluctuations in the influent to the wastewater treatment plant, an equalization tank will be sized to store at least the peak day flow. As shown in the example from Carnival's Amber Cove facility MBR system in Figure 9-2, the last lift station from the wastewater collection system pumps raw wastewater (influent) passing through the fine screens to this equalization tank. Equalized influent (raw wastewater) is then pumped to fill the MBR process."

As discussed in Section 6.0 Waste Water Treatment Plant of the EMP (page 9):

"When required, waste activated sludge is conveyed to a storage tank where it can be digested, dewatered and used for the nursery/landscaping purposes and/or hauled to the Pine Ridge Landfill for disposal."

Further details on the operation of the Waste Water Treatment Plant are discussed in the EMP.

The Bathroom facilities are discussed in Section 6.8 (p.58) of the EIA and a drawing of the locations are provided in Appendix 2 of the EIA. The number of restrooms were based on the anticipated throughput of guest through the facility.

"The bathrooms are dvidied into three categories:

Large Public Restrooms (Quantity 10)

- Men's Urinals
- Women's WC 11
- Men's Lavatory 3
- Women's Lavatory 4

Small Public Restrooms (Quantity 9)

- Men's WC 1
- Women's WC 1
- Men's Lavatory 1
- Women's Lavatory 1

Crew Restrooms (Quantity 3)

- Men's WC/Urinals 3
- Women's WC 4
- Men's Lavatory 2
- Women's Lavatory 2

PART 3. WRITTEN QUESTIONS FROM PUBLIC CONSULTATION PROCESS RECEIVED BY CARNIVAL CORPORATION FROM WEBSITE AND RESPONSES.

As of September 2, 2021 no questions or comments were received by Carnival Corporation on the Environmental Impact Assessment or Environmental Management Plan that were posted on the carnivalgrandport.com website.as per the public consultation process.

PART 4. WRITTEN QUESTIONS RECEIVED BY THE DEPARTMENT OF ENVIRONMENTAL PLANNING AND PROTECTION FROM THE PUBLIC CONSULTATION PROCESS.

The Department of Environmental Planning received questions from Falon Cartwright (Director of Science and Policy) of the Bahamas National Trust on September 2, 2021. The responses are inserted below the questions and presented on the following pages.



September 2, 2021

Mrs. Rochelle Newbold Director Department of Environmental Planning and Protection Ministry of the Environment and Housing

Dear Director Newbold,

RE: Carnival Grand Port Environmental Impact Assessment

The Bahamas National Trust (BNT) is writing to offer our official comments on the Environmental Impact Assessment (EIA) (Rev. II April 2020) for the Proposed Carnival Grand Port at Shark Rocks Point, Freeport, Grand Bahama prepared by Envirologic International Ltd. on behalf of Carnival Grand Bahama Investments Ltd.

We have evaluated the EIA considering the Bahamas National Trust's mandate to manage and protect the National Parks System and in particular the Peterson Cay National Park (PCNP) and the Lucayan National Park (LNP) due to the proximity to the proposed development.

General Comments

The Carnival Grand Port will create a waterway inland parallel to the current shoreline, and docking facilities to accommodate Carnival Cruise ships, up to two at a time. The location is east of the Peterson Cay National Park and west of Lucayan National Park. The primary impacts of this development are environmental and socio-economic. Major concerns for the BNT include:

1. The fragmentation of local habitat including reef and hard bar, mangroves, and pine forest

Response:

Based on the Conclusions of the study and the corresponding comprehensive management plan meant to mitigate any potential primary and/or secondary impacts. We do not believe we are causing any fragmentation.



We have executed many similar projects in the region implementing best practices and have not caused any fragmentation of the existing ecosystem.

 Long term impacts to the biotic and abiotic systems within PCNP including stochastic events such as spills and ship groundings, long-term effects of water quality and long- term effects on nutrient transport and benthic organism recruitment.

Response:

Our ships visit over 700 ports around the world often operating several hundred feet from many marine national parks without impacts to the biotic and abiotic systems.

These concerns have been specifically addressed both within the EIA document (including appendices) and within the EMP. Direct or secondary impacts with in the PCNP are not anticipated from this project.

3. Long term effects on the hydrology of the surrounding island environments including, the mangrove wetland, groundwater resources, current and wave flow within and beyond the project area.

Response:

These concerns have been specifically addressed both within the EIA document (including appendices) and within the EMP, specifically Appendix #4 Hydrological Report.

4. Economic impacts to nature tourism offerings preempted by on-property wildlife areas through higher cost for tour operators to maintain offerings further away from Freeport, legal and certification costs for guides wishing to engage with cruise guests and decreased participation of guests with local parks such as Lucayan National Park.

Response:

Notwithstanding the negative impacts from Dorian and COVID-19, this project truly represents an opportunity to increase Ecotourism in the region. Please refer to the Social Economic section of the study. Tour operators pre COVID-19 have been doing business with Carnival for years. This longstanding relationship will only grow in the future.

5. Long term economic effects on the surrounding communities through the cannibalization of the Port Lucaya tourism community as well as higher cost for participation in ecotourism and sustainable tourism ventures for local Bahamians.



Response:

Grand Port will more than double (likely triple) the number of passengers in Grand Bahamas (based on Pre COVID numbers). Furthermore, the port will create new opportunities currently not available for Bahamians that will sustain tour companies which have been adversely impacted by the lack of tourist due to Hurricane Dorian and COVID-19. By no means, will this opportunity create "higher cost for participation in ecotourism and sustainable tourism ventures for local Bahamians".

There is also a potential for new business to take root outside of the Carnival site to take advantage of the of the increased number of tourists visiting the port creating new employment opportunities.

In addition to these general concerns, the conduct of the assessment reveals the following gaps:

1. Timing of avian surveys was of short duration insufficient to thoroughly characterize avian species communities at any time of year and occurred at a time of year that underrepresents true diversity and specifically excludes the vast majority of threatened and endangered migratory species listed in the US Endangered Species Act which may use the area. Such as Piping Plovers, Bahama Nuthatch and woods warblers.

Response:

Additional Wildlife surveys are proposed in Section 9 page 30 of the EMP.

2. No wetland bird species were detected during the surveys; this conspicuous absence indicates a lack of thorough survey or use of an inappropriate sampling method or technique.

Response:

Additional Wildlife surveys are proposed in section 9 page 30 of the EMP.

 Wildlife survey methods and effort are not adequately described to determine abundance or density of the species identified or to account for absent species.

Response:

Additional Wildlife surveys are proposed in section 9 page 30 of the EMP.

4. The surveys conducted within the Peterson Cay National Park did not involve Park or BNT staff. This may have reduced the effectiveness of the effort and indicates a disregard for or lack of familiarity with local regulations.



Response:

Please note that we engaged not only with local BNT but with other NGO's in Grand Bahama throughout the inception of the project. Furthermore, our scientist implemented accepted methods & standards to collect and analyze the data. It is also important to note that our scientists were approved by DEPP based on their expertise.

5. The Benthic project area does not fully encompass the dredging footprint.

Response:

Our scientists implemented accepted methods & standards to collect and analyze the data. The data collected included not only the dredge footprint but also the areas adjacent to the dredge footprint.

The presentation of the EIA has additional concerns that should be addressed to improve accessibility, accuracy and value. Some of these concerns include:

1. Definitions of acronyms and terminology in the primary EIA document. The EIA document does not expand on some Acronyms such as CSA divers.

Response:

Please note the Terms of Reference approved by the DEPP does not require a definition of acronyms & terminology. Please refer to the Appendix 7 of the EIA "Continental Shelf Associates" CSA. The EIA contains 10 appendixes which are an essential part of the EIA and should referenced when reading the EIA.

- 2. Arithmetic: Numerical items in several areas of the report are inconsistent, inaccurate and/or misleading.
 - a. The numbers in several of the table columns do not add up to the totals at the bottom of the columns. The result of which is an over or underestimate of the impact area depending on the column. In the same table there appear to be multiple areal estimates for the same area. This should be accounted for and explained appropriately.

Response:

This comment was previously addressed. Please refer to Part 2 of the Public Consultation report.

b. The number of sample survey quadrat and bounce dive locations are inconsistent with the images in the documents.

Response:

The number of sample survey quadrat and bounce dive locations are provided in the Benthic Assessment Appendix #7

c. The job creation is stated as 1,680 annually and 706 during the development phase, but this includes direct, indirect and induced jobs. Direct development phase jobs are only 354 about half of what is in the main EIA. Annual direct jobs are only 1279 about 75% of what is reported in the broader EIA. Considering the current economic situation in Grand Bahama, indirect job creation and job induction through expenditure is less likely. These values need to be recalculated and in the main EIA distinction should be made between created jobs and indirect or induced jobs.

Response:

The economic data was generated by the Oxford Company and included in Appendix 8 of the EIA. This was used as a basis for the Social Economic section of the report. The EIA concludes that this project will have a positive economic impact on Grand Bahama and this conclusion has not changed.

- 3. Metadata for key environmental elements or survey locations should be presented including:
 - a. Discrete GIS locations: the transects used for environmental surveys, quadrat locations and bounce dives should be provided in tables to allow references for future monitoring and in situ validation of report information.

Response:

This information is available to support future assessments of the areas, but this information is not relevant to the main EIA document.

b. Effort data: start and end time of surveys speed of movement along transects and area or distance traveled are all necessary to determine the value of species assessments. These are not included for avian, roving diver, terrestrial invertebrate, or reptile surveys.

Response:

This information is included with in the field notes, but it is not relevant to the main EIA document.

Below are more specific concerns/questions regarding the project.

Avian Survey

Time and Duration

• The timing of the surveys during the summer reduce the number of species that can be detected due to migration and breeding.

Response:

Additional Avian surveys are proposed in section 9 page 30 of the EMP.

The surveys were of a short duration and it is not clear if the time was strictly



dedicated to avian surveys or if these birds were opportunistically recorded while focused on the vegetation survey.

Response:

Additional Avian surveys are proposed in section 9 page 30 of the EMP

Species detections

- There are 286 species of bird reported for Freeport and West Grand Bahama. Only 12 were detected here. No migratory songbirds were detected and no endemic species.
- The first and second most prolific bird observers for the Bahamas according to eBird live on Grand Bahama but were not consulted for the survey.
- The crab body shown in images implies predation by a larger heron, but no herons were detected despite the immense wetland area.
- The Bahama Nuthatch has been observed in the Owl's hole area where you
 conducted water quality assessments and in the pine forests north of the project site.
 There has not been any thorough effort in the project area. So there may be risk to
 this endangered endemic species.

Response:

The above 4 points are addressed with the additional Avian surveys which are proposed in section 9 page 30 of the EMP

Survey methodology

 Avian surveys should include some description of survey effort in terms of distance travelled, area searched and time spent looking for birds only.

Response:

Additional Avian surveys are proposed in section 9 page 30 of the EMP

 Methodology should be described as Caribbean Waterbird Census and forest surveys are different and the different protocols are specifically designed for certain habitats.

Response:

Methodology is described in Appendix #5 of the EIA

Benthic Survey

Benthos

- Sand transport is an issue when the coastline is altered with jetties on both the eastern and western ends of the development, the impacts to
- The two inlets will also create a new flow dynamic, potential for pollution (chemical, thermal and species introductions)
- The dredged footprint will change the wave profile and regular dredging will create more frequent disturbances.

Response:

The above 3 points are addressed in the EIA Coastal Processes Study Appendix #6

Benthic Wildlife

New inlets will create new wildlife habitat or pollution sources. Are there any wildlife
or disease elements present in the wetlands that may impact marine fauna or flora,
if dredging exposes them?

Response:

Please reference Appendix #6. There are no sources of pollution or disease associated with the creation of the inlets.

Dredging, inlets and jetties will affect longshore drift of sand and currents, how will this affect recruitment or survival of coral and other benthos in PCNP? Will PCNP be included in ongoing monitoring.

Response:

Please refer to Appendix #6 of the EIA. The project will have no impact to coral recruitment or survival in the PCNP. As a further safeguard The PCNP is included with in the monitoring plan.

 A 5.81 acre receiver site has been identified 1.5 miles east of the impact area for coral relocation and mitigation. There should be an additional EIA assessment of that area before it can be used for such activities.

Response:

The EIA has already been approved by DEPP for this activity.

 A 5.18 acre receiver site nearshore adjacent to the Western project boundary will be made of limestone boulders 4 ft in diameter. Will these be in the area affected by the inlet, dredging and changes in longshot sand transport?

Response:

No

 Dredging to maintain the cruise ship docking area will be a major impact with regular frequency. How will downstream impacts be managed? The timing of removals would also need to be carefully considered to avoid potentially spill due to hurricanes or winter storms.

Result:

Any required maintenance dredging is addressed with in the EMP document and will be conducted in coordination with DEPP. The same EMP policy for initial dredging applies to maintenance as discussed in Section 10.3.5 (page 40) of the EMP.

 Benthic habitat classification by bounce divers is appropriate for the timeline but underrepresents the actual diversity. Some of the corals missing from the PCNP site were reported in earlier assessments performed by BNT.

Response:

We believe that the study appropriately represents the diversity of the corals present in the study area.

 There is very little mention of the Stony Tissue Coral loss and potential risk of exporting this disease to other reefs/islands through either visitors or vessels, considering the presence of the disease in the project area.

Response:

Stony Tissue Coral Loss Disease (SCTLD) protocols are included with in the EMP. There is no correlation between a proposed pier (pile driven structure) and ship movement and the SCTLD that is now plaguing large parts of the Caribbean and the warm water coral reefs around the world.

Terrestrial Survey

 The report lists 155.18 acres of mangrove habitat and estimate 54.6 acres of impact. However, page 184 states that 103 of the 155 acres of habitat will be conserved. The image by Haskell August 30 2019 shows 159+/- acres of mangroves. The numbers are inconsistent.

Response:

This comment was previously addressed. Please refer to this Public Consultation report.

 Exposed habitat edges will also be more prone to invasion. How will invasion of the wetland be monitored and managed during the life of the project?

Response:

Please refer to the EMP section of the document. These areas will be replanted with mangroves.

The report mentions the removal of pine trees as typical in development in Freeport.
This is irrelevant. Proper assessment of the age and abundance of the pine trees is
needed to determine their value and inform appropriate mitigation. Transplanting is
also an option.

Response:

Please reference the Terrestrial Resource Study in Appendix 5 of the EIA



Current condition of Pines on access road to site (approximately 2.3 miles)



Pines on the property as a result of Dorian

Hydrologic Survey

 Proposed activities will shift the freshwater lens northward several hundred feet. Grand Bahama Company (GBUC) has a wellfield north of there and will be using that area for a wellfield expansion. How will this impact the ability to deliver water to Bahamians?

Response:

This concern has been adequately addressed with the GBUC. GBUC have been actively engaged throughout the hydrological study.

 Considering the extent and magnitude of interconnected fractures, the hydraulic conductivity may vary by several orders of magnitude within one rock type. The values used for the simulations should be considered "average" values over the entire system. Dredging that connects any of these cracks to the marine environment can potentially contaminate the entire freshwater lens and change recharge rates and viability. Have any studies

Response:

Please reference Appendix #4 of the EIA and EMP document where monitoring of the aquifer is proposed.

Saltwater intrusion to the freshwater lens is considered one of the major causes for the broad death of the pine forests and slow recovery. If the lens is pushed northward, what is the expected impact on the national forestry reserve?

Response:

Please reference Appendix #4 of the EIA and EMP document. Unfortunately, the pine forest in the area and most of east Grand Bahama have already been adversely impacted from the seawater flooding in from Dorian.



Current conditions of Pines at intersection of Suffolk Road (access road to site) and Grand Bahama Highway. Site is approximately 2.3 miles south.

• The permanently flooded brackish mangrove wetlands "do not exhibit the same tidal fluctuations as the surrounding area". This raises the concern that a sudden change in salinity could permanently damage and possibly kill the mangroves in that area. What remediation measures will be taken if the 103 acres of mangroves experience die off after the hydrology is changed?

Response:

This is addressed in the EMP, in general monitoring of the mangroves will be conducted during the development phase and restoration will be implemented if needed. Maintaining the wet land on our property is and will be a top priority it will be a feature we are looking for BNT to



work with (as explained in our public presentation(s) during the February 2019 in Grand Bahama.

 Hurricane Dorian already impacted the freshwater lens. If this work will reduce Bahamian access to clean water, how will this project compensate for that? They mention how their activities will have on the freshwater lens. Considering Dorian has potentially damaged the water lens already, does it seem sensible to further impact it?

Response:

This concern has been adequately addressed with the GBUC. GBUC have been actively engaged throughout the hydrological study and afterwards. Potential impacts to the freshwater lens are addressed in the EIA. The GBUC and GBPA have not expressed any objections to the project proceeding, in fact GBPA has approved the issuance of a Building Permit. GBUC is installing a 5 MGD Reverse Osmosis plant to treat groundwater from the W-6 wellfield to supply potable water to the public. Grand Port will also have its own Reverse Osmosis plant. Therefore, there should be no impacts to the GBUC subscribers other than those already experienced as a result of Dorian's impact.

Hurricanes will keep on coming, each with its own impact, hopefully none with the devastating impact of Dorian.

EIA suggests changes to the freshwater lens will be short term, there is no science to support this and based on current evidence as the freshwater lenses have not returned to pre-Dorian state in 2 years.

Response:

The EIA does not suggest that changes to the freshwater lens will be short term in fact the EMP proposes a monitoring plan to monitor potential changes to the freshwater lens. The impacts are discussed in Section 9.2.1 Groundwater Resources of the EIA and in Appendix 4 of the EIA.

Where will Reverse Osmosis plant effluent be discharged? Deep well injection or offshore? This needs to be stated and impacts to surrounding aquifer and biota need to be considered.

Response:

Please refer to the EMP and Appendix #6 of the EMP "Functional & Technical Specification Deep Injection Well"

Stated Impacts

• The report admits that the beaches are quality sea turtle nesting habitat and that the nighttime lighting environment poses the greatest risk nesting sea turtles. What best management practices are in place at Carnival properties in the region to reduce these impacts? How will they be applied here?

Response:

Please refer to Section 10.10 of the EMP. The port will be used during daytime. In rare occasion of a late evening for a few hours some small portion of the beach may have some ambiance lighting.

LNG in storage will have some boil off gas produced. What percentage of this is
expected to be recaptured to run the engines and what is the expected net loss to
the environment? Absolute value needs to be presented to determine true cost.

Response:

There will be no LNG storage at the port. Please refer to Appendix 11 of the EMP document "Bunkering Process". LNG ships have been calling on The Bahamas for years including since July also by LNG driven Cruise ships, most new cruise ship being build will call on the 9 Bahamian ports plus 2 under development will welcome LNG ships, using the cleanest fossil fuel. The new cruise ships have advance technologies that puts them a head of any cargo LNG driven ships and that includes boil off gas produced. Carnival is the global leader in LNG technology for cruise ships.

Additional Impacts

Appendix 3 (Water Lines) indicates that water supply will come from the GBUC. With the shift of the Freshwater lens north how will this affect the GBUC ability to deliver potable water to the additional Grand Port consumers along with their current customers?

Response:

GBUC has confirmed they will be able to provide the ships with ample supply without impacting local customers.

Carnival ships are 3 of 5 that call at Port Lucaya. What will become of Port Lucaya?

Response:

We do not have ship (including pre COVID) calls at Port Lucaya, we are using Freeport Harbour for the cruise operation. Port Lucaya is a marina/shopping/restaurant complex. The passenger counts in the new port will be at least double the number of passengers we had pre COVID (coming in with less ships but much larger capacity ships. Freeport Harbor is reported to be engaged in a new development project that will likely maintain and even increase the number of passengers calling on the commercial port. Further there is no statistics as to how many cruise ship passengers even make it to Port Lucaya. We note there has not been

a Carnival ship with passengers in Grand Bahama since the end of March 2020 until present and Port Lucaya has managed to sustain itself to date.

• In the event of storms, or other adverse events, will the jobs and income of local staff be guaranteed? Will the positions be salaried or dependent on the number of guests that disembark or make purchases?

Response:

The port will employ local Bahamians via 4 categories of employment: A. Via Bahamian Retailors at the port. B. Employees of the F&B beverage Bahamian operators at the port. C. The port Subcontractor labor in specialized area and D. The employees of the port itself. That is in addition to others that we will be working with operators selling tours to the cruise lines. We can only address the question as to our directly employed employees and indeed such adverse event we will guarantee the jobs and income of our employees as we have done in the past. Our employees will be paid by the time / job they will perform as measured in hours / days. We do not know how the other indirect employees will be renumerated.

 Tour businesses will now be split between Port Lucaya and Grand Port, how will this affect the local economy stability and offerings?

Response:

It will increase the offering and the opportunities. Additionally, tour operators offer different tour packages that do not go to Port Lucaya, i.e. ATV tours, kayak tours, moped tours and Lucayan National Park, etc.

• Sperm whales and other cetaceans have been reported south of Grand Bahama. How is this expected to affect them?

Response:

Please refer to the Marine Noise (page 41) of the EMP. No significant impacts to cetaceans are anticipated on this project.

If you have any comments of concerns, we would be happy to make ourselves available for further discussions on the matter.

Sincerely,

Falon Cartwright

Director of Science and Policy