

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT (CEIA) SAIL ROCK BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, AND BOAT DOCKS DEVELOPMENT FOR PLANNING APPLICATION REFERENCE SC. 808 & SC. 809 - BLOCK AND PARCEL NUMBERS 20202/24, 257, 267, 269, 270, 334, AND 356 SAIL ROCK PENINSULA, SOUTH CAICOS TURKS AND CAICOS ISLANDS FOR SAIL ROCK ESTATES LIMITED

APPENDICES

APPENDIX I

Schedule of Protected Flora and Fauna in the Turks and Caicos Islands



Department of Environment and Coastal Resources (DECR)
Ministry of Tourism, Environment, Heritage and Culture (MTEHC)
Turks and Caicos Islands Government (TCIG)
Providenciales, Turks and Caicos Islands



The following flora and fauna are protected species because they are endemic, rare and endangered.

THE SCHEDULES

- I. Protected Flora & Fungi
 - A. Turks & Caicos Endemic Plants
 1. Turks & Caicos heather *Limonium bahamense*
 2. Lucayan pear *Opuntia x lucayana*
 3. Britton's buttonbush *Spermacoce brittonii*
 4. Capillary buttonbush *Spermacoce capillaries*
 5. Stipitate dog-strangle *Metastelma stipitatum*
 6. Slender-stemmed peppergrass *Lepidium filicaule*
 7. Caicos Encyclia orchid *Encyclia caicensis*
 8. Caroline's pink *Stenandrium carolinae*
 9. Silvery silverbush *Argythamnia argentea*
 10. Broom bush *Evolvulus bahamensis*
 11. Hatpin sedge *Eleocharis bahamensis*
 - B. Endemic and vital species of fungi
 1. Ectomycorrhizal species in the genera *Neoboletus*, *Octaviana*, *Diplocystis*, *Melanogaster*, *Sebacinaceae*, *Tomentella*, *Thelophora*, *Thelophoraceae*, *Entoloba*, and *Inocybe*
 2. Pine truffle *Rhizopogon floscorubens*
 3. *Russula littoralis*
 4. *Scleroderma bermudense* and other ectomycorrhizal *Scleroderma*
 5. *Sullus cothurnatus*
 6. *Amanita arenicola*
 - C. Lucayan Archipelago Endemic Plants
 1. Haulbark *Thouinia discolor*
 2. Inagua Encyclia orchid *Encyclia inaguensis*
 3. Correll's rock orchid *Encyclia correllii* (ex *Encyclia gracilis*)
 4. Rufous Encyclia *Encyclia rufa*
 5. Inagua gum-elemi *Bursera inaguensis*
 6. Frenning's gum-elemi *Bursera frenningae*
 7. Sea sage *Lantana involucrata*
 8. Inagua silver-top palm *Coccothrinax inaguensis*
 9. Nakedback *Euphorbia gymnonota*

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10. Wild thyme *Euphorbia inaguensis*
11. Inagua century plant *Agave inaguensis*
12. Lucayan century plant *Agave millspaughii*
13. Bahama love grass *Eragrostis bahamensis*
14. Nash's pepperwort *Marsilea nashii*
15. Inagua fimbry sedge *Fimbristylis inaguensis*
16. Caicos pine *Pinus caribaea* var. *bahamensis*
17. Brasileto *Caesalpinia reticulata*
18. Pineyard golden creeper *Ernodea serratifolia*
19. Low ashy heliotrope *Heliotropium nanum*
20. Thyme-leaved buttonbush *Spermacoce thymifolia*
21. Lucayan lobelia *Lobelia lucayana*
22. Lucayan cocobey *Varronia lucayana*
23. Bahama cocobey *Varronia bahamensis*
24. Lucayan silverbush *Argythamnia lucayana*
25. Yellow silverbush *Argythamnia sericea*
26. Bumbo-bush *Lepidaploa arbuscula*
27. False holly *Anaethia paucifloscula*
28. Lucayan boneset *Chromolaena lucayana*
29. Rong-bush *Wedelia bahamensis*
30. Heliotrope *Heliotropium diffusum*
31. Nash's heliotrope *Heliotropium nashii*
32. Wilson's pinweed spurge *Euphorbia lecheoides*
33. Bahama milkpea *Galactia bahamensis*
34. Swamp-bush *Pavonia bahamensis*
35. Correll's spider-grass *Aristida correlliae*
36. Catesby's lily-thorn *Catesbaea foliosa*
37. Winder *Clematis plukenetii*
38. Golden creeper *Ernodea millspaughii*
39. Savanna buttonbush *Spermacoce savannarum*
40. Big sage *Lantana balsamifera*
41. Horse pear *Consoletia nashii*

D. Native Plants of Special Conservation Concern

1. Tall Encyclia orchid *Encyclia altissima*
2. Britton's shadow-witch orchid *Ponthieva brittonae*
3. Adder's mouth orchid *Malaxis spicata*
4. Spring ladies tresses *Spiranthes vernalis*
5. Green ladies tresses *Spiranthes polyantha*
6. Cuban dune mat *Guilleminea brittonii*
7. Woolly nipple cactus *Mammillaria nivosa*
8. Smooth pear *Opuntia bahamana*
9. Dildo cactus *Pilosocereus royerii*

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10. West Indian mahogany *Swietenia mahagoni*
11. Holy lignum vitae *Guaiacum sanctum*
12. True lignum vitae *Guaiacum officinale*
13. Mauby *Colubrina elliptica*
14. Brook's cereus *Harrisia brookii*
15. Monkey-fiddle *Euphorbia tithymaloides* var. *bahamensis*
16. Pork-and-doughboy *Acacia acuiifera*
17. Leatherleaf casha *Acacia coriophylla*
18. Bahama savia *Savia bahamensis*
19. Brasiletto *Caesalpinia bahamensis*
20. Bloody powderpuff *Calliandra haematomma*
21. Popcorn *Chamaecrista caribaea*
22. Mistletoe *Dendropemon purpureus*
23. Wild hibiscus *Hibiscus clypeatus*
24. Taylor's jujube *Ziziphus taylori*
25. Bahama buttonbush *Spermacoce bahamensis*
26. Mahogany mistletoe *Phoradendron northropiae*
27. Pineyard rat-tail bush *Stachytarpheta fruticosa*

II. Protected Fauna

A. Turks & Caicos Endemic Fauna

1. Turks & Caicos rock iguana *Cyclura carinata*
2. Caicos pygmy trope boa *Tropidophis greenwayi* (*T. g. greenwayi* & *T. g. lathanus*)
3. Caicos barking gecko *Aristelliger hechti*
4. Turks snake-doctor *Spondylurus turksae*
5. Caicos snake-doctor *Spondylurus caicosae*
6. Turks dwarf gecko *Sphaerodactylus underwoodi*
7. Caicos dwarf gecko *Sphaerodactylus caicosensis*
8. Dwarf Greater Antillean bullfinch *Loxigilla violacea ofella*
9. Turks & Caicos thick-billed vireo *Vireo crassirostris stalagmum*
10. Cave crustacean *Deevaya spiralis*
11. Cave crustacean *Speonebillia cannoni*
12. Cave crustacean *Bahadzia stocki*
13. Cave crustacean *Lasionectes entrichoma*
14. Cave crustacean *Erebonectoides macrochaetus*
15. Cave crustacean *Fosshagenia ferrarii*
16. Cave crustacean *Pelagomacellicephala iliffei*
17. Cave crustacean *Kaloketos pilosus*
18. Cave crustacean *Godzillius robustus*
19. Cave crustacean *Bahalana caicosana*
20. Cave crustacean *Spelaeonicippe provo*

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B. Protected Birds. List of Turks & Caicos Islands Native, Migratory, and Regionally Vagrant Bird Species.

- Flamingos (Phoenicopteriformes)
1. Caribbean Flamingo *Phoenicopterus ruber*
- Tropicbirds (Phaethontiformes)
2. White Tailed Tropicbird *Phaethon lepturus*
- Petrels (Procellariiformes)
3. Herald petrel *Pterodroma arminjoniana*
 4. Black-capped petrel *Pterodroma hasitata*
 5. Audubon's shearwater *Puffinus lherminieri*
 6. Cory's shearwater *Calonectris borealis*
- Pelicans, Cormorants, Herons Pelecaniformes
8. Brown pelican *Pelecanus occidentalis*
 9. Brown Booby *Sula leucogaster*
 10. Masked booby *Sula dactylatra*
 11. Northern gannet *Morus bassanus*
 12. Red-footed booby *Sula sula*
 13. Double Crested Cormorant *Phalacrocorax auritus*
 14. Olivaceous Cormorant *Phalacrocorax olivaceus*
 15. Magnificent Frigatebird *Fregata magnificens*
 16. Great Blue Heron *Ardea herodias*
 17. Great Egret *Casmerodius albus*
 18. Snowy Egret *Egretta thula*
 19. Little Blue Heron *Egretta caerulea*
 20. Tricolored Heron *Egretta tricolor*
 21. Reddish Egret *Egretta rufescens*
 22. Cattle Egret *Bubulcus ibis*
 23. Green Heron *Butorides virescens*
 24. Black Crowned Night Heron *Nycticorax nycticorax*
 25. Yellow Crowned Night Heron *Nyctanassa violacea*
 26. American Bittern *Botaurus lentiginosus*
 27. Glossy Ibis *Plegadis falcinellus*
 28. White ibis *Eudocimus albus*
 29. Roseate Spoonbill *Ajaia ajaja*
- Rails and Cranes (Gruiformes)
30. Clapper Rail *Rallus longirostris*
 31. King rail *Rallus elegans*
 32. Sora Rail *Porzana carolina*
 33. Purple gallinule *Porphyrio martinicus*
 34. Common gallinule *Gallinula galeata*
 35. American coot *Fulica americana*
 36. Caribbean coot *Fulica caribaea*
 37. Sandhill crane *Grus canadensis*

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38. Limpkin *Aramus guarauna*
Geese, Swans and Ducks (Anseriformes)
39. West Indian Whistling Duck *Dendrocygna arborea*
40. Fulvous whistling duck *Dendrocygna bicolor*
41. Green Winged Teal *Anas crecca*
42. White-cheeked Pintail *Anas bahamensis*
43. Blue-winged Teal *Anas discors*
44. Ruddy Duck *Oxyura jamaicensis*
45. Least Grebe *Tachybaptus dominicus*
46. Pied-billed Grebe *Podilymbus podiceps*
47. Greater Scaup *Aythya marila*
48. Lesser scaup *Aythya affinis*
49. Ring-necked duck *Aythya collaris*
50. Hooded merganser *Lophodytes cucullatus*
51. Common merganser *Mergus merganser*
52. Red-breasted merganser *Mergus serrator*
53. Canada goose *Branta canadensis*
54. Masked Duck *Nomonyx dominicus*
55. Redhead *Aythya americana*
56. Northern shoveler *Spatula clypeata*
57. Gadwall *Mareca strepera*
58. American wigeon *Mareca americana*
59. Mallard *Anas platyrhynchos* (excludes domestic breeds)
60. American black duck *Anas rubripes*
61. Northern pintail *Anas acuta*
62. Shorebirds *Charadriiformes*
63. American Oystercatcher *Haematopus palliatus*
64. Black-necked Stilt *Himantopus mexicanus*
65. American Avocet *Recurvirostra americana*
66. Lesser Golden Plover *Pluvialis dominica*
67. Grey plover *Pluvialis squatarola*
68. Semipalmated Plover *Charadrius semipalmatus*
69. Wilson's Plover *Charadrius wilsonia*
70. Killdeer *Charadrius vociferus*
71. Snowy Plover *Charadrius alexandrinus*
72. Piping Plover *Charadrius melodus*
73. Black-bellied Plover *Pluvialis squatarola*
74. Upland Sandpiper *Bartymia longicauda*
75. Whimbrel *Numenius phaeopus*
76. Hudsonian Godwit *Limosa haemastica*
77. Ruddy Turnstone *Arenaria interpres*
78. Red Knot *Calidris canutus*
79. Stilt Sandpiper *Calidris himantopus*
80. Sanderling *Calidris alba*

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81. Dunlin *Calidris alpina*
82. Least Sandpiper *Calidris minutilla*
83. White-rumped Sandpiper *Calidris fuscicollis*
84. Pectoral Sandpiper *Calidris melanotos*
85. Semipalmated Sandpiper *Calidris pusilla*
86. Western Sandpiper *Calidris mauri*
87. Short-billed Dowitcher *Limnodromus griseus*
88. Wilson's snipe *Gallinago delicata*
89. Common Snipe *Gallinago gallinago*
90. Spotted Sandpiper *Actitis macularia*
91. Solitary Sandpiper *Tringa solitaria*
92. Willet *Catoptrophorus semipalmatus*
93. Greater Yellowlegs *Tringa melanoleuca*
94. Lesser Yellowlegs *Tringa flavipes*
95. Wilson's phalarope *Steganopus tricolor*
96. Little auk *Alle alle*
97. Pomarine skua *Stercorarius pomarinus*
98. Brown Noddy *Anous stolidus*
99. Black Skimmer *Rhynchops niger*
100. Bonaparte's gull *Chroicocephalus philadelphia*
101. Black-headed gull *Chroicocephalus ridibundus*
102. Laughing gull *Leucophaeus atricilla*
103. Ring-billed gull *Larus delawarensis*
104. Great black-backed gull *Larus marinus*
105. American herring gull *Larus smithsonianus*
106. Sooty Tern *Sterna fuscata*
107. Bridled Tern *Sterna anaethetus*
108. Least Tern *Sterna antillarum*
109. Gull-billed tern *Gelochelidon nilotica*
110. Caspian tern *Hydroprogne caspia*
111. Black tern *Chlidonius niger*
112. Roseate Tern *Sterna dougallii*
113. Common Tern *Sterna hirundo*
114. Forster's Tern *Sterna forsteri*
115. Sandwich Tern *Sterna sandvicensis*
116. Royal Tern *Sterna maximus*
- Pigeons and doves (Columbiformes)
117. White Crowned Pigeon *Columba leucocephala*
118. White-winged Dove *Zenaida asiatica*
119. Zenaida Dove *Zenaida aurita*
120. Mourning Dove *Zenaida macroura*
121. Common Ground Dove *Columbina passerina*
122. Key West Quail Dove *Geotrygon chrysis*
- Cuckoos (Cuculiformes)

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123. Yellow-billed Cuckoo *Coccyzus americanus*
124. Mangrove Cuckoo *Coccyzus minor*
125. Smooth-billed Ani *Crotophaga ani*
- Hawks (Accipitriformes)
126. Osprey *Pandion heliaetus*
127. Red-tailed hawk *Buteo jamaicensis*
128. Sharp-shinned hawk *Accipiter striatus*
129. Northern harrier *Circus cyaneus*
130. Swallow-tailed kite *Elanoides forficatus*
- Owls (Strigiformes)
131. Barn Owl *Tyto alba*
132. Short-eared Owl *Asio flammeus*
- Nighthawks, swifts, hummingbirds (Caprimulgiformes)
133. Common Nighthawk *Chordeiles minor*
134. Antillean Nighthawk *Chordeiles gundlachii*
135. Chuck-will's- widow *Caprimulgus carolinensis*
136. Black Swift *Cypseloides niger*
137. Chimney Swift *Chaetura pelagica*
138. Antillean palm swift *Tachornis phoenicobia*
139. Lesser Antillean swift *Chaetura martinica*
140. Bahama Woodstar Hummingbird *Calliphlox evelynae*
141. Bee Hummingbird *Mellisuga helenae*
142. Cuban emerald hummingbird *Chlorostilbon ricordii*
- Kingfishers (Coraciiformes)
143. Belted Kingfisher *Ceryle alcyon*
- Falcons (Falconiformes)
144. American kestrel *Falco sparverius*
145. Merlin *Falco columbarius*
146. Peregrine falcon *Falco peregrinus*
- Woodpeckers (Piciformes)
147. Yellow Bellied Sapsucker *Sphyrapicus varius*
148. Hairy Woodpecker *Picoides villosus*
- Perching birds (Passeriformes)
149. Purple Martin *Progne subis*
150. Sand martin *Riparia riparia*
151. Caribbean Martin *Progne dominicensis*
152. Bahama swallow *Tachycineta cyaneoviridis*
153. Tree Swallow *Tachycineta bicolor*
154. Cave swallow *Petrochelidon fulva*
155. Northern Rough-winged Swallow *Stelgidopteryx serripennis*
156. Bank Swallow *Riparia riparia*
157. Cliff Swallow *Hirundo pyrrhonota*
158. Barn Swallow *Hirundo rustica*
159. Eastern Wood Pewee *Contopus virens*

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160. Greater Antillean Pewee *Contopus caribaeus*
161. Eastern Kingbird *Tyrannus tyrannus*
162. Gray Kingbird *Tyrannus dominicensis*
163. Giant kingbird (historical range) *Tyrannus cubensis*
164. La Sagra's flycatcher *Myiarcus sagrae*
165. Hispaniolan wood peewee *Contopus hispaniolensis*
166. Cedar waxwing *Bombycilla cedrorum*
167. Cuban Crow *Corvus nasicus*
168. Blue-gray Gnatcatcher *Polioptila caerulea*
169. Gray-cheeked Thrush *Catharus minimus*
170. American robin *Turdus migratorius*
171. Gray Catbird *Dumetella carolinensis*
172. Northern Mockingbird *Mimus polyglottus*
173. Bahama Mockingbird *Mimus gundlachii*
174. Pearly-eyed Thrasher *Margarops fuscatus*
175. Chipping sparrow *Spizella passerina*
176. White-crowned sparrow *Zonotrichia leucophrys*
177. Savannah sparrow *Passerculus sandwichensis*
178. White-eyed Vireo *Vireo griseus*
179. Thick-billed Vireo *Vireo crassirostris*
180. Yellow-throated Vireo *Vireo flavifrons*
181. Philadelphia Vireo *Vireo philadelphicus*
182. Red-eyed Vireo *Vireo olivaceus*
183. Black-whiskered Vireo *Vireo altiloquus*
184. Blue Winged Warbler *Vermivora pinus*
185. Tennessee Warbler *Vermivora peregrina*
186. Nashville Warbler *Vermivora ruficapilla*
187. Northern Parula Warbler *Parula americana*
188. Yellow Warbler *Dendroica petechia*
189. Chestnut-sided Warbler *Dendroica pensylvanica*
190. Magnolia Warbler *Dendroica magnolia*
191. Cape May Warbler *Dendroica tigrina*
192. Black-throated Blue Warbler *Dendroica caerulescens*
193. Yellow-rumped Warbler *Dendroica coronata*
194. Black-throated Green Warbler *Dendroica virens*
195. Blackburnian Warbler *Dendroica fusca*
196. Yellow-throated Warbler *Dendroica dominica*
197. Kirtland's Warbler *Dendroica kirtlandii*
198. Prairie Warbler *Dendroica discolor*
199. Palm Warbler *Dendroica palmarum*
200. Bay-breasted Warbler *Dendroica castanea*
201. Blackpoll Warbler *Dendroica striata*
202. Cerulean Warbler *Dendroica cerulea*
203. Black-and-white Warbler *Mniotilta varia*

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204. American Redstart *Setophaga ruticilla*
205. Prothonotary Warbler *Protonotaria citrea*
206. Worm-eating Warbler *Helmitheros vermivorus*
207. Ovenbird *Seiurus aurocapillus*
208. Townsend's warbler *Setophaga townsendi*
209. Northern Waterthrush *Seiurus noveboracensis*
210. Louisiana Waterthrush *Seiurus motacilla*
211. Kentucky Warbler *Oporomis formosus*
212. Connecticut Warbler *Oporomis agilis*
213. Mourning Warbler *Oporomis philadelphia*
214. Common Yellowthroat *Geothlypis trichas*
215. Hooded Warbler *Wilsonia citrina*
216. Green-tailed warbler *Microigea palustris*
217. Swainson's warbler *Limnethlypis swainsonii*
218. Bananaquit *Coereba flaveola*
219. Western spindalis *Spindalis zena*
220. Summer Tanager *Piranga rubra*
221. Scarlet Tanager *Piranga olivacea*
222. Rose Breasted Grosbeak *Pheucticus ludovicianis*
223. Blue Grosbeak *Guaraca caerulea*
224. Indigo Bunting *Passerina cyanea*
225. Painted Bunting *Passerina ciris*
226. Dickcissel *Spiza americana*
227. Black-faced Grassquit *Tiaris bicolor*
228. Greater Antillean Bullfinch *Loxigilla violacea ofella*
229. White-crowned Sparrow *Zonotrichia leucophrys*
230. Bobolink *Dolichonyx oryzivorus*
231. Brown-headed Cowbird *Molothrus ater*
232. Shiny cowbird *Molothrus bonariensis*
233. Northern Oriole *Icterus galbula*
234. Buff-bellied pipit *Anthus rubescens*

C. Protected Reptiles and Amphibians

1. Southern Bahamas rainbow boa *Chilabothrus chrysogaster*
2. Mayaguana dwarf gecko *Sphaerodactylus mariguanae*
3. Jamaican slider *Trachemys terrapent*
4. Inagua slider *Trachemys stejnegeri*

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5. Thread snake *Typhlops platycephalus*?
6. American crocodile *Crocodylus acutus*†
7. Green turtle *Chelonia mydas*
8. Hawksbuill turtle *Eretmochelys imbricata*
9. Loggerhead turtle *Caretta caretta*

D. Protected Mammals

1. All bats; all species in order *Chiroptera*
2. All hutias; *Geocapromys* species
3. All whales, dolphins, and porpoises, all members of order *Cetacea*
4. West Indian manatee *Trichechus manatus*
5. All other marine mammals, including vagrant species

E. Protected Terrestrial Invertebrates

1. Turks Island leafwing
2. Drury's hairstreak
3. Cave shrimp *Typhlatya garciai*
4. Cave shrimp *Barbouria cubensis*

Department of Environment
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Turks & Caicos Islands

APPENDIX II

Turks and Caicos Islands Invasive Plants

TURKS AND CAICOS ISLANDS - INVASIVE PLANTS

Non-native species are discouraged, particularly if they have caused ecological issues in other locations. Caution should always be exercised because it is hard to predict whether introduced species will become problematic. However, the following species have proved to be invasive and should be avoided completely -

Casuarina (AKA Australian pine) *Casuarina equisetifolia*

Cow Bush *Leucaena leucocephala*

Beach Cabbage *Scaevola taccada*

Brazilian Pepper *Schinus terebinthifolius*

Castor-oil-plant *Ricinus communis*

Azores jasmine (AKA Brazilian jasmine) *Jasminum fluminense*

APPENDIX III

Index of CITES Species



COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS



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The UN Environment Programme World Conservation Monitoring Centre (UNEP-WCMC) is a global Centre of excellence on biodiversity. The Centre operates as a collaboration between the UN Environment Programme and the UK-registered charity WCMC. Together we are confronting the global crisis facing nature.

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2 The common name record

Where available, English (E), Spanish (S) and French (F) common names are provided. The common name is followed by the corresponding scientific name under which all information is recorded. There is only one entry for each common name, e.g. there is an entry for 'Eagle, Golden' but not for 'Golden Eagle'.

Examples of common name records and explanation

- 1) Hummingbird, Emerald-chinned (E): *Abeillia abeillei*
= go to "*Abeillia abeillei*" to see the full record of the "emerald-chinned hummingbird".
- 2) parrots (E): PSITTACIFORMES (Aves)
= go to "PSITTACIFORMES" to see the full record of "parrots".
- 3) orchids, slipper (E): *Paphiopedilum* spp. / *Phragmipedium* spp.
= go to "*Paphiopedilum* spp." and "*Phragmipedium* spp." to see the full record of "slipper orchids", because the same common name is used for both genera.

3 The synonym record

A synonym is followed by '=' and the scientific name under which all information is recorded.

Example and explanation

Loxodonta cyclotis = *Loxodonta africana*

Explanation: *Loxodonta cyclotis* is a synonym of *Loxodonta africana*. Go to "*Loxodonta africana*" to see the full record.

Note: A same species name may be displayed as both a synonym and an accepted name when it has been given by different authors to different species. Thus, the *Index of CITES species* contains the following consecutive entries:

Porites solida = *Porites astreoides*

Porites solida II PORITIDAE (Anthozoa)

Selecting "Author's name" in the *Advanced options* will display the authors' names both on screen and in the downloads, thereby clarifying these records as:

Porites solida Verrill, 1868 = *Porites astreoides* Lamarck, 1816

Porites solida (Forskål, 1775) II PORITIDAE (Anthozoa)

In other words, the Conference of the Parties to CITES has adopted *Porites astreoides*, as named by Lamarck in 1816, and *Porites solida*, as named by Forskål in 1775, as the scientific names of two

FAUNA

- Accipiter chionogaster* (Kaup, 1852) = *Accipiter striatus* Vieillot, 1807
- Accipiter erythronemius* (Kaup, 1850) = *Accipiter striatus* Vieillot, 1807
- Accipiter striatus* Vieillot, 1807 II ³¹ ACCIPITRIDAE**
(Aves) (E) Sharp-shinned Hawk (S) Azor chico, Esparvero chico, Gavilán americano, Gavilán arrastrador, Gavilán pajaroero (F) Épervier brun
- Accipiter ventralis* Sclater, 1866 = *Accipiter striatus* Vieillot, 1807
- Acropora cervicornis* (Lamarck, 1816) II**
ACROPORIDAE (Anthozoa) (E) Staghorn Coral (S) Coral cuerno de ciervo (F) Corail cornes de cerf
- Acropora palmata* (Lamarck, 1816) II ACROPORIDAE**
(Anthozoa) (E) Elkhorn Coral (S) Coral cuerno de alce (F) Corail cornes d'élan
- Agarice fragile* (F): *Agaricia fragilis*
- Agarice laitue* (F): *Agaricia agaricites*
- Agarice plate* (F): *Agaricia humilis*
- Agaricia agaricites* (Linnaeus, 1758) II AGARICIIDAE**
(Anthozoa) (E) Leaf Coral, Lettuce Coral (S) Coral de lechuga (F) Agarice laitue
- Agaricia cailleti* (Duchassaing & Michelotti, 1864) = *Leptoseris cailleti* (Duchassaing & Michelotti, 1864)
- Agaricia crassa* Verrill, 1901 = *Agaricia agaricites* (Linnaeus, 1758)
- Agaricia fragilis* (Dana, 1846) II AGARICIIDAE**
(Anthozoa) (E) Fragile Saucer Coral (S) Coral fragile (F) Agarice fragile
- Agaricia humilis* Verrill, 1901 II AGARICIIDAE**
(Anthozoa) (E) Lowrelief Lettuce Coral (S) Coral bajorrelieve (F) Agarice plate
- Agaricia purpurea* LeSueur, 1820 = *Agaricia agaricites* (Linnaeus, 1758)
- Águila pescadora* (S): *Pandion haliaetus*
- Águila sangual* (S): *Pandion haliaetus*
- Aguillilla colirroja* (S): *Buteo jamaicensis*
- Aguilucho pálido* (S): *Circus cyaneus*
- Aigle pêcheur* (F): *Pandion haliaetus*
- Alcachofa de mar* (S): *Scolymia cubensis*
- Anas arborea* Linnaeus, 1758 = *Dendrocygna arborea* (Linnaeus, 1758)
- Anas bicolor* Vieillot, 1816 = *Dendrocygna bicolor* (Vieillot, 1816)
- Asio flammeus* (Pontoppidan, 1763) II ³⁴ STRIGIDAE**
(Aves) (E) Short-eared Owl (S) Búho campestre, Búho orejicorto, Lechuza campestre, Lechuza orejicorta, Lechuzón campestre (F) Hibou brachyote, Hibou des marais
- Astrea annularis* (Ellis & Solander, 1786) = *Montastrea annularis* (Ellis & Solander, 1786)
- Astrea argus* Lamarck, 1816 = *Montastrea cavernosa* (Linnaeus, 1767)
- Astrea conferta* Milne Edwards & Haime, 1850 = *Montastrea cavernosa* (Linnaeus, 1767)
- Astrea decactis* Lyman, 1859 = *Madracis decactis* (Lyman, 1859)
- Astrea intersepta* (Esper, 1795) = *Stephanocoenia intersepta* (Esper, 1795)
- Astrea radiata* (Ellis & Solander, 1786) = *Montastrea cavernosa* (Linnaeus, 1767)
- Astrea rigida* Dana, 1846 = *Isophyllastrea rigida* (Dana, 1846)
- Astropsammia pedersenii* Verrill, 1869 = *Tubastraea coccinea* Lesson, 1829
- Axohelia mirabilis* (Duchassaing & Michelotti, 1860) = *Madracis myriaster* (Milne Edwards & Haime, 1849)
- Axohelia myriaster* Milne Edwards & Haime, 1849 = *Madracis myriaster* (Milne Edwards & Haime, 1849)
- Axohelia dumetosa* (Duchassaing, 1870) = *Madracis myriaster* (Milne Edwards & Haime, 1849)
- Axohelia mirabilis* (Duchassaing & Michelotti, 1860) = *Madracis myriaster* (Milne Edwards & Haime, 1849)
- Axohelia myriaster* (Milne Edwards & Haime, 1849) = *Madracis myriaster* (Milne Edwards & Haime, 1849)
- Axohelia schrammii* Pourtalès, 1874 = *Madracis myriaster* (Milne Edwards & Haime, 1849)
- Azor chico* (S): *Accipiter striatus*
- Balbugard fluvialile* (F): *Pandion haliaetus*
- Balbugard pêcheur* (F): *Pandion haliaetus*
- Barn-Owl, Common* (E): *Tyto alba*
- Baula* (S): *Dermochelys coriacea*
- Boa, Ambergris Cay Dwarf* (E): *Tropidophis greenwayi*
- Boa, Bahamas Islands* (E): *Epicrates chrysogaster*
- Boa de l'île Turques* (F): *Epicrates chrysogaster*
- Boa forestier d'Ambergris Cay* (F): *Tropidophis greenwayi*
- Boa nain d'Ambergris Cay* (F): *Tropidophis greenwayi*
- Boa, Turks Islands* (E): *Epicrates chrysogaster*
- Búho campestre* (S): *Asio flammeus*
- Búho orejicorto* (S): *Asio flammeus*
- Busardo colirrojo* (S): *Buteo jamaicensis*
- Busard Saint-Martin* (F): *Circus cyaneus*
- Buse à queue rousse* (F): *Buteo jamaicensis*
- Buteo jamaicensis* (Gmelin, 1788) II ³¹ ACCIPITRIDAE**
(Aves) (E) Red-tailed Hawk (S) Aguillilla colirroja, Busardo colirrojo, Guaraguao (F) Buse à queue rousse
- Caballito* (S): *Hippocampus reidi*
- Caballito de mar* (S): *Hippocampus reidi*
- Caballito de mar* (S): *Hippocampus erectus*
- Caballito erecto* (S): *Hippocampus erectus*
- Caballito estriado* (S): *Hippocampus erectus*
- Caballito hocico largo* (S): *Hippocampus reidi*
- Caballito punteado* (S): *Hippocampus erectus*
- Cachona* (S): *Sphyrna lewini*
- Caguama* (S): *Caretta caretta*
- Canal* (S): *Dermochelys coriacea*
- Caouana elongata* Gray, 1844 = *Caretta caretta* (Linnaeus, 1758)
- Caouanne* (F): *Caretta caretta*
- Carcharias tigris* Atwood, 1865 = *Isurus oxyrinchus* Rafinesque, 1810
- Cardon* (S): *Dermochelys coriacea*
- Caret* (F): *Eretmochelys imbricata*
- Caretta atra* Merrem, 1820 = *Caretta caretta* (Linnaeus, 1758)

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

- Caretta bissa* Rüppell, 1835 = *Eretmochelys imbricata* (Linnaeus, 1766)
- Caretta caretta* (Linnaeus, 1758) I CHELONIIDAE**
(Reptilia) (E) Loggerhead, Loggerhead turtle (S) Caguama, Cayuma, Tortuga boba, Tortuga cabezona, Tortuga caretta, Tortuga comun (F) Caouanne, Cayunne, Coffre, Tortue à bahut, Tortue caouanne, Tortue caret
- Caretta cepedii* Merrem, 1820 = *Chelonia mydas* (Linnaeus, 1758)
- Caretta esculenta* Merrem, 1820 = *Chelonia mydas* (Linnaeus, 1758)
- Caretta gigas* Deraniyagala, 1933 = *Caretta caretta* (Linnaeus, 1758)
- Caretta nasuta* Rafinesque, 1814 = *Caretta caretta* (Linnaeus, 1758)
- Caretta rostrata* Girard, 1858 = *Eretmochelys imbricata* (Linnaeus, 1766)
- Caretta squamosa* Girard, 1858 = *Eretmochelys imbricata* (Linnaeus, 1766)
- Caretta thunbergii* Merrem, 1820 = *Chelonia mydas* (Linnaeus, 1758)
- Caryophyllia aurantiaca* Milne Edwards, 1836 = *Tubastraea coccinea* Lesson, 1829
- Caryophyllia berteriana* Duchassaing, 1850 II**
CARYOPHYLLIIDAE (Anthozoa) (E) Beautiful Horn Coral (S) Coral cuernito hermoso
- Caryophyllia carduus* (Ellis & Solander, 1786) = *Mussa angulosa* (Pallas, 1766)
- Caryophyllia cubensis* Milne Edwards & Haime, 1849 = *Scolymia cubensis* (Milne Edwards & Haime, 1849)
- Caryophyllia fastigiata* (Pallas, 1766) = *Eusmilium fastigiata* (Pallas, 1766)
- Caryophyllia formosa* Pourtalès, 1867 = *Caryophyllia berteriana* Duchassaing, 1850
- Cayuma (S): *Caretta caretta*
Cayunne (F): *Caretta caretta*
Cernicalo americano (S): *Falco sparverius*
Cernicalo primito (S): *Falco sparverius*
Cestracion leeuwenii (Day 1865) = *Sphyrna lewini* (Griffith & Smith, 1834)
- Cestracion oceanica* (Garman 1913) = *Sphyrna lewini* (Griffith & Smith, 1834)
- Chagrin (F): *Rhincodon typus*
- Chelone imbricata* (Linnaeus, 1766) = *Eretmochelys imbricata* (Linnaeus, 1766)
- Chelonia agassizii* Bocourt, 1868 = *Chelonia mydas* (Linnaeus, 1758)
- Chelonia bicarinata* Lesson, 1834 = *Chelonia mydas* (Linnaeus, 1758)
- Chelonia formosa* Girard, 1858 = *Chelonia mydas* (Linnaeus, 1758)
- Chelonia grisea* Eschscholtz, 1829 = *Eretmochelys imbricata* (Linnaeus, 1766)
- Chelonia lachrymata* Cuvier, 1829 = *Chelonia mydas* (Linnaeus, 1758)
- Chelonia lata* Philippi, 1887 = *Chelonia mydas* (Linnaeus, 1758)
- Chelonia maculosa* Cuvier, 1829 = *Chelonia mydas* (Linnaeus, 1758)
- Chelonia marmorata* Duméril & Bibron, 1835 = *Chelonia mydas* (Linnaeus, 1758)
- Chelonia mydas* (Linnaeus, 1758) I CHELONIIDAE**
(Reptilia) (E) Green Turtle (S) Tortuga blanca, Tortuga verde (F) Tortue comestible, Tortue franche, Tortue verte
- Chelonia pelagorum* Bory, 1833 = *Caretta caretta* (Linnaeus, 1758)
- Chelonia pseudocaretta* Lesson, 1834 = *Eretmochelys imbricata* (Linnaeus, 1766)
- Chelonia pseudomydas* Lesson, 1834 = *Eretmochelys imbricata* (Linnaeus, 1766)
- Chelonia radiata* Cuvier, 1829 = *Eretmochelys imbricata* (Linnaeus, 1766)
- Chelonias lutaria* Rafinesque, 1814 = *Dermochelys coriacea* (Vandelli, 1761)
- Chelonia tenuis* Girard, 1858 = *Chelonia mydas* (Linnaeus, 1758)
- Chelonia virgata* Schweigger, 1812 = *Chelonia mydas* (Linnaeus, 1758)
- Chilabothrus chrysogaster* (Cope, 1871) = *Epicrates chrysogaster* (Cope, 1871)
- Chiriría caribeha (S): *Dendrocycna arborea*
Chouette effraie (F): *Tyto alba*
- Circus cyaneus* (Linnaeus, 1766) II ³¹ ACCIPITRIDAE**
(Aves) (E) Hen Harrier, Marsh Hawk, Northern Harrier (S) Aguilucho pálido, Gavilán rastrero (F) Busard Saint-Martin
- Cirripathes setacea occidentalis* (Gray, 1860) = *Stichopathes occidentalis* (Gray, 1860)
- coarl, Ridged cactus (E): *Mycetophyllia lamarkiana*
- Coenopsammia affinis* Duncan, 1889 = *Tubastraea coccinea* Lesson, 1829
- Coenopsammia aurea* (Quoy & Gaimard, 1833) = *Tubastraea coccinea* Lesson, 1829
- Coenopsammia coccinea* (Lesson, 1834) = *Tubastraea coccinea* Lesson, 1829
- Coenopsammia ehrenbergiana* Milne Edwards & Haime, 1848 = *Tubastraea coccinea* Lesson, 1829
- Coenopsammia manni* Verrill, 1866 = *Tubastraea coccinea* Lesson, 1829
- Coenopsammia radiata* Verrill, 1864 = *Tubastraea coccinea* Lesson, 1829
- Coenopsammia tenuilamellosa* Milne Edwards & Haime, 1848 = *Tubastraea coccinea* Lesson, 1829
- Coenopsammia urvillii* Milne Edwards & Haime, 1848 = *Tubastraea coccinea* Lesson, 1829
- Coenopsammia willeyi* Gardiner, 1899 = *Tubastraea coccinea* Lesson, 1829
- Coenosmilium arbuscula* Pourtalès, 1874 II**
CARYOPHYLLIIDAE (Anthozoa) (E) Dwarf Tree Coral (S) Coral arbolito
- Coffin-back (E): *Dermochelys coriacea*
Coffre (F): *Caretta caretta*
- Colpophyllia natans* (Houttuyn, 1772) II FAVIIDAE**
(Anthozoa) (E) Boulder Brain Coral (S) Coral cerebro macizo (F) Corail cerveau natan
- Concha reina del Caribe (S): *Strombus gigas*
Conch, Pink (E): *Strombus gigas*
Conch, Queen (E): *Strombus gigas*

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

Corail balle de golf (F): <i>Favia fragum</i>	Coral, Great Star (E): <i>Montastrea cavernosa</i>
Corail cactus à crêtes basses (F): <i>Mycetophyllia daniana</i>	Coral, Green Cactus (E): <i>Madracis decactis</i>
Corail cactus ridé (F): <i>Mycetophyllia lamarckiana</i>	Coral, Green Wire (E): <i>Stichopathes occidentalis</i>
Corail cactus sinueux (F): <i>Isophyllia sinuosa</i>	Coral, Knobby Brain (E): <i>Diploria clivosa</i>
Corail cerveau bosselé (F): <i>Diploria divosa</i>	Coral laberintico (S): <i>Meandrina maeandrites</i>
Corail cerveau natan (F): <i>Colpophyllia natans</i>	Coral, Lacy Lettuce (E): <i>Leptoseris cailloti</i>
Corail cerveau symétrique (F): <i>Diploria strigosa</i>	Coral, Large Flower (E): <i>Mussa angulosa</i>
Corail coeur d'artichaut (F): <i>Scolymia cubensis</i>	Coral, Leaf (E): <i>Agaricia agaricites</i>
Corail cornes de cerf (F): <i>Acropora cervicornis</i>	Coral, Lesser Starlet (E): <i>Siderastrea radians</i>
Corail cornes d'élan (F): <i>Acropora palmata</i>	Coral, Lettuce (E): <i>Agaricia agaricites</i>
Corail étoile elliptique (F): <i>Dichocoenia stokesii</i>	Coral, Lobed Star (E): <i>Montastrea annularis</i>
Corail étoilé massif (F): <i>Montastrea annularis</i>	Coral, Lowrelief Lettuce (E): <i>Agaricia humilis</i>
Corail étoile rougissant (F): <i>Stephanocoenia intersepta</i>	Coral, Lowridge Cactus (E): <i>Mycetophyllia daniana</i>
Corail étoile rugueux (F): <i>Isophyllastrea rigida</i>	coral macizo de Franks (S): <i>Montastrea franksi</i>
Corail fleur doux (F): <i>Eusmilia fastigiata</i>	Coral, Massive Starlet (E): <i>Siderastrea siderea</i>
Corail fleur épineux (F): <i>Mussa angulosa</i>	Coral, Maze (E): <i>Meandrina maeandrites</i>
Corail laitue (F): <i>Helioseris cucullata</i>	Coral montañoso (S): <i>Montastrea faveolata</i>
Corail méandreux (F): <i>Meandrina maeandrites</i>	Coral mostaza (S): <i>Porites astreoides</i>
Corail starlette massif (F): <i>Siderastrea siderea</i>	Coral, Mountainous Star (E): <i>Montastrea faveolata</i>
Corail alambre verde (S): <i>Stichopathes occidentalis</i>	Coral, Mustard Hill (E): <i>Porites astreoides</i>
Corail arbolito (S): <i>Coenosmilia arbuscula</i>	Coral naranja de tubo (S): <i>Tubastraea coccinea</i>
Corail, Artichoke (E): <i>Scolymia cubensis</i>	Coral, Orange Cup (E): <i>Tubastraea coccinea</i>
Corail bajo relieve (S): <i>Agaricia humilis</i>	Coral, Orange Tube (E): <i>Tubastraea coccinea</i>
Corail, Beautiful Horn (E): <i>Caryophyllia berteriana</i>	Coral piña (S): <i>Dichocoenia stokesii</i>
Corail, Blue Crust (E): <i>Porites branneri</i>	Coral, Pineapple (E): <i>Dichocoenia stokesii</i>
Corail, Blushing Star (E): <i>Stephanocoenia intersepta</i>	Coral rayo de sol (S): <i>Helioseris cucullata</i>
Corail, Boulder Brain (E): <i>Colpophyllia natans</i>	Coral, Ridged Cactus (E): <i>Mycetophyllia lamarckiana</i>
Corail, Boulder Star (E): <i>Montastrea annularis</i>	Coral rosado (S): <i>Manicina areolata</i>
Corail, Boulder Star (E): <i>Montastrea franksi</i>	Coral, Rose (E): <i>Manicina areolata</i>
Corail cavernoso macizo (S): <i>Montastrea cavernosa</i>	Coral, Rough Star (E): <i>Isophyllastrea rigida</i>
Corail, Cavernous Star (E): <i>Montastrea cavernosa</i>	Coral, Rough Starlet (E): <i>Siderastrea radians</i>
Corail cerebro macizo (S): <i>Colpophyllia natans</i>	Coral, Sinuous Cactus (E): <i>Isophyllia sinuosa</i>
Corail cerebro parejo (S): <i>Diploria strigosa</i>	Coral, Small Star (E): <i>Favia fragum</i>
Corail cerebro verrugoso (S): <i>Diploria clivosa</i>	Coral, Smooth Flower (E): <i>Eusmilia fastigiata</i>
Corail, Club Finger (E): <i>Porites porites</i>	Coral, Smooth Starlet (E): <i>Siderastrea siderea</i>
Corail, Clubtip Finger (E): <i>Porites porites</i>	Coral, Solitary Disk (E): <i>Scolymia cubensis</i>
Corail crustoso azul (S): <i>Porites branneri</i>	Coral, Spiny Flower (E): <i>Mussa angulosa</i>
Corail cuernito hermoso (S): <i>Caryophyllia berteriana</i>	Coral, Staghorn (E): <i>Acropora cervicornis</i>
Corail cuerno de alce (S): <i>Acropora palmata</i>	Coral, Striated Cup (E): <i>Desmophyllum striatum</i>
Corail cuerno de ciervo (S): <i>Acropora cervicornis</i>	Coral, Striate Finger (E): <i>Madracis myriaster</i>
Corail de dedos chatos (S): <i>Porites porites</i>	Coral, Sunray Lettuce (E): <i>Helioseris cucullata</i>
Corail de diez rayos (S): <i>Madracis decactis</i>	Coral, Symmetrical Brain (E): <i>Diploria strigosa</i>
Corail de encaje (S): <i>Leptoseris cailloti</i>	Coral tazón estriado (S): <i>Desmophyllum striatum</i>
Corail de lechuga (S): <i>Agaricia agaricites</i>	Coral, Ten-ray Finger (E): <i>Madracis decactis</i>
Corail de ocho rayos (S): <i>Madracis formosa</i>	Coral, Ten-ray Star (E): <i>Madracis decactis</i>
Corail, Dwarf Tree (E): <i>Coenosmilia arbuscula</i>	Coral, Yellow Pencil (E): <i>Madracis myriaster</i>
Corail, Eight-ray Finger (E): <i>Madracis formosa</i>	Coraux à pores (F): <i>Porites branneri</i>
Corail, Elkhorn (E): <i>Acropora palmata</i>	Cornúa (S): <i>Sphyrna lewini</i>
Corail, Elliptical Star (E): <i>Dichocoenia stokesii</i>	Cornuda (S): <i>Sphyrna lewini</i>
Corail empelotado (S): <i>Favia fragum</i>	Cornuda común (S): <i>Sphyrna lewini</i>
Corail estrella macizo (S): <i>Montastrea annularis</i>	Cornuda común (S): <i>Sphyrna lewini</i>
Corail estrella sonrojado (S): <i>Stephanocoenia intersepta</i>	Cornuda martillo (S): <i>Sphyrna lewini</i>
Corail estrellita chico (S): <i>Siderastrea radians</i>	Cornuda negra (S): <i>Sphyrna lewini</i>
Corail estrellita macizo (S): <i>Siderastrea siderea</i>	<i>Cosmoporites laevigata</i> Duchassaing & Michelotti, 1864 = <i>Porites astreoides</i> Lamarck, 1816
Corail estriado de dedos (S): <i>Madracis myriaster</i>	Crécerelle américaine (F): <i>Falco sparverius</i>
Corail floral liso (S): <i>Eusmilia fastigiata</i>	Crécerelle d'Amérique (F): <i>Falco sparverius</i>
Corail fragile (S): <i>Agaricia fragilis</i>	<i>Ctenophyllia maeandrites</i> (Linnaeus, 1758) = <i>Meandrina maeandrites</i> (Linnaeus, 1758)
Corail, Fragile Saucer (E): <i>Agaricia fragilis</i>	
Corail, Franks's Boulder Star (E): <i>Montastrea franksi</i>	
Corail, Golfball (E): <i>Favia fragum</i>	

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

- Ctenophyllia pectinata* (Lamarck, 1801) = *Meandrina maeandrites* (Linnaeus, 1758)
- Ctenophyllia profunda* Dana, 1846 = *Meandrina maeandrites* (Linnaeus, 1758)
- Ctenophyllia quadrata* Dana, 1846 = *Meandrina maeandrites* (Linnaeus, 1758)
- Cyclura carinata*** Harlan, 1824 I IGUANIDAE (Reptilia) (E) Bahamas Rock Iguana, Bartsch's Iguana, Turks and Caicos Ground Iguana, Turks and Caicos Iguana, Turks and Caicos rock iguana, Turks Island iguana (F) Cyclure des îles Turques-et-Caïques, Iguane terrestre des îles Turks et Caïques
- Cyclure des îles Turques-et-Caïques (F): *Cyclura carinata*
- Dámero (S): *Rhincodon typus*
- Dauphin de Clymène (F): *Stenella clymene*
- Delfin clymene (S): *Stenella clymene*
- Dendrocygna arborea*** (Linnaeus, 1758) II ANATIDAE (Aves) (E) Black-billed Wood-Duck, Cuban Tree-Duck, West Indian Tree-Duck, West indian whistling duck, West Indian Whistling-Duck (S) Chirirí caribena, Pato silbón de Cuba, Suiriri yaguaza (F) Dendrocygne à bec noir, Dendrocygne des Antilles
- Dendrocygna bicolor*** (Vieillot, 1816) III ANATIDAE (Aves) (E) Fulvous duck, Fulvous Tree-Duck, Fulvous whistling duck, Fulvous Whistling-Duck (S) Pato silbón común, Pijiji canelo, Suiriri bicolor, Suiriri leonado, Yaguaso colorado (F) Dendrocygne fauve
- Dendrocygna fulva* Hartlaub, 1844 = *Dendrocygna bicolor* (Vieillot, 1816)
- Dendrocygne à bec noir (F): *Dendrocygna arborea*
- Dendrocygne des Antilles (F): *Dendrocygna arborea*
- Dendrocygne fauve (F): *Dendrocygna bicolor*
- Dendrophyllia affinis* Duncan, 1889 = *Tubastraea coccinea* Lesson, 1829
- Dendrophyllia aurantiaca* (Milne Edwards, 1836) = *Tubastraea coccinea* Lesson, 1829
- Dendrophyllia danae* Verrill, 1872 = *Tubastraea coccinea* Lesson, 1829
- Dendrophyllia ehrenbergiana* (Milne Edwards & Haime, 1848) = *Tubastraea coccinea* Lesson, 1829
- Dendrophyllia manni* (Verrill, 1866) = *Tubastraea coccinea* Lesson, 1829
- Dendrophyllia surcularis* Verrill, 1869 = *Tubastraea coccinea* Lesson, 1829
- Dendrophyllia turbinata* Nemenzo, 1960 = *Tubastraea coccinea* Lesson, 1829
- Dendrophyllia willeyi* (Gardiner, 1899) = *Tubastraea coccinea* Lesson, 1829
- Dermatochelys atlantica* Duméril and Bibron, 1835 = *Dermatochelys coriacea* (Vandelli, 1761)
- Dermatochelys porcata* Wagler, 1830 = *Dermatochelys coriacea* (Vandelli, 1761)
- Dermatochelys coriacea*** (Vandelli, 1761) I DERMOCHELYIDAE (Reptilia) (E) Coffin-back, Leatherback, Leatherback sea turtle, Leatherback Turtle, Leathery Turtle, Luth, Luth Turtle, Trunkback Turtle, Trunk turtle (S) Baula, Canal, Cardon, Dorso de cuero, Galapagos, Siete lomos, Siete quillas, Tinglada, Tinglar, Tora, Tortuga laud (F) Tortue Luth
- Desmophyllum striatum*** Cairns, 1979 II CARYOPHYLLIIDAE (Anthozoa) (E) Striated Cup Coral (S) Coral tazón estriado
- Dichocoenia stokesii*** Milne Edwards & Haime, 1848 II MEANDRINIIDAE (Anthozoa) (E) Elliptical Star Coral, Pineapple Coral (S) Coral piña (F) Corail étoile elliptique
- Diploria clivosa*** (Ellis & Solander, 1786) II FAVIIDAE (Anthozoa) (E) Knobby Brain Coral (S) Coral cerebro verrugoso (F) Corail cerveau bosselé
- Diploria mammosa* (Dana, 1846) = *Diploria clivosa* (Ellis & Solander, 1786)
- Diploria strigosa*** (Dana, 1846) II FAVIIDAE (Anthozoa) (E) Symmetrical Brain Coral (S) Coral cerebro parejo (F) Corail cerveau symétrique
- Dolphin, Atlantic Spinner (E): *Stenella clymene*
- Dolphin, Clymene (E): *Stenella clymene*
- Dolphin, Helmet (E): *Stenella clymene*
- Dorso de cuero (S): *Dermochelys coriacea*
- duck, Fulvous (E): *Dendrocygna bicolor*
- duck, Fulvous whistling (E): *Dendrocygna bicolor*
- duck, West indian whistling (E): *Dendrocygna arborea*
- Effraie africaine (F): *Tyto alba*
- Effraie des clochers (F): *Tyto alba*
- Épervier brun (F): *Accipiter striatus*
- Epicrates chrysogaster*** (Cope, 1871) II BOIDAE (Reptilia) (E) Bahamas Islands Boa, Turks Islands Boa (F) Boa de l'île Turques
- Epicrates relicquus* Barbour & Shreve, 1935 = *Epicrates chrysogaster* (Cope, 1871)
- Epicrates striatus chrysogaster* (Fischer, 1856) = *Epicrates chrysogaster* (Cope, 1871)
- Epicrates striatus relicquus* (Fischer, 1856) = *Epicrates chrysogaster* (Cope, 1871)
- Eretmochelys imbricata*** (Linnaeus, 1766) I CHELONIIDAE (Reptilia) (E) Hawksbill Turtle (S) Tortuga carey, Tortuga de carey (F) Caret, Tortue à bec de faucon, Tortue à écailles, Tortue imbriquée
- Eretmochelys squamata* Agassiz, 1857 = *Eretmochelys imbricata* (Linnaeus, 1766)
- Esmerejón (S): *Falco columbarius*
- Esparvero chico (S): *Accipiter striatus*
- Euphyllia aspera* Dana, 1846 = *Eusmilia fastigiata* (Pallas, 1766)
- Eusmilia aspera* (Dana, 1848) = *Eusmilia fastigiata* (Pallas, 1766)
- Eusmilia fastigiata*** (Pallas, 1766) II CARYOPHYLLIIDAE (Anthozoa) (E) Smooth Flower Coral (S) Coral floral liso (F) Corail fleur doux
- Eusmilia knorrii* Milne Edwards & Haime, 1848 = *Eusmilia fastigiata* (Pallas, 1766)
- Explanaria annularis* (Ellis & Solander, 1786) = *Montastrea annularis* (Ellis & Solander, 1786)
- Explanaria argus* (Lamarck, 1816) = *Montastrea cavernosa* (Linnaeus, 1767)
- Explanaria radiata* (Ellis & Solander, 1786) = *Montastrea cavernosa* (Linnaeus, 1767)
- Falco columbarius*** Linnaeus, 1758 II³¹ FALCONIDAE (Aves) (E) Merlin, Pigeon Hawk (S) Esmerejón, Halcón migratorio, Halcón palomero (F) Faucon émerillon

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

- Falco cyaneus* Linnaeus, 1766 = *Circus cyaneus* (Linnaeus, 1766)
Falco haliaetus Linnaeus, 1758 = *Pandion haliaetus* (Linnaeus, 1758)
Falco jamaicensis Gmelin, 1788 = *Buteo jamaicensis* (Gmelin, 1788)
Falco kreyenborgi Kleinschmidt, 1929 = *Falco peregrinus* Tunstall, 1771
Falco madens Ripley & Watson, 1963 = *Falco peregrinus* Tunstall, 1771
Falcon, Peregrine (E): *Falco peregrinus*
Falco peregrinus Tunstall, 1771 I FALCONIDAE (Aves)
(E) Duck Hawk, Peregrine, Peregrine Falcon (S)
Halcón blancuzco, Halcón común, Halcón peregrino, Halcón real, Halcón viajero (F) Faucon pèlerin
Falco sparverius Linnaeus, 1758 II ³¹ FALCONIDAE (Aves) (E) American Kestrel (S) Cernícalo americano, Cernícalo primito, Halconcito, Halconcito común, Halcón primito (F) Crécerelle américaine, Crécerelle d'Amérique
Faucon émerillon (F): *Falco columbarius*
Faucon pèlerin (F): *Falco peregrinus*
Favia coarctata Duchassaing & Michelotti, 1860 = *Favia fragum* (Esper, 1793)
Favia fragum (Esper, 1793) II FAVIIDAE (Anthozoa) (E)
Golfball Coral, Small Star Coral (S) Coral empetotado (F) Corail balle de golf
Favia incerta Duchassaing & Michelotti, 1860 = *Favia fragum* (Esper, 1793)
Favia whitfieldi Verrill, 1901 = *Favia fragum* (Esper, 1793)
Flamant de Cuba (F): *Phoenicopterus ruber*
Flamant rose (F): *Phoenicopterus ruber*
Flamant rouge (F): *Phoenicopterus ruber*
Flamenco (S): *Phoenicopterus ruber*
Flamenco común (S): *Phoenicopterus ruber*
Flamenco de Cuba (S): *Phoenicopterus ruber*
Flamenco rojo (S): *Phoenicopterus ruber*
Fleming, American (E): *Phoenicopterus ruber*
Fleming, Caribbean (E): *Phoenicopterus ruber*
Galapagos (S): *Dermochelys coriacea*
Gavilán americano (S): *Accipiter striatus*
Gavilán arrastrador (S): *Accipiter striatus*
Gavilán pajarero (S): *Accipiter striatus*
Gavilán pescador (S): *Pandion haliaetus*
Gavilán rastreador (S): *Circus cyaneus*
Goreaugya memorialis Wells, 1974 = *Meandrina maeandrites* (Linnaeus, 1758)
Grand corail étoilé (F): *Montastrea cavernosa*
Guaraguao (S): *Buteo jamaicensis*
Guincho (S): *Pandion haliaetus*
Halcón blancuzco (S): *Falco peregrinus*
Halconcito (S): *Falco sparverius*
Halconcito común (S): *Falco sparverius*
Halcón común (S): *Falco peregrinus*
Halcón migratorio (S): *Falco columbarius*
Halcón palomero (S): *Falco columbarius*
Halcón peregrino (S): *Falco peregrinus*
Halcón primito (S): *Falco sparverius*
Halcón real (S): *Falco peregrinus*
Halcón viajero (S): *Falco peregrinus*
Hammerhai, gebuchteter (E): *Sphyrna lewini*
Hammerhead (E): *Sphyrna lewini*
hammerhead, Scalloped (E): *Sphyrna lewini*
Harrier, Hen (E): *Circus cyaneus*
Harrier, Northern (E): *Circus cyaneus*
Hawk, Duck (E): *Falco peregrinus*
Hawk, Marsh (E): *Circus cyaneus*
Hawk, Pigeon (E): *Falco columbarius*
Hawk, Red-tailed (E): *Buteo jamaicensis*
Hawk, Sharp-shinned (E): *Accipiter striatus*
Helioseris cucullata (Ellis & Solander, 1786) II AGARICIIDAE (Anthozoa) (E) Sunray Lettuce Coral (S)
Coral rayo de sol (F) Corail laitue
Hibou brachyote (F): *Asio flammeus*
Hibou des marais (F): *Asio flammeus*
Hippocampe long-nez (F): *Hippocampus reidi*
Hippocampe moucheté (F): *Hippocampus erectus*
Hippocampe rayé (F): *Hippocampus erectus*
Hippocampus brunneus Bean, 1906 = *Hippocampus erectus* Perry, 1810
Hippocampus erectus Perry, 1810 II SYNGNATHIDAE (Actinopteri) (E) Black Seahorse, Brown Seahorse, Horsefish, Lined Seahorse, Northern Seahorse, Spotted Seahorse, Yellow Seahorse (S) Caballito de mar, Caballito erecto, Caballito estriado, Caballito punteado (F) Hippocampe moucheté, Hippocampe rayé
Hippocampus fascicularis Kaup, 1856 = *Hippocampus erectus* Perry, 1810
Hippocampus hudsonius DeKay, 1842 = *Hippocampus erectus* Perry, 1810
Hippocampus kincaidii Townsend & Barbour, 1906 = *Hippocampus erectus* Perry, 1810
Hippocampus laevidentatus Kaup, 1856 = *Hippocampus erectus* Perry, 1810
Hippocampus marginalis Kaup, 1856 = *Hippocampus erectus* Perry, 1810
Hippocampus obtusus Ginsburg, 1933 = *Hippocampus reidi* Ginsburg, 1933
Hippocampus poeyi Howell Rivero, 1934 = *Hippocampus reidi* Ginsburg, 1933
Hippocampus punctulatus Guichenot, 1853 = *Hippocampus erectus* Perry, 1810
Hippocampus reidi Ginsburg, 1933 II SYNGNATHIDAE (Actinopteri) (E) Brazilian Seahorse, Long-snout Seahorse, Longsnout Seahorse, Slender Seahorse (S) Caballito, Caballito de mar, Caballito hocico largo (F) Hippocampe long-nez
Hippocampus stylifer Jordan & Gilbert, 1882 = *Hippocampus erectus* Perry, 1810
Hippocampus tetragonus Mitchell, 1814 = *Hippocampus erectus* Perry, 1810
Hippocampus villosus Günther, 1880 = *Hippocampus erectus* Perry, 1810
Homalochilus chrysogaster Cope, 1871 = *Epicrates chrysogaster* (Cope, 1871)
Horsefish (E): *Hippocampus erectus*
Iguana, Bahamas Rock (E): *Cyclura carinata*
Iguana, Bartsch's (E): *Cyclura carinata*
Iguana, Turks and Caicos (E): *Cyclura carinata*

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

- Iguana, Turks and Caicos Ground (E): *Cyclura carinata*
 iguana, Turks and caicos rock (E): *Cyclura carinata*
 iguana, Turks Island (E): *Cyclura carinata*
 Iguane terrestre des îles Turks et Caïques (F): *Cyclura carinata*
- Isophyllastrea rigida** (Dana, 1846) II MUSSIDAE
 (Anthozoa) (E) Rough Star Coral (S) Micetocoral
 áspero (F) Corail étoile rugueux
- Isophyllia multiflora* Verrill, 1901 = *Isophyllia sinuosa* (Ellis & Solander, 1786)
- Isophyllia rigida* (Dana, 1846) = *Isophyllastrea rigida* (Dana, 1846)
- Isophyllia sinuosa** (Ellis & Solander, 1786) II MUSSIDAE
 (Anthozoa) (E) Sinuous Cactus Coral (S) Micetocoral
 sinuoso (F) Corail cactus sinueux
- Isuropsis dekeyi* Gill, 1862 = *Isurus oxyrinchus* Rafinesque, 1810
- Isurus bideni* Phillips, 1932 = *Isurus oxyrinchus* Rafinesque, 1810
- Isurus glaucus* Müller and Henle, 1839 = *Isurus oxyrinchus* Rafinesque, 1810
- Isurus mako* Whitley, 1929 = *Isurus oxyrinchus* Rafinesque, 1810
- Isurus oxyrinchus** Rafinesque, 1810 II LAMNIDAE
 (Elasmobranchii) (E) Shortfin mako (S) Marrajo común,
 Marrajo dientuso, Tiburón mako aletas cortas (F)
 Taupe bleu
- Isurus spallanzanii* Rafinesque, 1810 = *Isurus oxyrinchus* Rafinesque, 1810
- Isurus tigris africanus* Smith, 1957 = *Isurus oxyrinchus* Rafinesque, 1810
- Kestrel, American (E): *Falco sparverius*
- Lambis (F): *Strombus gigas*
- Lamna guentheri* Murray, 1884 = *Isurus oxyrinchus* Rafinesque, 1810
- Lamna huiobrii* Philippi, 1887 = *Isurus oxyrinchus* Rafinesque, 1810
- Lamna oxyrhina* Cuvier and Valenciennes, in Agassiz, 1838 = *Isurus oxyrinchus* Rafinesque, 1810
- Lamna punctata* Storer, 1839 = *Isurus oxyrinchus* Rafinesque, 1810
- Leatherback (E): *Dermochelys coriacea*
- Lechuza campestre (S): *Asio flammeus*
- Lechuza común (S): *Tyto alba*
- Lechuza de campanario (S): *Tyto alba*
- Lechuza orejicorta (S): *Asio flammeus*
- Lechuzón campestre (S): *Asio flammeus*
- Leptoseris caillieti** (Duchassaing & Michelotti, 1864) II AGARICIIDAE (Anthozoa) (E) Lacy Lettuce Coral (S) Coral de encaje
- Leptoseris cucullata* (Ellis & Solander, 1786) = *Helioseris cucullata* (Ellis & Solander, 1786)
- Leptoseris nobilis* Ma, 1959 = *Helioseris cucullata* (Ellis & Solander, 1786)
- Lithophyllia argemone* Duchassaing & Michelotti, 1860 = *Mussa angulosa* (Pallas, 1766)
- Lobophyllia angulosa* (Pallas, 1766) = *Mussa angulosa* (Pallas, 1766)
- Lobophyllia aurea* Quoy & Gaimard, 1833 = *Tubastraea coccinea* Lesson, 1829
- Loggerhead (E): *Caretta caretta*
- Luth (E): *Dermochelys coriacea*
- Madrace à dix rayons (F): *Madracis decactis*
- Madrace profond (F): *Madracis formosa*
- Madracis decactis** (Lyman, 1859) II POCILLOPORIDAE
 (Anthozoa) (E) Green Cactus Coral, Ten-ray Finger Coral, Ten-ray Star Coral (S) Coral de diez rayos (F) Madrace à dix rayons
- Madracis formosa** Wells, 1973 II POCILLOPORIDAE
 (Anthozoa) (E) Eight-ray Finger Coral (S) Coral de ocho rayos (F) Madrace profond
- Madracis mirabilis* (Duchassaing & Michelotti, 1860) = *Madracis myriaster* (Milne Edwards & Haime, 1849)
- Madracis myriaster** (Milne Edwards & Haime, 1849) II POCILLOPORIDAE (Anthozoa) (E) Striate Finger Coral, Yellow Pencil Coral (S) Coral estriado de dedos
- Madrepora agaricites* Linnaeus, 1758 = *Agaricia agaricites* (Linnaeus, 1758)
- Madrepora angulosa* Pallas, 1766 = *Mussa angulosa* (Pallas, 1766)
- Madrepora annularis* Ellis & Solander, 1786 = *Montastrea annularis* (Ellis & Solander, 1786)
- Madrepora areolata* Linnaeus, 1758 = *Manicina areolata* (Linnaeus, 1758)
- Madrepora astroites* Pallas, 1766 = *Montastrea annularis* (Ellis & Solander, 1786)
- Madrepora attenuata* Brook, 1893 = *Acropora cervicornis* (Lamarck, 1816)
- Madrepora capitata* Esper, 1797 = *Eusmilia fastigiata* (Pallas, 1766)
- Madrepora carduus* Ellis & Solander, 1786 = *Mussa angulosa* (Pallas, 1766)
- Madrepora cavernosa* Linnaeus, 1766 = *Montastrea cavernosa* (Linnaeus, 1767)
- Madrepora cervicornis* Lamarck, 1816 = *Acropora cervicornis* (Lamarck, 1816)
- Madrepora clivosa* Ellis & Solander, 1786 = *Diploria clivosa* (Ellis & Solander, 1786)
- Madrepora cornuta* Duchassaing & Michelotti, 1860 = *Acropora palmata* (Lamarck, 1816)
- Madrepora cucullata* Ellis & Solander, 1786 = *Helioseris cucullata* (Ellis & Solander, 1786)
- Madrepora fastigiata* Pallas, 1766 = *Eusmilia fastigiata* (Pallas, 1766)
- Madrepora faveolata* Ellis & Solander, 1786 = *Montastrea annularis* (Ellis & Solander, 1786)
- Madrepora filograna* Esper, 1791 = *Diploria clivosa* (Ellis & Solander, 1786)
- Madrepora flabellum* Lamarck, 1816 = *Acropora palmata* (Lamarck, 1816)
- Madrepora fragum* Esper, 1797 = *Favia fragum* (Esper, 1793)
- Madrepora gyrosa* Ellis & Solander, 1786 = *Colpophyllia natans* (Houttuyn, 1772)
- Madrepora intersepta* Esper, 1795 = *Stephanocoenia intersepta* (Esper, 1795)
- Madrepora labyrinthica* Pallas, 1766 = *Meandrina maeandrites* (Linnaeus, 1758)
- Madrepora maeandrites* Linnaeus, 1758 = *Meandrina maeandrites* (Linnaeus, 1758)

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

- Madrepora palmata* Lamarck, 1816 = *Acropora palmata* (Lamarck, 1816)
Madrepora perampla Horn, 1861 = *Acropora palmata* (Lamarck, 1816)
Madrepora porites Pallas, 1766 = *Porites porites* (Pallas, 1766)
Madrepora radians Pallas, 1766 = *Siderastrea radians* (Pallas, 1766)
Madrepora radiata Ellis & Solander, 1786 = *Montastrea cavernosa* (Linnaeus, 1767)
Madrepora siderea Ellis & Solander, 1786 = *Siderastrea siderea* (Ellis & Solander, 1786)
Madrepora sinuosa Ellis & Solander, 1786 = *Isophyllia sinuosa* (Ellis & Solander, 1786)
Madrepora thomasi Duchassaing & Michelotti, 1860 = *Acropora palmata* (Lamarck, 1816)
mako, Shortfin (E): *Isurus oxyrinchus*
Manicina areolata (Linnaeus, 1758) II FAVIIDAE (Anthozoa) (E) Rose Coral (S) Coral rosado (F) Rose de corail
Manicina hispida Ehrenberg, 1834 = *Manicina areolata* (Linnaeus, 1758)
Manicina mayori Wells, 1936 = *Manicina areolata* (Linnaeus, 1758)
Manicina praeupta Ehrenberg, 1834 = *Manicina areolata* (Linnaeus, 1758)
Manicina strigilis Milne Edwards & Haime, 1849 = *Manicina areolata* (Linnaeus, 1758)
Marrajo común (S): *Isurus oxyrinchus*
Marrajo dientuso (S): *Isurus oxyrinchus*
Meandrina filograna (Esper, 1791) = *Diploria clivosa* (Ellis & Solander, 1786)
Meandrina grandilobata Milne Edwards & Haime, 1849 = *Diploria clivosa* (Ellis & Solander, 1786)
Meandrina interrupta Dana, 1846 = *Diploria clivosa* (Ellis & Solander, 1786)
Meandrina maeandrites (Linnaeus, 1758) II MEANDRINIIDAE (Anthozoa) (E) Maze Coral (S) Coral laberíntico (F) Corail méandreux
Meandrina mammosa Dana, 1846 = *Diploria clivosa* (Ellis & Solander, 1786)
Meandrina memorialis (Wells, 1974) = *Meandrina maeandrites* (Linnaeus, 1758)
Meandrina pectinata Lamarck, 1801 = *Meandrina maeandrites* (Linnaeus, 1758)
Meandrina strigosa Dana, 1846 = *Diploria strigosa* (Dana, 1846)
Meandrina superficialis Milne Edwards & Haime, 1849 = *Diploria clivosa* (Ellis & Solander, 1786)
Merlin (E): *Falco columbarius*
Micetocoral angular (S): *Mussa angulosa*
Micetocoral áspero (S): *Isophyllastrea rigida*
Micetocoral crestado (S): *Mycetophyllia lamarckiana*
Micetocoral de poca cresta (S): *Mycetophyllia daniana*
Micetocoral sinuoso (S): *Isophyllia sinuosa*
Micristodus punctatus Gill, 1865 = *Rhincodon typus* Smith, 1828
Montastrea annularis (Ellis & Solander, 1786) II FAVIIDAE (Anthozoa) (E) Boulder Star Coral, Lobed Star Coral (S) Coral estrella macizo (F) Corail étoilé massif
Montastrea cavernosa (Linnaeus, 1767) II FAVIIDAE (Anthozoa) (E) Cavernous Star Coral, Great Star Coral (S) Coral cavernoso macizo (F) Grand corail étoilé
Montastrea cavernosa hirta (Linnaeus, 1767) = *Montastrea cavernosa* (Linnaeus, 1767)
Montastrea faveolata (Ellis & Solander, 1786) II FAVIIDAE (Anthozoa) (E) Mountainous Star Coral (S) Coral montañoso
Montastrea franksi (Gregory, 1895) II FAVIIDAE (Anthozoa) (E) Boulder Star Coral, Franks's Boulder Star Coral (S) coral macizo de Franks
Montastrea hispidula (Verrill, 1901) = *Montastrea annularis* (Ellis & Solander, 1786)
Morfillo (S): *Sphyrna lewini*
Mussa angulosa (Pallas, 1766) II MUSSIDAE (Anthozoa) (E) Large Flower Coral, Spiny Flower Coral (S) Micetocoral angular (F) Corail fleur épineux
Mycedia fragilis Dana, 1846 = *Agaricia fragilis* (Dana, 1846)
Mycedia gibbosa Dana, 1846 = *Agaricia agaricites* (Linnaeus, 1758)
Mycedium caileti Duchassaing & Michelotti, 1864 = *Leptoseris caileti* (Duchassaing & Michelotti, 1864)
Mycedium danai Duchassaing & Michelotti, 1860 = *Agaricia agaricites* (Linnaeus, 1758)
Mycedium lessoni Duchassaing & Michelotti, 1860 = *Agaricia agaricites* (Linnaeus, 1758)
Mycedium sanctijohannis Duchassaing & Michelotti, 1864 = *Agaricia agaricites* (Linnaeus, 1758)
Mycedium vesparium Duchassaing & Michelotti, 1860 = *Agaricia agaricites* (Linnaeus, 1758)
Mycetophyllia daniana Milne Edwards & Haime, 1849 II MUSSIDAE (Anthozoa) (E) Lowridge Cactus Coral (S) Micetocoral de poca cresta (F) Corail cactus à crêtes basses
Mycetophyllia lamarckiana Milne Edwards & Haime, 1848 II MUSSIDAE (Anthozoa) (E) Ridged cactus coral, Ridged Cactus Coral (S) Micetocoral crestado (F) Corail cactus ridé
Neoporites subtilis Duchassaing & Michelotti, 1864 = *Porites astreoides* Lamarck, 1816
Onychochelys kraussi Gray, 1873 = *Eretmochelys imbricata* (Linnaeus, 1766)
Orbicella annularis (Ellis & Solander, 1786) = *Montastrea annularis* (Ellis & Solander, 1786)
Orbicella braziliana Verrill, 1901 = *Montastrea cavernosa* (Linnaeus, 1767)
Orbicella cavernosa (Linnaeus, 1766) = *Montastrea cavernosa* (Linnaeus, 1767)
Orbicella faveolata = *Montastrea faveolata* (Ellis & Solander, 1786)
Orbicella franksi = *Montastrea franksi* (Gregory, 1895)
Orbicella hispidula Verrill, 1901 = *Montastrea annularis* (Ellis & Solander, 1786)
Osprey (E): *Pandion haliaetus*
Oulophyllia spinosa Milne Edwards & Haime, 1849 = *Isophyllia sinuosa* (Ellis & Solander, 1786)
Owl, Barn (E): *Tyto alba*

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

- Owl, Short-eared (E): *Asio flammeus*
Oxyrhina gomphodon Müller and Henle, 1839 = *Isurus oxyrinchus* Rafinesque, 1810
Pandion haliaetus (Linnaeus, 1758) II ³¹ PANDIONIDAE (Aves) (E) Osprey (S) Águila pescadora, Águila sangual, Gavilán pescador, Guincho (F) Aigle pêcheur, Balbugard fluvialite, Balbuzard pêcheur
Parastrea fragum (Esper, 1797) = *Favia fragum* (Esper, 1793)
Pato silbón común (S): *Dendrocygna bicolor*
Pato silbón de Cuba (S): *Dendrocygna arborea*
Pejepeine (S): *Pristis pristis*
Peregrine (E): *Falco peregrinus*
Petit corail starlette (F): *Siderastrea radians*
Pez dama (S): *Rhincodon typus*
Pez martillo (S): *Sphyrna lewini*
Pez sierra común (S): *Pristis pristis*
Phoenicopterus roseus Pallas, 1811 = *Phoenicopterus ruber* Linnaeus, 1758
Phoenicopterus ruber Linnaeus, 1758 II PHOENICOPTERIDAE (Aves) (E) American Flamingo, Caribbean Flamingo (S) Flamenco, Flamenco común, Flamenco de Cuba, Flamenco rojo, Tococo (F) Flamant de Cuba, Flamant rose, Flamant rouge
Pijiji canelo (S): *Dendrocygna bicolor*
Placopsammia darwini Duncan, 1876 = *Tubastraea coccinea* Lesson, 1829
Plesiastrea goodei Verrill, 1900 = *Stephanocoenia intersepta* (Esper, 1795)
Poisson-scie commun (F): *Pristis pristis*
Porite digitée (F): *Porites porites*
Porite étoile (F): *Porites astreoides*
Porites agaricus Duchassaing & Michelotti, 1860 = *Porites astreoides* Lamarck, 1816
Porites astreoides Lamarck, 1816 II PORITIDAE (Anthozoa) (E) Mustard Hill Coral (S) Coral mostaza (F) Porite étoile
Porites branneri Rathbun, 1887 II PORITIDAE (Anthozoa) (E) Blue Crust Coral (S) Coral crustoso azul (F) Coraux à pores
Porites clavaria Lamarck, 1816 = *Porites porites* (Pallas, 1766)
Porites guadalupensis Duchassaing & Michelotti, 1860 = *Porites astreoides* Lamarck, 1816
Porites hentscheli Thiel, 1928 = *Porites astreoides* Lamarck, 1816
Porites incerta Duchassaing & Michelotti, 1860 = *Porites astreoides* Lamarck, 1816
Porites polymorphus Link, 1807 = *Porites porites* (Pallas, 1766)
Porites porites (Pallas, 1766) II PORITIDAE (Anthozoa) (E) Club Finger Coral, Clubtip Finger Coral (S) Coral de dedos chatos (F) Porite digitée
Porites solida Verrill, 1868 = *Porites astreoides* Lamarck, 1816
Porites superficialis Duchassaing & Michelotti, 1860 = *Porites astreoides* Lamarck, 1816
Porites verrilli Rehberg, 1892 = *Porites astreoides* Lamarck, 1816
Pristis antiquorum Latham, 1794 = *Pristis pristis* (Linnaeus, 1758)
Pristis canaliculata Bloch & Schneider, 1801 = *Pristis pristis* (Linnaeus, 1758)
Pristis pristis (Linnaeus, 1758) I PRISTIDAE (Elasmobranchii) (E) Common Sawfish (S) Pejepeine, Pez sierra común, Sägefisch (F) Poisson-scie commun, Scie, Scie commune
Pristis typica Poey, 1861 = *Pristis pristis* (Linnaeus, 1758)
Pristis zephyreus Jordan & Starks, 1895 = *Pristis pristis* (Linnaeus, 1758)
Requin baleine (F): *Rhincodon typus*
Requin-baleine (F): *Rhincodon typus*
Requin marteau (F): *Sphyrna lewini*
Requin-marteau halicorne (F): *Sphyrna lewini*
Reussia lamellosa Duchassaing & Michelotti, 1860 = *Madracis decactis* (Lyman, 1859)
Rhincodon typus Smith, 1828 II RHINCODONTIDAE (Elasmobranchii) (E) Whale Shark (S) Dámero, Pez dama, Tiburón Ballena (F) Chagrin, Requin baleine, Requin-baleine
Rhinodon pentalineatus Kishinouye, 1901 = *Rhincodon typus* Smith, 1828
Rhinodon typicus Müller & Henle, 1839 = *Rhincodon typus* Smith, 1828
Rhinodon typicus Smith, 1845 = *Rhincodon typus* Smith, 1828
Rose de corail (F): *Manicina areolata*
Sägefisch (S): *Pristis pristis*
Sawfish, Common (E): *Pristis pristis*
Scie (F): *Pristis pristis*
Scie commune (F): *Pristis pristis*
Scolymia cubensis (Milne Edwards & Haime, 1849) II MUSSIDAE (Anthozoa) (E) Artichoke Coral, Solitary Disk Coral (S) Alcachofa de mar (F) Corail coeur d'artichaut
Seahorse, Black (E): *Hippocampus erectus*
Seahorse, Brazilian (E): *Hippocampus reidi*
Seahorse, Brown (E): *Hippocampus erectus*
Seahorse, Lined (E): *Hippocampus erectus*
Seahorse, Longsnout (E): *Hippocampus reidi*
Seahorse, Long-snout (E): *Hippocampus reidi*
Seahorse, Northern (E): *Hippocampus erectus*
Seahorse, Slender (E): *Hippocampus reidi*
Seahorse, Spotted (E): *Hippocampus erectus*
Seahorse, Yellow (E): *Hippocampus erectus*
shark, Bronze hammerhead (E): *Sphyrna lewini*
shark, Hammerhead (E): *Sphyrna lewini*
shark, Kidney-headed (E): *Sphyrna lewini*
shark, Scalloped hammerhead (E): *Sphyrna lewini*
shark, Southern hammerhead (E): *Sphyrna lewini*
Shark, Whale (E): *Rhincodon typus*
Siderastrea radians (Pallas, 1766) II SIDERASTREIDAE (Anthozoa) (E) Lesser Starlet Coral, Rough Starlet Coral (S) Coral estrellita chico (F) Petit corail starlette
Siderastrea senegalensis Milne Edwards & Haime, 1850 = *Siderastrea radians* (Pallas, 1766)
Siderastrea siderea (Ellis & Solander, 1786) II SIDERASTREIDAE (Anthozoa) (E) Massive Starlet

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- Coral, Smooth Starlet Coral (S) Coral estrellita macizo (F) Corail starlette massif
- Siderastrea siderea dominicensis* (Ellis & Solander, 1786) = *Siderastrea siderea* (Ellis & Solander, 1786)
- Siete lomos (S): *Dermochelys coriacea*
- Siete quillas (S): *Dermochelys coriacea*
- Sphargis angusta* Philippi, 1899 = *Dermochelys coriacea* (Vandelli, 1761)
- Sphargis coriacea* (Linnaeus, 1766) = *Dermochelys coriacea* (Vandelli, 1761)
- Sphargis mercurialis* Merrem, 1820 = *Dermochelys coriacea* (Vandelli, 1761)
- Sphyrna couardi* Cadenat, 1951 = *Sphyrna lewini* (Griffith & Smith, 1834)
- Sphyrna diplana* (Springer 1941) = *Sphyrna lewini* (Griffith & Smith, 1834)
- Sphyrna gilberti* Quattro, Driggers III, Grady, Ulrich & Roberts, 2013 = *Sphyrna lewini* (Griffith & Smith, 1834)
- Sphyrna lewini* (Griffith & Smith, 1834) II SPHYRNIDAE (Elasmobranchii) (E) Bronze hammerhead shark, gebuchteter Hammerhai, Hammerhead, Hammerhead shark, Kidney-headed shark, Scalloped hammerhead, Scalloped hammerhead shark, Southern hammerhead shark (S) Cachona, Cornúa, Cornuda, Cornuda comun, Cornuda común, Cornuda martillo, Cornuda negra, Morfillo, Pez martillo, Tiburón martillo, Tiburón martillo festoneado (F) Requin marteau, Requin-marteau halicorne
- Squalus cepedii* Lesson, 1830 = *Isurus oxyrinchus* Rafinesque, 1810
- Stenella clymene* (Gray, 1846) II 23 DELPHINIDAE (Mammalia) (E) Atlantic Spinner Dolphin, Clymene Dolphin, Helmet Dolphin (S) Delfin clymene (F) Dauphin de Clymène
- Stephanocoenia goodei* (Verrill, 1900) = *Stephanocoenia intersepta* (Esper, 1795)
- Stephanocoenia intersepta* (Esper, 1795) II ASTROCOENIIDAE (Anthozoa) (E) Blushing Star Coral (S) Coral estrella sonrojado (F) Corail étoile rougissant
- Stephanocoenia michelinii* Milne Edwards & Haime, 1848 = *Stephanocoenia intersepta* (Esper, 1795)
- Stichopathes occidentalis* (Gray, 1860) II ANTIPATHIDAE (Anthozoa) (E) Green Wire Coral (S) Coral alambre verde
- Strix alba* Scopoli, 1769 = *Tyto alba* (Scopoli, 1769)
- Strix flammea* Pontopiddan, 1763 = *Asio flammeus* (Pontopiddan, 1763)
- Strombe Géant (F): *Strombus gigas*
- Strombus gigas* Linnaeus, 1758 II STROMBIDAE (Gastropoda) (E) Pink Conch, Queen Conch (S) Concha reina del Caribe (F) Lambis, Strombe Géant
- Stylophora dumetosa* Duchassaing, 1870 = *Madracis myriaster* (Milne Edwards & Haime, 1849)
- Stylophora mirabilis* Duchassaing & Michelotti, 1860 = *Madracis myriaster* (Milne Edwards & Haime, 1849)
- Suirirí bicolor (S): *Dendrocygna bicolor*
- Suirirí leonado (S): *Dendrocygna bicolor*
- Suirirí yaguaza (S): *Dendrocygna arborea*
- Syngnathus caballus* Larranaga, 1923 = *Hippocampus erectus* Perry, 1810
- Taupe bleu (F): *Isurus oxyrinchus*
- Testudo arcuata* Catesby, 1771 = *Dermochelys coriacea* (Vandelli, 1761)
- Testudo caouana* Lacépède, 1788 = *Caretta caretta* (Linnaeus, 1758)
- Testudo caretta* Linnaeus, 1758 = *Caretta caretta* (Linnaeus, 1758)
- Testudo cepediana* Daudin, 1802 = *Chelonia mydas* (Linnaeus, 1758)
- Testudo cephalo* Schneider, 1783 = *Caretta caretta* (Linnaeus, 1758)
- Testudo coriacea* Linnaeus, 1766 = *Dermochelys coriacea* (Vandelli, 1761)
- Testudo imbricata* Linnaeus, 1766 = *Eretmochelys imbricata* (Linnaeus, 1766)
- Testudo japonica* Thunberg, 1787 = *Chelonia mydas* (Linnaeus, 1758)
- Testudo lyra* Lacépède, 1788 = *Dermochelys coriacea* (Vandelli, 1761)
- Testudo mydas* Linnaeus, 1758 = *Chelonia mydas* (Linnaeus, 1758)
- Testudo nasicornis* Bonnat, 1789 = *Eretmochelys imbricata* (Linnaeus, 1766)
- Testudo nasicornis* Lacépède, 1788 = *Caretta caretta* (Linnaeus, 1758)
- Testudo rugosa* Daudin, 1802 = *Chelonia mydas* (Linnaeus, 1758)
- Testudo tuberculata* Pennant, 1801 = *Dermochelys coriacea* (Vandelli, 1761)
- Testudo viridis* Schneider, 1783 = *Chelonia mydas* (Linnaeus, 1758)
- Thalassochelys caretta* (Linnaeus, 1758) = *Caretta caretta* (Linnaeus, 1758)
- Thalassochelys corticata* Girard, 1858 = *Caretta caretta* (Linnaeus, 1758)
- Tiburón Ballena (S): *Rhincodon typus*
- Tiburón mako aletas cortas (S): *Isurus oxyrinchus*
- Tiburón martillo (S): *Sphyrna lewini*
- Tiburón martillo festoneado (S): *Sphyrna lewini*
- Tinglada (S): *Dermochelys coriacea*
- Tinglar (S): *Dermochelys coriacea*
- Tococo (S): *Phoenicopiterus ruber*
- Tora (S): *Dermochelys coriacea*
- Tortue à bahut (F): *Caretta caretta*
- Tortue à bec de faucon (F): *Eretmochelys imbricata*
- Tortue à écailles (F): *Eretmochelys imbricata*
- Tortue caouanne (F): *Caretta caretta*
- Tortue caret (F): *Caretta caretta*
- Tortue comestible (F): *Chelonia mydas*
- Tortue franche (F): *Chelonia mydas*
- Tortue imbriquée (F): *Eretmochelys imbricata*
- Tortue Luth (F): *Dermochelys coriacea*
- Tortue verte (F): *Chelonia mydas*
- Tortuga blanca (S): *Chelonia mydas*
- Tortuga boba (S): *Caretta caretta*
- Tortuga cabezona (S): *Caretta caretta*
- Tortuga careta (S): *Caretta caretta*
- Tortuga Carey (S): *Eretmochelys imbricata*

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

Tortuga comun (S): <i>Caretta caretta</i>	Tubastrée orange (F): <i>Tubastraea coccinea</i>
Tortuga de carey (S): <i>Eretmochelys imbricata</i>	Turtle, Green (E): <i>Chelonia mydas</i>
Tortuga laud (S): <i>Dermochelys coriacea</i>	Turtle, Hawksbill (E): <i>Eretmochelys imbricata</i>
Tortuga verde (S): <i>Chelonia mydas</i>	Turtle, Leatherback (E): <i>Dermochelys coriacea</i>
Tree-Duck, Cuban (E): <i>Dendrocygna arborea</i>	turtle, Leatherback sea (E): <i>Dermochelys coriacea</i>
Tree-Duck, Fulvous (E): <i>Dendrocygna bicolor</i>	Turtle, Leathery (E): <i>Dermochelys coriacea</i>
Tree-Duck, West Indian (E): <i>Dendrocygna arborea</i>	turtle, Loggerhead (E): <i>Caretta caretta</i>
<i>Tropidophis greenwayi</i> Barbour & Shreve, 1936 II	Turtle, Luth (E): <i>Dermochelys coriacea</i>
TROPIDOPHIIDAE (Reptilia) (E) Ambergris Cay Dwarf	turtle, Trunk (E): <i>Dermochelys coriacea</i>
Boa (F) Boa forestier d'Ambergris Cay, Boa nain d'Ambergris Cay	Turtle, Trunkback (E): <i>Dermochelys coriacea</i>
<i>Tropidophis pardalis greenwayi</i> (Gundlach, 1840) =	<i>Tyto alba</i> (Scopoli, 1769) II ³⁴ TYTONIDAE (Aves) (E)
<i>Tropidophis greenwayi</i> Barbour & Shreve, 1936	Barn Owl, Common Barn-Owl (S) Lechuza común,
<i>Tubastraea aurea</i> (Quoy & Gaimard, 1833) = <i>Tubastraea coccinea</i> Lesson, 1829	Lechuza de campanario (F) Chouette effraie, Effraie africaine, Effraie des clochers
<i>Tubastraea coccinea</i> Lesson, 1829 II	<i>Tyto delicatula</i> (Gould, 1837) = <i>Tyto alba</i> (Scopoli, 1769)
DENDROPHYLLIIDAE (Anthozoa) (E) Orange Cup	<i>Tyto deroepstorffi</i> (Hume, 1875) = <i>Tyto alba</i> (Scopoli, 1769)
Coral, Orange Tube Coral (S) Coral naranja de tubo (F)	<i>Tyto detorta</i> Hartert, 1913 = <i>Tyto alba</i> (Scopoli, 1769)
Tubastrée orange	Whistling-Duck, Fulvous (E): <i>Dendrocygna bicolor</i>
<i>Tubastraea pedersenii</i> (Verrill, 1869) = <i>Tubastraea coccinea</i> Lesson, 1829	Whistling-Duck, West Indian (E): <i>Dendrocygna arborea</i>
<i>Tubastraea tenuilamellosa</i> (Milne Edwards & Haime, 1848) = <i>Tubastraea coccinea</i> Lesson, 1829	Wood-Duck, Black-billed (E): <i>Dendrocygna arborea</i>
<i>Tubastraea willeyi</i> (Gardiner, 1899) = <i>Tubastraea coccinea</i> Lesson, 1829	Yaguaso colorado (S): <i>Dendrocygna bicolor</i>
	<i>Zygaena erythraea</i> (Klunzinger 1871) = <i>Sphyrna lewini</i> (Griffith & Smith, 1834)

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FLORA

- Acajou de Cuba (S): *Swietenia mahagoni*
 Acajou de Santo Domingo (S): *Swietenia mahagoni*
 Alpagata (S): *Consolea macracantha*
Arequipa mirabilis (Ritter) Backeberg = *Cactaceae* Juss.
 Bois de Gaïac (F): *Guaiacum officinale*
 Bois de saint (F): *Guaiacum officinale*
 Bois de vie (F): *Guaiacum officinale*
Borziacactus mirabilis (Buining) Donald = *Cactaceae* Juss.
CACTACEAE spp. Juss. #4 I/II/NC (E) Cacti, Turk's Island
 Prickly-pear Cactus (S) Cactus (F) Cactus
 Cacti (E): *Cactaceae*
 Cactus (S): *Cactaceae*
 Cactus (F): *Cactaceae*
 cactus, Barrel (E): *Melocactus intortus*
 Cactus, Nash's Prickly-pear (E): *Consolea macracantha*
 Cactus, Organ (E): *Pilosocereus royerii*
 Cactus, Pope's Head (E): *Melocactus intortus*
 Cactus, Red-topped Barrel (E): *Melocactus intortus*
 cactus, Royen's tree (E): *Pilosocereus royerii*
 Cactus, Turk's Cap (E): *Melocactus intortus*
 Cactus, Turk's Head (E): *Melocactus intortus*
 Cactus, Turk's Island Prickly-pear (E): *Cactaceae*
 cactus, Woolly nipple (E): *Mammillaria nivosa*
 Caoba Española (S): *Swietenia mahagoni*
 cap, Turk's (E): *Melocactus intortus*
Cephalocereus barbadensis Britton & Rose =
Pilosocereus royerii (L.) Byles & Rowley
Cephalocereus brooksianus (Britton & Rose) =
Pilosocereus royerii (L.) Byles & Rowley
Cephalocereus gaumeri (Britton & Rose) = *Pilosocereus royerii* (L.) Byles & Rowley
Cephalocereus millspaughii Britton = *Pilosocereus royerii* (L.) Byles & Rowley
Cephalocereus monoclonos (De Candolle) Britton & Rose =
Pilosocereus royerii (L.) Byles & Rowley
Cephalocereus nobilis (Haw.) Britton & Rose =
Pilosocereus royerii (L.) Byles & Rowley
Cephalocereus royerii Britton & Rose = *Pilosocereus royerii* (L.) Byles & Rowley
Cephalocereus swartzii (Griseb.) Britton & Rose =
Pilosocereus royerii (L.) Byles & Rowley
Cereus orcuttii K. Brandegee = *Cactaceae* Juss.
Cleistocana mirabilis (Buining) Hunt = *Cactaceae* Juss.
 Coabilla (S): *Swietenia mahagoni*
Consolea falcata (Ekman & Werdermann) F.Knuth =
Consolea macracantha (Grisebach) Berger
Consolea macracantha (Grisebach) Berger #4 II
 CACTACEAE (E) Nash's Prickly-pear Cactus (S)
 Alpagata, Tuna de cruz
Consolea millspaughii (Britton) Berg = *Consolea macracantha* (Grisebach) Berger
Consolea nashii (Britton) Berger = *Consolea macracantha* (Grisebach) Berger
Consolea nashii gibarensis A.E.Areces-Kallea = *Consolea macracantha* (Grisebach) Berger
Encyclia altissima Schltr. #4 II ⁷² ORCHIDACEAE
Encyclia bahamensis (Grisebach.) Britton & Millsp. =
Encyclia rufa (Lindl.) Britt. & Millsp.
Encyclia caicensis Saulea & R.M. Adams #4 II ⁷²
 ORCHIDACEAE (E) Life plant, Wild shallot
Encyclia gracilis (Lindley) Schltr. #4 II ⁷²
 ORCHIDACEAE
Encyclia hodgeana (Hawkes) Beckner #4 II ⁷²
 ORCHIDACEAE
Encyclia inaguensis Nash ex Britton & Millsp. #4 II ⁷²
 ORCHIDACEAE
Encyclia rufa (Lindl.) Britt. & Millsp. #4 II ⁷²
 ORCHIDACEAE
Epidendrum bahamense Grisebach. = *Encyclia rufa* (Lindl.) Britt. & Millsp.
Epidendrum primulinum Bateman ex Lindl. = *Encyclia rufa* (Lindl.) Britt. & Millsp.
Epidendrum rufum Lindl. = *Encyclia rufa* (Lindl.) Britt. & Millsp.
Eriosyce kunzei Ritter = *Cactaceae* Juss.
Espostoa baumannii (Spegazzini) Britton & Rose =
Cactaceae Juss.
Espostocactus mirabilis (Rauh & Backeberg ex Backeberg) Rowley = *Cactaceae* Juss.
 Gaïac (F): *Guaiacum officinale*
 Gayac (F): *Guaiacum officinale*
 Guaiacum (E): *Guaiacum officinale*
Guaiacum bijugum Stokes = *Guaiacum officinale* L.
 Guaiacum, Gum (E): *Guaiacum officinale*
Guaiacum officinale L. #2 II ZYGOPHYLLACEAE (E)
 Brazil Wood, Commoner Lignum Vitae, Guaiac Tree, Guaiacum, Guaiacum Resin, Guaiacum Wood, Gum Guaiacum, Lignum Vitae, Pockwood, Tree of Life, Vera, Wood of life (S) Guajacum, Guayacán negro, Guayaco, Leno de Guayaco, Palo de vida, Palosanto, Palo Santo, Pau Santo (F) Bois de Gaïac, Bois de saint, Bois de vie, Gaïac, Gayac, Resina de Gayaco, Resin de Gaïac
 Guajacum (S): *Guaiacum officinale*
 Guayacán negro (S): *Guaiacum officinale*
 Guayaco (S): *Guaiacum officinale*
Gymnocalycium parvulum Ritter = *Cactaceae* Juss.
Gymnocalycium platense (Ritter) Donald & Rowley =
Cactaceae Juss.
Haageocereus albisetatus (Akers) Backeberg =
Cactaceae Juss.
Haageocereus climaxanthus (Werdermann) Croizat =
Cactaceae Juss.
Haagespostoa albisetata (Akers) Rowley = *Cactaceae* Juss.
Haagespostoa climaxantha (Werdermann) Rowley =
Cactaceae Juss.
 Head, Cactus, Pope's (E): *Mammillaria nivosa*
 head, Turk's (E): *Melocactus intortus*
Horridocactus geissei (Poselger ex Schumann) Doelz =
Cactaceae Juss.
Ibidium lucayanum Britton = *Mesadenus lucayanum* (Britton) Schltr., 1920
 Leno de Guayaco (S): *Guaiacum officinale*
 Life, Tree of (E): *Guaiacum officinale*
 life, Wood of (E): *Guaiacum officinale*
 Mahogani de Saint-Dominique (F): *Swietenia mahagoni*

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

- Mahogany petites feuilles (F): *Swietenia mahagoni*
 Mahogany (E): *Swietenia mahagoni*
 mahogany, American (E): *Swietenia mahagoni*
 Mahogany, Cuban (E): *Swietenia mahagoni*
 mahogany, Small-leaved (E): *Swietenia mahagoni*
 Mahogany, West Indian (E): *Swietenia mahagoni*
Mammillaria flavescens Haworth = *Mammillaria nivos*
 Link ex Pfeiffer
Mammillaria hamata Lehmann ex Pfeiffer = *Cactaceae*
 Juss.
Mammillaria nivos Link ex Pfeiffer #4 II CACTACEAE
 (E) Cactus, Pope's Head, Woolly nipple cactus
Mahucana mirabilis Buining = *Cactaceae* Juss.
Melocactus communis Link & Otto = *Melocactus intortus*
 (Miller) Urban
Melocactus coronatus (Lamarck) Backeberg = *Melocactus*
intortus (Miller) Urban
Melocactus intortus (Miller) Urban #4 II CACTACEAE (E)
 Barrel cactus, Mother-in-law's pincushion, Pope's Head
 Cactus, Red-topped Barrel Cactus, Turk's cap, Turk's
 Cap Cactus, Turk's head, Turk's Head Cactus (F) Tête
 a l'anglais
Melocactus perezassoi Areces = *Melocactus intortus*
 (Miller) Urban
Mesadenus lucayanus (Britton) Schltr., 1920 #4 II 72
 ORCHIDACEAE
Mesadenus stahlis (Cogn.) Garay = *Mesadenus lucayanus*
 (Britton) Schltr., 1920
Neobinghamia climaxantha (Werdermann) Backeberg =
Cactaceae Juss.
Neobinghamia mirabilis Rauh & Backeberg ex Backeberg
 = *Cactaceae* Juss.
Neobinghamia multiareolata Rauh & Backeberg =
Cactaceae Juss.
Neobinghamia villigera (Ritter) Backeberg = *Cactaceae*
 Juss.
Neochilenia eriosyzoides (Foerster) Kattermann =
Cactaceae Juss.
Neochilenia kunzei (Foerster) Backeberg = *Cactaceae*
 Juss.
Neochilenia transitensis (Spegazzini) Spegazzini =
Cactaceae Juss.
Neoporteria eriosyzoides (Buining) Backeberg =
Cactaceae Juss.
Neoporteria kunzei (Foerster) Backeberg = *Cactaceae*
 Juss.
Neoporteria nidus = *Cactaceae* Juss.
Neoporteria transitensis (Ritter) Ferryman ex
 Preston-Mafham = *Cactaceae* Juss.
Neoporteria vollenarensis (Ritter) A.E. Hoffmann =
Cactaceae Juss.
 Nopal estricto (S): *Opuntia stricta*
Opuntia anahuacensis Griffiths = *Opuntia stricta*
 (Haworth) Haworth
Opuntia atropensis Small = *Opuntia stricta* (Haworth)
 Haworth
Opuntia bahamana Britton & Rose = *Opuntia stricta*
 (Haworth) Haworth
Opuntia congesta Knize = *Cactaceae* Juss.
Opuntia dillenii (Ker-Gawler) Haworth = *Opuntia stricta*
 (Haworth) Haworth
Opuntia falcata Ekman & Werdermann = *Consolea*
macracantha (Grisebach) Berger
Opuntia keyensis Britton & Small = *Opuntia stricta*
 (Haworth) Haworth
Opuntia lucayana Britton = *Cactaceae* Juss.
Opuntia macracantha (Grisebach) Berger = *Consolea*
macracantha (Grisebach) Berger
Opuntia macrathra Gibbes = *Opuntia stricta* (Haworth)
 Haworth
Opuntia magnifica Small = *Opuntia stricta* (Haworth)
 Haworth
Opuntia melanosperma Svenson = *Opuntia stricta*
 (Haworth) Haworth
Opuntia millspaughii Britton = *Consolea macracantha*
 (Grisebach) Berger
Opuntia nashii Britton = *Consolea macracantha*
 (Grisebach) Berger
Opuntia nejapensis Bravo = *Opuntia stricta* (Haworth)
 Haworth
Opuntia nitens Small = *Opuntia stricta* (Haworth) Haworth
Opuntia stricta (Haworth) Haworth #4 II CACTACEAE (E)
 Erect pricklypear (S) Nopal estricto
Opuntia subsphaerocarpa Spegazzini = *Opuntia stricta*
 (Haworth) Haworth
Opuntia tehuantepecana (Bravo) Bravo = *Opuntia stricta*
 (Haworth) Haworth
Opuntia tenuiflora Small = *Opuntia stricta* (Haworth)
 Haworth
Opuntia zebrina Small = *Opuntia stricta* (Haworth)
 Haworth
Pacheroactus orcuttii (K.Brandege) Rowley =
Cactaceae Juss.
Pachycereus orcuttii (K. Brandege) Britton & Rose =
Cactaceae Juss.
 Palo de vida (S): *Guaiacum officinale*
 Palosanto (S): *Guaiacum officinale*
 Palo Santo (S): *Guaiacum officinale*
 Pau Santo (S): *Guaiacum officinale*
 Pear, Vine (E): *Pilosocereus royerii*
Pilocereus curtisii (Pfeiff.) Salm-Dyck = *Pilosocereus*
royerii (L.) Byles & Rowley
Pilocereus haworthii (DC.) Console = *Pilosocereus royerii*
 (L.) Byles & Rowley
Pilocereus strictus (Link & Otto) C.F.Först. & Rümpler =
Pilosocereus royerii (L.) Byles & Rowley
Pilosocereus barbadensis (Britton & Rose) Byles &
 Rowley = *Pilosocereus royerii* (L.) Byles & Rowley
Pilosocereus gaumeri (Britton & Rose) Backeberg =
Pilosocereus royerii (L.) Byles & Rowley
Pilosocereus monoclonos (De Candolle) Byles & Rowley =
Pilosocereus royerii (L.) Byles & Rowley
Pilosocereus nobilis (Haworth) Byles & Rowley =
Pilosocereus royerii (L.) Byles & Rowley
Pilosocereus royerii (L.) Byles & Rowley #4 II
 CACTACEAE (E) Organ Cactus, Royen's tree cactus,
 Vine Pear
Pilosocereus swartzii (Griseb.) Britton & Rose =
Pilosocereus royerii (L.) Byles & Rowley

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Pilosocereus urbanianus (K. Schum.) Britton & Rose =
Pilosocereus royerii (L.) Byles & Rowley
 pincushion, Mother-in-law's (E): *Melocactus intortus*
 plant, Life (E): *Encyclia caicensis*
 Pockwood (E): *Guaiacum officinale*
 pricklypear, Erect (E): *Opuntia stricta*
Pseudopilocereus nobilis (Haworth) Buxbaum =
Pilosocereus royerii (L.) Byles & Rowley
Pyrrhocactus eriosyzoides (Ritter) Ritter = *Cactaceae*
 Juss.
Pyrrhocactus transitensis = *Cactaceae* Juss.
Pyrrhocactus vallenarensis (Soehrens ex Schumann)
 Britton & Rose = *Cactaceae* Juss.
 Resina de Gayaco (F): *Guaiacum officinale*
 Resin de Gaïac (F): *Guaiacum officinale*
 Resin, Guaiacum (E): *Guaiacum officinale*
 shallot, Wild (E): *Encyclia caicensis*
Spiranthes lucayana (Britton) Cogn. = *Mesadenus*
lucayanus (Britton) Schltr., 1920
Spiranthes stahlia Cogn. = *Mesadenus lucayanus* (Britton)
 Schltr., 1920
Strombocactus roseiflorus Rauh & Backeberg =
Cactaceae Juss.
Swietenia mahagoni (L.) Jacq. #5 II MELIACEAE (E)
 American mahogany, Cuban Mahogany, Mahogany,
 Small-leaved mahogany, West Indian Mahogany (S)
 Acajou de Cuba, Acajou de Santo Domingo, Caoba
 Española, Coabilla (F) Mahogani de Saint-Dominique,
 Mahogani petites feuilles
 Tête à l'anglais (F): *Melocactus intortus*
 Tree, Guaiac (E): *Guaiacum officinale*
 Tuna de cruz (S): *Consolea macracantha*
 Vera (E): *Guaiacum officinale*
 Vitae, Commoner Lignum (E): *Guaiacum officinale*
 Vitae, Lignum (E): *Guaiacum officinale*
 Wood, Brazil (E): *Guaiacum officinale*
 Wood, Guaiacum (E): *Guaiacum officinale*

Annotations key

Annotations not preceded by “#”

1 *Antilocapra americana*

Only the population of Mexico is included in Appendix I. No other population is included in the Appendices.

2 *Bos gaurus*

Excludes the domesticated form, which is referenced as *Bos frontalis*, and is not subject to the provisions of the Convention.

3 *Bos mutus*

Excludes the domesticated form, which is referenced as *Bos grunniens*, and is not subject to the provisions of the Convention.

4 *Bubalus arnee*

Excludes the domesticated form, which is referenced as *Bubalus bubalis* and is not subject to the provisions of the Convention.

5 *Ovis canadensis*

Only the population of Mexico; no other population is included in the Appendices.

6 *Ovis gmelini*

Only the population of Cyprus; no other population is included in the Appendices

7 *Saiga borealis*

A zero export quota for wild specimens traded for commercial purposes

8 *Saiga tatarica*

A zero export quota for wild specimens traded for commercial purposes

9 *Vicugna vicugna*

Only the populations of Argentina (the populations of the Provinces of Jujuy, Catamarca and Salta, and the semi-captive populations of the Provinces of Jujuy, Salta, Catamarca, La Rioja and San Juan), Chile (populations of the region of Tarapacá and of the region of Arica and Parinacota), Ecuador (the whole population), Peru (the whole population) and the Plurinational State of Bolivia (the whole population); all other populations are included in Appendix I.

For the exclusive purpose of allowing international trade in fibre from vicuñas (*Vicugna vicugna*) and their derivative products, only if the fibre comes from the shearing of live vicuñas. Trade in products derived from the fibre may only take place in accordance with the following provisions:

a) Any person or entity processing vicuña fibre to manufacture cloth and garments must request authorization from the relevant authorities of the country of origin (Countries of origin: The countries where the species occurs, that is, Argentina, Bolivia, Chile, Ecuador and Peru) to use the “vicuña country of origin” wording, mark or logo adopted by the range States of the species that are signatories to the Convention for the Conservation and Management of the Vicuña.

b) Marketed cloth or garments must be marked or identified in accordance with the following provisions:

i) For international trade in cloth made from live-sheared vicuña fibre, whether the cloth was produced within or outside of the range States of the species, the wording, mark or logo must be used so that the country of origin can be identified. The VICUÑA [COUNTRY OF ORIGIN] wording, mark or logo has the format as detailed below:

This wording, mark or logo must appear on the reverse side of the cloth. In addition, the selvages of the cloth must bear the words VICUÑA [COUNTRY OF ORIGIN].

ii) For international trade in garments made from live-sheared vicuña fibre, whether the garments were produced within or outside of the range States of the species, the wording, mark or logo indicated in paragraph b) i) must be used. This wording, mark or logo must appear on a label on the garment itself. If the garments are produced outside of the country of origin, the name of the country where the garment was produced should also be indicated, in addition to the wording, mark or logo referred to in paragraph b) i).

c) For international trade in handicraft products made from live-sheared vicuña fibre produced within the range

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States of the species, the VICUÑA [COUNTRY OF ORIGIN] - ARTESANÍA wording, mark or logo must be used as detailed below:

d) If live-sheared vicuña fibre from various countries of origin is used for the production of cloth and garments, the wording, mark or logo of each of the countries of origin of the fibre must be indicated, as detailed in paragraphs b) i) and ii).

e) All other specimens shall be deemed to be specimens of species listed in Appendix I and the trade in them shall be regulated accordingly.

10 *Moschus* spp.

The populations of Afghanistan, Bhutan, India, Myanmar, Nepal and Pakistan are included in Appendix I. All other populations are included in Appendix II.

10 *Moschus* spp.

Except the populations of Afghanistan, Bhutan, India, Myanmar, Nepal and Pakistan, which are included in Appendix I.

11 TAYASSUIDAE spp.

Except the species included in Appendix I (*Catagonus wagneri*) and the populations of *Pecari tajacu* of Mexico and the United States of America, which are not included in the Appendices.

12 *Canis lupus*

Except the populations of Bhutan, India, Nepal and Pakistan, which are included in Appendix I. Excludes the domesticated form and the dingo which are referenced as *Canis lupus familiaris* and *Canis lupus dingo*.

13 FELIDAE spp.

Included in Appendix II, except for the species included in Appendix I. Specimens of the domesticated form are not subject to the provisions of the Convention.

14 *Acinonyx jubatus*

Included in Appendix I. Annual export quotas for live specimens and hunting trophies are granted as follows: Botswana: 5; Namibia: 150; Zimbabwe: 50. The trade in such specimens is subject to the provisions of Article III of the Convention.

15 *Caracal caracal*

Except the Asian population, which is included in Appendix I.

16 *Herpailurus yagouaroundi*

Only the populations of Central and North America; all other populations are included in Appendix II.

17 *Panthera leo*

[FAMILY listing Felidae spp.]

For *Panthera leo* (African populations): a zero annual export quota is established for specimens of bones, bone pieces, bone products, claws, skeletons, skulls and teeth removed from the wild and traded for commercial purposes. Annual export quotas for trade in bones, bone pieces, bone products, claws, skeletons, skulls and teeth for commercial purposes, derived from captive breeding operations in South Africa, will be established and communicated annually to the CITES Secretariat.

17 *Panthera leo*

Only the populations of India; all other populations are included in Appendix II.

18 *Prionailurus bengalensis bengalensis*

Except the populations of Bangladesh, India and Thailand, which are included in Appendix I.

19 *Prionailurus rubiginosus*

Only the population of India; all other populations are included in Appendix II.

19 *Prionailurus rubiginosus*

Except the population of India, which is included in Appendix I.

20 *Puma concolor*

Only the populations of Costa Rica and Panama; all other populations are included in Appendix II

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²¹ *Aonyx capensis microdon*

Only the populations of Cameroon and Nigeria; all other populations are included in Appendix II.

²² *Ursus arctos*

Except the populations of Bhutan, China, Mexico and Mongolia, which are included in Appendix I.

²² *Ursus arctos*

Only the populations of Bhutan, China, Mexico and Mongolia; all other populations are included in Appendix II.

²³ CETACEA spp.

Included in Appendix II, except for the species included in Appendix I. A zero annual export quota has been established for live specimens from the Black Sea population of *Tursiops truncatus* removed from the wild and traded for primarily commercial purposes.

²⁴ *Balaenoptera acutorostrata*

Population of West Greenland.

²⁵ *Pteropus* spp.

Except *Pteropus brunneus* and the species included in Appendix I.

²⁶ *Chaetophractus nationi*

Included in Appendix II. A zero annual export quota has been established. All specimens shall be deemed to be specimens of species included in Appendix I and the trade in them shall be regulated accordingly.

²⁷ *Equus africanus*

Excludes the domesticated form, which is referenced as *Equus asinus* and is not subject to the provisions of the Convention.

²⁸ *Ceratotherium simum simum*

Only the populations of Eswatini and South Africa; all other populations are included in Appendix I. For the exclusive purpose of allowing international trade in live animals to appropriate and acceptable destinations and hunting trophies. All other specimens shall be deemed to be specimens of species included in Appendix I and the trade in them shall be regulated accordingly.

²⁹ *Loxodonta africana*

The populations of Botswana, Namibia, South Africa and Zimbabwe are listed in Appendix II for the exclusive purpose of allowing:

- a) trade in hunting trophies for non-commercial purposes;
- b) trade in live animals to appropriate and acceptable destinations, as defined in Resolution Conf. 11.20 (Rev. CoP18), for Botswana and Zimbabwe and for *in situ* conservation programmes for Namibia and South Africa;
- c) trade in hides;
- d) trade in hair;
- e) trade in leather goods for commercial or non-commercial purposes for Botswana, Namibia and South Africa and for non-commercial purposes for Zimbabwe;
- f) trade in individually marked and certified ekipas incorporated in finished jewellery for non-commercial purposes for Namibia and ivory carvings for non-commercial purposes for Zimbabwe;
- g) trade in registered raw ivory (for Botswana, Namibia, South Africa and Zimbabwe, whole tusks and pieces) subject to the following:
 - i) only registered government-owned stocks, originating in the State (excluding seized ivory and ivory of unknown origin);
 - ii) only to trading partners that have been verified by the Secretariat, in consultation with the Standing Committee, to have sufficient national legislation and domestic trade controls to ensure that the imported ivory will not be re-exported and will be managed in accordance with all requirements of Resolution Conf. 10.10 (Rev. CoP18) concerning domestic manufacturing and trade;
 - iii) not before the Secretariat has verified the prospective importing countries and the registered government-owned stocks;
 - iv) raw ivory pursuant to the conditional sale of registered government-owned ivory stocks agreed at CoP12, which are 20,000 kg (Botswana), 10,000 kg (Namibia) and 30,000 kg (South Africa);
 - v) in addition to the quantities agreed at CoP12, government-owned ivory from Botswana, Namibia, South Africa and Zimbabwe registered by 31 January 2007 and verified by the Secretariat may be traded and despatched, with the ivory in paragraph g) iv) above, in a single sale per destination under strict supervision of the Secretariat;
 - vi) the proceeds of the trade are used exclusively for elephant conservation and community conservation and development programmes within or adjacent to the elephant range; and

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vii) the additional quantities specified in paragraph g) v) above shall be traded only after the Standing Committee has agreed that the above conditions have been met; and
h) no further proposals to allow trade in elephant ivory from populations already in Appendix II shall be submitted to the Conference of the Parties for the period from CoP14 and ending nine years from the date of the single sale of ivory that is to take place in accordance with provisions in paragraphs g) i), g) ii), g) iii), g) vi) and g) vii). In addition such further proposals shall be dealt with in accordance with Decisions 16.55 and 14.78 (Rev. CoP16).

On a proposal from the Secretariat, the Standing Committee can decide to cause this trade to cease partially or completely in the event of non-compliance by exporting or importing countries, or in the case of proven detrimental impacts of the trade on other elephant populations.

All other specimens shall be deemed to be specimens of species included in Appendix I and the trade in them shall be regulated accordingly.

30 *Chinchilla* spp.

Specimens of the domesticated form are not subject to the provisions of the Convention

31 FALCONIFORMES spp.

Except *Caracara lutosa* and the species of the family Cathartidae, which are not included in the Appendices; and the species included in Appendices I and III.

32 *Falco newtoni*

Except the population of the Seychelles, which is included in Appendix I.

32 *Falco newtoni*

Only the population of Seychelles.

33 PSITTACIFORMES spp.

Included in Appendix II, except for the species included in Appendix I and *Agapornis roseicollis*, *Melopsittacus undulatus*, *Nymphicus hollandicus* and *Psittacula krameri*, which are not included in the Appendices.

34 STRIGIFORMES spp.

Except *Sceloglaux albigula* and the species included in Appendix I.

35 *Struthio camelus*

Only the populations of Algeria, Burkina Faso, Cameroon, the Central African Republic, Chad, Mali, Mauritania, Morocco, Niger, Nigeria, Senegal and Sudan are included in Appendix I. No other population is included in the Appendices.

36 *Caiman latirostris*

Except the population of Argentina, which is included in Appendix II.

37 *Crocodylus acutus*

Population of the Integrated Management District of Mangroves of the Bay of Cispata, Tinajones, La Balsa and Surrounding Areas, Department of Córdoba, Colombia, and the population of Cuba; and the population of Mexico, which is subject to a zero export quota for wild specimens for commercial purposes

38 *Crocodylus moreletii*

Only the population of Belize, which is included in Appendix II with a zero quota for wild specimens traded for commercial purposes, and the population of Mexico.

39 *Crocodylus niloticus*

Populations of Botswana, Egypt (subject to a zero quota for wild specimens traded for commercial purposes), Ethiopia, Kenya, Madagascar, Malawi, Mozambique, Namibia, South Africa, Uganda, the United Republic of Tanzania (subject to an annual export quota of no more than 1,600 wild specimens including hunting trophies, in addition to ranches specimens), Zambia and Zimbabwe.

39 *Crocodylus niloticus*

Included in Appendix I, except the populations of Botswana, Egypt (subject to a zero quota for wild specimens traded for commercial purposes), Ethiopia, Kenya, Madagascar, Malawi, Mozambique, Namibia, South Africa, Uganda, the United Republic of Tanzania (subject to an annual export quota of no more than 1,600 wild specimens including hunting trophies, in addition to ranches specimens), Zambia and Zimbabwe, which are included in Appendix II

40 *Crocodylus porosus*

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Only the populations of Australia, Indonesia, Malaysia [wild harvest restricted to the State of Sarawak and a zero quota for wild specimens for the other States of Malaysia (Sabah and Peninsular Malaysia), with no change in the zero quota unless approved by the Parties] and Papua New Guinea; all other populations are included in Appendix I.

41 *Ceratophora aspera*

Zero export quota for wild specimens for commercial purposes

42 *Ceratophora stoddartii*

Zero export quota for wild specimens for commercial purposes

43 *Lyriocephalus scutatus*

Zero export quota for wild specimens for commercial purposes

44 *Abronia* spp.

Except the species included in Appendix I. Zero export quota for wild specimens for *Abronia aurita*, *A. gaiophantasma*, *A. montecristoi*, *A. salvadorensis* and *A. vasconcelosii*.

45 LANTHANOTIDAE spp.

Zero export quota for wild specimens for commercial purposes.

46 *Vipera ursinii*

Only the population of Europe, except the area which formerly constituted the Union of Soviet Socialist Republics; these latter populations are not included in the Appendices.

47 *Chelodina mccordi*

Zero export quota for specimens from the wild.

48 *Batagur borneoensis*

Zero quota for wild specimens for commercial purposes.

49 *Batagur trivittata*

Zero quota for wild specimens for commercial purposes.

50 *Heosemys annandalii*

Zero quota for wild specimens for commercial purposes.

51 *Heosemys depressa*

Zero quota for wild specimens for commercial purposes.

52 *Orlitia borneensis*

Zero quota for wild specimens for commercial purposes.

53 TESTUDINIDAE spp.

Included in Appendix II, except for the species included in Appendix I. A zero annual export quota has been established for *Centrochelys sulcata* for specimens removed from the wild and traded for primarily commercial purposes.

54 *Rheobatrachus* spp.

Except *Rheobatrachus silus* and *Rheobatrachus vitellinus*.

55 *Holothuria fuscogilva*

Entry into effect delayed by 12 months, i.e. until 28 August 2020

56 *Holothuria nobilis*

Entry into effect delayed by 12 months, i.e. until 28 August 2020

57 *Holothuria whitmaei*

Entry into effect delayed by 12 months, i.e. until 28 August 2020

58 *Panax ginseng*

Only the population of the Russian Federation; no other population is included in the Appendices.

59 *Dicksonia* spp.

Only the populations of the Americas; no other population is included in the Appendices

60 *Diospyros* spp.

Populations of Madagascar.

61 *Euphorbia* spp.

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Succulent species only except *Euphorbia misera* and the species included in Appendix I. Artificially propagated specimens of cultivars of *Euphorbia trigona*, artificially propagated specimens of crested, fan-shaped or colour mutants of *Euphorbia lactea*, when grafted on artificially propagated root stock of *Euphorbia nerifolia*, and artificially propagated specimens of cultivars of *Euphorbia 'Milii'* when they are traded in shipments of 100 or more plants and readily recognizable as artificially propagated specimens, are not subject to the provisions of the Convention.

62 *Euphorbia cremersii*

Included in Appendix I. Includes the forma *viridifolia* and the variety *rakotozafyi*.

63 *Euphorbia cylindrifolia*

Included in Appendix I. Includes the subspecies *tuberifera*.

64 *Euphorbia decaryi*

Included in Appendix I. Includes the varieties *ampanihyensis*, *robinsonii* and *spirosticha*.

65 *Euphorbia moratii*

Included in Appendix I. Includes the varieties *antsingiensis*, *bemarahensis* and *multiflora*.

66 *Aloe* spp.

Except the species included in Appendix I. Also excludes *Aloe vera*, also referenced as *Aloe barbadensis* which is not included in the Appendices.

67 *Aloe compressa*

Included in Appendix I. Includes the varieties *paucituberculata*, *rugosquamosa* and *schistophila*.

68 *Aloe haworthioides*

Included in Appendix I. Includes the variety *aurantiaca*.

69 *Aloe laeta*

Included in Appendix I. Includes the variety *maniaensis*.

70 *Cedrela* spp.

Populations of the Neotropics.

Entry into effect delayed by 12 months, i.e. until 28 August 2020.

71 *Swietenia macrophylla*

Populations of the Neotropics

72 ORCHIDACEAE spp.

Included in Appendix II, except for the species included in Appendix I.

Additionally, artificially propagated hybrids of the following genera are not subject to the provisions of the Convention, if conditions, as indicated under a) and b), are met: *Cymbidium*, *Dendrobium*, *Phalaenopsis* and *Vanda*:

a) Specimens are readily recognizable as artificially propagated and do not show any signs of having been collected in the wild such as mechanical damage or strong dehydration resulting from collection, irregular growth and heterogeneous size and shape within a taxon and shipment, algae or other epiphyllous organisms adhering to leaves, or damage by insects or other pests; and

b) i) when shipped in non-flowering state, the specimens must be traded in shipments consisting of individual containers (such as cartons, boxes, crates or individual shelves of CC-containers) each containing 20 or more plants of the same hybrid; the plants within each container must exhibit a high degree of uniformity and healthiness; and the shipment must be accompanied by documentation, such as an invoice, which clearly states the number of plants of each hybrid; or

ii) when shipped in flowering state, with at least one fully open flower per specimen, no minimum number of specimens per shipment is required but specimens must be professionally processed for commercial retail sale, e.g. labelled with printed labels or packaged with printed packages indicating the name of the hybrid and the country of final processing. This should be clearly visible and allow easy verification.

Plants not clearly qualifying for the exemption must be accompanied by appropriate CITES documents.

73 *Aerangis ellisii*

Included in Appendix I. Seedling or tissue cultures obtained in vitro, in solid or liquid media, and transported in sterile containers are not subject to the provisions of the Convention only if the specimens meet the definition of 'artificially propagated' agreed by the Conference of the Parties in Resolution Conf. 11.11 (Rev. CoP15), i.e. plant specimens: a) grown under controlled conditions; and b) grown from seeds, cuttings, divisions, callus tissues or other plant tissues, spores or other propagules that either are exempt from the provisions of the Convention or have been derived from cultivated parental stock.

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

74 *Cattleya jongheana*

Included in Appendix I. Seedling or tissue cultures obtained *in vitro*, in solid or liquid media, and transported in sterile containers are not subject to the provisions of the Convention only if the specimens meet the definition of 'artificially propagated' agreed by the Conference of the Parties in Resolution Conf. 11.11 (Rev. CoP15), i.e. plant specimens: a) grown under controlled conditions; and b) grown from seeds, cuttings, divisions, callus tissues or other plant tissues, spores or other propagules that either are exempt from the provisions of the Convention or have been derived from cultivated parental stock.

75 *Cattleya lobata*

Included in Appendix I. Seedling or tissue cultures obtained *in vitro*, in solid or liquid media, and transported in sterile containers are not subject to the provisions of the Convention only if the specimens meet the definition of 'artificially propagated' agreed by the Conference of the Parties in Resolution Conf. 11.11 (Rev. CoP15), i.e. plant specimens: a) grown under controlled conditions; and b) grown from seeds, cuttings, divisions, callus tissues or other plant tissues, spores or other propagules that either are exempt from the provisions of the Convention or have been derived from cultivated parental stock.

76 *Dendrobium cruentum*

Included in Appendix I. Seedling or tissue cultures obtained *in vitro*, in solid or liquid media, and transported in sterile containers are not subject to the provisions of the Convention only if the specimens meet the definition of 'artificially propagated' agreed by the Conference of the Parties in Resolution Conf. 11.11 (Rev. CoP15), i.e. plant specimens: a) grown under controlled conditions; and b) grown from seeds, cuttings, divisions, callus tissues or other plant tissues, spores or other propagules that either are exempt from the provisions of the Convention or have been derived from cultivated parental stock.

77 *Mexipedium xerophyticum*

Seedling or tissue cultures obtained *in vitro*, in solid or liquid media, and transported in sterile containers are not subject to the provisions of the Convention only if the specimens meet the definition of 'artificially propagated' agreed by the Conference of the Parties.

78 *Paphiopedilum* spp.

Included in Appendix I. Seedling or tissue cultures obtained *in vitro*, in solid or liquid media, and transported in sterile containers are not subject to the provisions of the Convention only if the specimens meet the definition of 'artificially propagated' agreed by the Conference of the Parties in Resolution Conf. 11.11 (Rev. CoP15), i.e. plant specimens: a) grown under controlled conditions; and b) grown from seeds, cuttings, divisions, callus tissues or other plant tissues, spores or other propagules that either are exempt from the provisions of the Convention or have been derived from cultivated parental stock.

79 *Peristeria elata*

Included in Appendix I. Seedling or tissue cultures obtained *in vitro*, in solid or liquid media, and transported in sterile containers are not subject to the provisions of the Convention only if the specimens meet the definition of 'artificially propagated' agreed by the Conference of the Parties in Resolution Conf. 11.11 (Rev. CoP15), i.e. plant specimens: a) grown under controlled conditions; and b) grown from seeds, cuttings, divisions, callus tissues or other plant tissues, spores or other propagules that either are exempt from the provisions of the Convention or have been derived from cultivated parental stock.

80 *Phragmipedium* spp.

Included in Appendix I. Seedling or tissue cultures obtained *in vitro*, in solid or liquid media, and transported in sterile containers are not subject to the provisions of the Convention only if the specimens meet the definition of 'artificially propagated' agreed by the Conference of the Parties in Resolution Conf. 11.11 (Rev. CoP15), i.e. plant specimens: a) grown under controlled conditions; and b) grown from seeds, cuttings, divisions, callus tissues or other plant tissues, spores or other propagules that either are exempt from the provisions of the Convention or have been derived from cultivated parental stock.

81 *Renanthera imschootiana*

Included in Appendix I. Seedling or tissue cultures obtained *in vitro*, in solid or liquid media, and transported in sterile containers are not subject to the provisions of the Convention only if the specimens meet the definition of 'artificially propagated' agreed by the Conference of the Parties in Resolution Conf. 11.11 (Rev. CoP15), i.e. plant specimens: a) grown under controlled conditions; and b) grown from seeds, cuttings, divisions, callus tissues or other plant tissues, spores or other propagules that either are exempt from the provisions of the Convention or have been derived from cultivated parental stock.

82 *Cyclamen* spp.

Artificially propagated specimens of cultivars of *Cyclamen persicum* are not subject to the provisions of the Convention. However, the exemption does not apply to such specimens traded as dormant tubers.

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

APPENDIX IV

IUCN Red List Species for TCI – Species observed during Assessment Highlighted

IUCN Red List species for TCI			
Species observed during Assessment Highlighted			
Agaricia undata	Data Deficient		
Agelaius phoeniceus	Least Concern		
Ahlia egmontis	Least Concern		
Ahlia egmontis	Least Concern		
Ahliesaurus berryi	Least Concern		
Aix sponsa	Least Concern		
Albula vulpes	Near Threatened		
Albula vulpes	Least Concern	✓	Sedimentation needs to be controlled to prevent adverse impacts
Aldrovandia affinis	Least Concern		
Aldrovandia gracilis	Least Concern		
Alectis ciliaris	Least Concern		
Alectis ciliaris	Least Concern		
Alepisaurus ferox	Least Concern		
Alepisaurus ferox	Data Deficient		
Alepocephalus productus	Least Concern		
Alle alle	Least Concern		
Alopias superciliosus	Vulnerable		
Alopias vulpinus	Vulnerable		
Alphestes afer	Least Concern		
Aluterus monoceros	Least Concern		
Aluterus monoceros	Least Concern		
Aluterus schoepfii	Least Concern		
Aluterus scriptus	Least Concern		
Amblycirrhitus pinos	Least Concern		
Amblycirrhitus pinos	Least Concern		
Ammannia baccifera	Least Concern		
Amyris elemifera	Least Concern	✓	Uncommon
Anarchias similis	Least Concern		
Anarchias similis	Least Concern		
Anarchopterus criniger	Least Concern		
Anarchopterus tectus	Least Concern		
Anarchopterus tectus	Least Concern		
Anas acuta	Least Concern		
Anas bahamensis	Least Concern	✓	Canal may increase available habitat
Anas platyrhynchos	Least Concern		
Anas rubripes	Least Concern		
Anchoa cayorum	Least Concern		
Anchoa cayorum	Least Concern		
Anchoa filifera	Least Concern		
Anchoa lamprotaenia	Least Concern		
Anchoa lamprotaenia	Least Concern		
Ancylometta antillarum	Least Concern		
Anguilla rostrata	Endangered		
Anhinga anhinga	Least Concern		
Anisotremus surinamensis	Data Deficient		
Anisotremus virginicus	Least Concern		

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

IUCN Red List species for TCI
Species observed during Assessment Highlighted

Anisotremus virginicus	Least Concern		
Annona glabra	Least Concern		
Annona montana	Least Concern		
Annona mucosa	Least Concern		
Anolis equestris	Least Concern		
Anolis sagrei	Least Concern	✓	Present
Anolis scriptus	Least Concern	✓	Present
Anoplogaster brachycera	Data Deficient		
Anoplogaster cornuta	Least Concern		
Anous minutus	Least Concern		
Anous stolidus	Least Concern		
Anser caerulescens	Least Concern		
Antennarius multiocellatus	Least Concern		
Antennarius multiocellatus	Least Concern		
Antennarius pauciradiatus	Least Concern		
Antennarius pauciradiatus	Least Concern		
Antennarius striatus	Least Concern		
Antennarius striatus	Least Concern		
Antennatus bermudensis	Least Concern		
Antheophora hermaphrodita	Least Concern		
Anthus rubescens	Least Concern		
Antigonia capros	Least Concern		
Antigonia capros	Least Concern		
Antigonia combatia	Least Concern		
Antigonia combatia	Least Concern		
Antillotyphlops platycephalus	Least Concern		
Antimora rostrata	Least Concern		
Antrostomus carolinensis	Near Threatened		
Apogon aurolineatus	Least Concern		
Apogon aurolineatus	Least Concern		
Apogon binotatus	Least Concern		
Apogon binotatus	Least Concern		
Apogon lachneri	Least Concern		
Apogon lachneri	Least Concern		
Apogon maculatus	Least Concern		
Apogon maculatus	Least Concern		
Apogon phenax	Least Concern		
Apogon phenax	Least Concern		
Apogon pillionatus	Least Concern		
Apogon pillionatus	Least Concern		
Apogon planifrons	Least Concern		
Apogon planifrons	Least Concern		
Apogon pseudomaculatus	Least Concern		
Apogon pseudomaculatus	Least Concern		
Apogon quadrisquamatus	Least Concern		
Apogon quadrisquamatus	Least Concern		
Apogon townsendi	Least Concern		

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

IUCN Red List species for TCI			
Species observed during Assessment Highlighted			
Apogon townsendi	Least Concern		
Aprognathodon platyventris	Least Concern		
Aprognathodon platyventris	Least Concern		
Apsilus dentatus	Least Concern		
Apsilus dentatus	Least Concern		
Apterichtus kendalli	Least Concern		
Apterichtus kendalli	Least Concern		
Aramus guarauna	Least Concern		
Archosargus rhomboidalis	Least Concern		
Archosargus rhomboidalis	Least Concern		
Arcos nudus	Least Concern		
Arctozenus risso	Least Concern		
Ardea alba	Least Concern		
Ardea herodias	Least Concern	✓	Canal may increase available habitat
Ardena gravis	Least Concern		
Ardena grisea	Near Threatened		
Arenaria interpres	Least Concern	✓	Canal may increase available habitat
Argentina georgei	Least Concern		
Argonauta argo	Least Concern		
Argonauta hians	Least Concern		
Argyripnus atlanticus	Least Concern		
Argyrolepecus hemigymnus	Least Concern		
Argyrolepecus olfersii	Least Concern		
Argyrolepecus sladeni	Least Concern		
Argythamnia argentea	Endangered		
Ariosoma balearicum	Least Concern		
Ariosoma balearicum	Least Concern		
Ariosoma balearicum	Least Concern		
Aristelliger hechti	Vulnerable		
Aristostomias grimaldii	Least Concern		
Aristostomias lunifer	Least Concern		
Aristostomias polydactylus	Least Concern		
Aristostomias tittmanni	Least Concern		
Aristostomias xenostoma	Least Concern		
Asquamiceps caeruleus	Least Concern		
Astichopus multifidus	Least Concern		
Astrapogon alutus	Least Concern		
Astrapogon alutus	Least Concern		
Astrapogon puncticulatus	Least Concern		
Astrapogon puncticulatus	Least Concern		
Astrapogon stellatus	Data Deficient		
Astrapogon stellatus	Least Concern		
Astronesthes atlanticus	Least Concern		
Astronesthes gemmifer	Data Deficient		
Astronesthes gudrunae	Least Concern		
Astronesthes indicus	Least Concern		
Astronesthes leucopogon	Least Concern		

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

IUCN Red List species for TCI			
Species observed during Assessment Highlighted			
Astronesthes macropogon	Least Concern		
Astronesthes micropogon	Least Concern		
Astronesthes niger	Least Concern		
Astronesthes similus	Least Concern		
Astronesthes zharovi	Least Concern		
Ataxolepis apus	Least Concern		
Aulopus filamentosus	Least Concern		
Aulopus filamentosus	Least Concern		
Aulostomus maculatus	Least Concern		
Aulostomus maculatus	Least Concern		
Auxis rochei	Least Concern		
Auxis rochei	Least Concern		
Auxis rochei	Least Concern		
Auxis thazard	Least Concern		
Auxis thazard	Least Concern		
Auxis thazard	Data Deficient		
Avicennia germinans	Least Concern	✓	Canal may increase available habitat
Avocettina infans	Least Concern		
Ayenia tenuicaulis	Endangered		
Aythya affinis	Least Concern		
Aythya americana	Least Concern		
Aythya collaris	Least Concern	✓	Canal may increase available habitat
Aythya marila	Least Concern		
Bajacalifornia megalops	Least Concern		
Balaenoptera acutorostrata	Least Concern		
Balaenoptera borealis	Endangered		
Balaenoptera edeni	Least Concern		
Balistes capriscus	Near Threatened		
Balistes capriscus	Vulnerable		
Balistes vetula	Least Concern		
Balistes vetula	Near Threatened		
Barathrites parri	Least Concern		
Barathrodemus manatinus	Least Concern		
Barathronus bicolor	Least Concern		
Barbourisia rufa	Least Concern		
Barbulifer ceuthoecus	Least Concern		
Barbulifer ceuthoecus	Least Concern		
Bartramia longicauda	Least Concern		
Bassogigas gillii	Least Concern		
Bassozetes compressus	Least Concern		
Bassozetes levistomatus	Least Concern		
Bassozetes nielseni	Least Concern		
Bassozetes normalis	Least Concern		
Bassozetes taenia	Least Concern		
Bathophilus longipes	Least Concern		
Bathophilus metallicus	Least Concern		
Bathophilus nigerrimus	Least Concern		

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

IUCN Red List species for TCI	
Species observed during Assessment Highlighted	
Beryx splendens	Least Concern
Bodianus pulchellus	Least Concern
Bodianus pulchellus	Least Concern
Bodianus rufus	Least Concern
Bodianus rufus	Least Concern
Boehmeria cylindrica	Least Concern
Bolinichthys indicus	Least Concern
Bolinichthys photothorax	Least Concern
Bolinichthys supralateralis	Least Concern
Bolitaena pygmaea	Least Concern
Bombycilla cedrorum	Least Concern
Bonapartia pedaliota	Least Concern
Borostomias elucens	Least Concern
Borostomias mononema	Least Concern
Botaurus lentiginosus	Least Concern
Bothus lunatus	Least Concern
Bothus lunatus	Least Concern
Bothus maculiferus	Least Concern
Bothus maculiferus	Data Deficient
Bothus ocellatus	Least Concern
Bothus ocellatus	Least Concern
Bothus robinsi	Least Concern
Bothus robinsi	Least Concern
Bourreria succulenta	Least Concern
Brama brama	Data Deficient
Brama brama	Least Concern
Brama caribbea	Least Concern
Brama dussumieri	Least Concern
Brama dussumieri	Least Concern
Branta canadensis	Least Concern
Bregmaceros atlanticus	Least Concern
Brinkmannella elongata	Data Deficient
Brockius albigenys	Least Concern
Brockius nigricinctus	Least Concern
Brockius nigricinctus	Least Concern
Brotula barbata	Least Concern
Brotula barbata	Least Concern
Brotulotaenia brevicauda	Least Concern
Brotulotaenia crassa	Least Concern
Brotulotaenia nigra	Least Concern
Bryx dunckeri	Least Concern
Bryx dunckeri	Least Concern
Bryx randalli	Least Concern
Bubulcus ibis	Least Concern ✓ Observed
Bufo ceratias wedli	Least Concern
Bullisichthys caribbaeus	Least Concern
Buteo jamaicensis	Least Concern

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

IUCN Red List species for TCI			
Species observed during Assessment Highlighted			
Butorides striata	Least Concern		
Bythites gerdae	Least Concern		
Cakile lanceolata	Least Concern		
Calamopteryx goslinei	Least Concern		
Calamus bajonado	Least Concern		
Calamus bajonado	Least Concern		
Calamus calamus	Least Concern		
Calamus calamus	Least Concern		
Calamus penna	Least Concern		
Calamus penna	Least Concern		
Calamus pennatula	Least Concern		
Calamus pennatula	Least Concern		
Calidris alba	Least Concern	✓	Not observed, but proposed canal could provide new habitat
Calidris alpina	Least Concern		
Calidris canutus	Near Threatened		
Calidris fuscicollis	Least Concern	✓	Not observed, but proposed canal could provide new habitat
Calidris himantopus	Least Concern	✓	Not observed, but proposed canal could provide new habitat
Calidris mauri	Least Concern	✓	Not observed, but proposed canal could provide new habitat
Calidris melanotos	Least Concern	✓	Not observed, but proposed canal could provide new habitat
Calidris minutilla	Least Concern	✓	Not observed, but proposed canal could provide new habitat
Calidris pusilla	Near Threatened	✓	Not observed, but proposed canal could provide new habitat
Callechelys bilinearis	Least Concern		
Callionymus bairdi	Least Concern		
Calonectris borealis	Least Concern		
Canavalia rosea	Least Concern		
Cantherhines macrocerus	Least Concern		
Cantherhines pullus	Least Concern		
Canthidermis maculata	Least Concern		
Canthidermis sufflamen	Least Concern		
Canthidermis sufflamen	Least Concern		
Canthigaster rostrata	Least Concern		
Canthigaster rostrata	Least Concern		
Caranx bartholomaei	Least Concern		
Caranx bartholomaei	Least Concern		
Caranx crysos	Least Concern		
Caranx crysos	Least Concern		
Caranx crysos	Least Concern		
Caranx hippos	Data Deficient		
Caranx hippos	Least Concern		
Caranx hippos	Least Concern		

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

IUCN Red List species for TCI			
Species observed during Assessment Highlighted			
Caranx latus	Least Concern		
Caranx latus	Least Concern		
Caranx lugubris	Least Concern		
Caranx lugubris	Least Concern		
Caranx ruber	Least Concern		
Caranx ruber	Least Concern		
Carapus bermudensis	Least Concern		
Carapus bermudensis	Least Concern		
Carcharhinus acronotus	Endangered		
Carcharhinus falciformis	Vulnerable		
Carcharhinus leucas	Vulnerable		
Carcharhinus limbatus	Vulnerable		
Carcharhinus longimanus	Critically Endangered		
Carcharhinus perezii	Endangered		
Carcharhinus plumbeus	Endangered		
Carcharhinus signatus	Endangered		
Carcharodon carcharias	Vulnerable		
Cardellina canadensis	Least Concern		
Cardiospermum halicacabum	Least Concern		
Caretta caretta	Vulnerable		
Casasia clusiifolia	Least Concern	✓	Occasional; now known as Genipa clusiifolia
Catesbaea foliosa	Near Threatened		
Catesbaea parviflora	Least Concern	✓	Uncommon
Cathartes aura	Least Concern		
Catharus fuscescens	Least Concern		
Catharus guttatus	Least Concern		
Catharus minimus	Least Concern		
Caulophryne jordani	Least Concern		
Cenchrus echinatus	Least Concern		
Cenchrus tribuloides	Least Concern		
Centrobranchus nigroocellatus	Least Concern		
Centrodraco acanthopoma	Least Concern		
Centropomus undecimalis	Least Concern		
Centropyge argi	Least Concern		
Centropyge argi	Least Concern		
Cephalopholis cruentata	Least Concern		
Cephalopholis cruentata	Least Concern		
Cephalopholis fulva	Least Concern		
Cephalopholis fulva	Least Concern		
Ceratias holboelli	Least Concern		
Ceratias uranoscopus	Least Concern		
Ceratoscopelus townsendi	Least Concern		
Ceratoscopelus warmingii	Least Concern		
Cerdale floridana	Least Concern		
Cetomimus gillii	Data Deficient		
Cetorhinus maximus	Endangered		

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

IUCN Red List species for TCI			
Species observed during Assessment Highlighted			
Cetostoma regani	Data Deficient		
Chaenophryne longiceps	Least Concern		
Chaenopsis limbaughi	Least Concern		
Chaenopsis ocellata	Least Concern		
Chaenopsis ocellata	Least Concern		
Chaetodipterus faber	Least Concern		
Chaetodipterus faber	Least Concern		
Chaetodon capistratus	Least Concern		
Chaetodon capistratus	Least Concern		
Chaetodon ocellatus	Least Concern		
Chaetodon ocellatus	Least Concern		
Chaetodon sedentarius	Least Concern		
Chaetodon sedentarius	Least Concern		
Chaetodon striatus	Least Concern		
Chaetodon striatus	Least Concern		
Chaetura pelagica	Vulnerable		
Chamaecrista caribaea	Vulnerable		
Chamaecrista lineata	Least Concern		
Charadrius melodus	Near Threatened		
Charadrius nivosus	Near Threatened		
Charadrius semipalmatus	Least Concern	✓	Not observed, but proposed canal could provide new habitat
Charadrius vociferus	Least Concern	✓	Proposed canal could provide new habitat
Charadrius wilsonia	Least Concern	✓	Nesting area to be impacted
Chascanopsetta lugubris	Least Concern		
Chauliodus danae	Least Concern		
Chauliodus sloani	Least Concern		
Chauliodus sloani	Least Concern		
Chaunacops roseus	Least Concern		
Chaunax pictus	Least Concern		
Chaunax suttkusi	Least Concern		
Cheilopogon cyanopterus	Least Concern		
Cheilopogon cyanopterus	Least Concern		
Cheilopogon exsiliens	Data Deficient		
Cheilopogon exsiliens	Least Concern		
Cheilopogon exsiliens	Least Concern		
Cheilopogon furcatus	Least Concern		
Cheilopogon furcatus	Least Concern		
Cheilopogon melanurus	Least Concern		
Cheilopogon melanurus	Least Concern		
Cheilopogon nigricans	Least Concern		
Chelonia mydas	Endangered		
Chiasmodon niger	Least Concern		
Chiasmodon pluriradiatus	Least Concern		
Chilabothrus chrysogaster	Near Threatened		
Chilomycterus antennatus	Least Concern		

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

IUCN Red List species for TCI			
Species observed during Assessment Highlighted			
Chilomycterus antennatus	Least Concern		
Chilomycterus antillarum	Least Concern		
Chilomycterus antillarum	Least Concern		
Chiococca alba	Least Concern		
Chirocentrodon bleekermanus	Least Concern		
Chirocentrodon bleekermanus	Data Deficient		
Chirostomias pliopterus	Least Concern		
Chlidonias leucopterus	Least Concern		
Chlidonias niger	Least Concern		
Chlorophthalmus agassizi	Least Concern		
Chloroscombrus chrysurus	Least Concern		
Chloroscombrus chrysurus	Least Concern		
Chlorostilbon ricardii	Least Concern		
Chondestes grammacus	Least Concern		
Choranthias tenuis	Least Concern		
Choranthias tenuis	Least Concern		
Chordeiles gundlachi	Least Concern	✓	Heard, potential nesting habitat present
Chordeiles minor	Least Concern		
Chrionema squamentum	Least Concern		
Chromis cyanea	Least Concern		
Chromis cyanea	Least Concern		
Chromis enchrysur	Least Concern		
Chromis enchrysur	Least Concern		
Chromis multilineata	Least Concern		
Chromis multilineata	Least Concern		
Chrysobalanus icaco	Least Concern		
Chrysophyllum oliviforme	Least Concern		
Circus hudsonius	Least Concern		
Citharexylum spinosum	Least Concern		
Citharichthys cornutus	Least Concern		
Citharichthys cornutus	Least Concern		
Cladocora arbuscula	Least Concern		
Clepticus parrae	Least Concern		
Clepticus parrae	Least Concern		
Clusia rosea	Least Concern		
Coccoloba diversifolia	Least Concern		
Coccoloba uvifera	Least Concern	✓	Abundant
Coccorella atlantica	Least Concern		
Coccothrinax inaguensis	Near Threatened	✓	Uncommon, could be salvaged/transplanted
Coccyzus americanus	Least Concern		
Coccyzus minor	Least Concern	✓	Occasional
Coelorrinchus ventrilux	Least Concern		
Coereba flaveola	Least Concern	✓	Nesting habitat would be impacted
Colinus virginianus	Near Threatened		
Colpophyllia natans	Least Concern		

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

IUCN Red List species for TCI			
Species observed during Assessment Highlighted			
Colubrina arborescens	Least Concern		
Colubrina elliptica	Least Concern		
Columba livia	Least Concern		
Columbina passerina	Least Concern	✓	Nesting habitat would be impacted
Conger triporiceps	Least Concern		
Conger triporiceps	Least Concern		
Conocara macropterum	Least Concern		
Conocarpus erectus	Least Concern	✓	Common
Conodon nobilis	Least Concern		
Conodon nobilis	Least Concern		
Consolea nashii	Least Concern		
Contopus caribaeus	Least Concern		
Contopus virens	Least Concern		
Conus acutimarginatus	Least Concern		
Conus arangoi	Least Concern		
Conus attenuatus	Least Concern		
Conus centurio	Least Concern		
Conus daucus	Least Concern		
Conus ermineus	Least Concern		
Conus flavescens	Least Concern		
Conus granulatus	Least Concern		
Conus lenhilli	Data Deficient		
Conus mindanus	Least Concern		
Conus patae	Least Concern		
Conus regius	Least Concern		
Conus speciosissimus	Least Concern		
Conus sphacelatus	Least Concern		
Cookeolus japonicus	Least Concern		
Coralliozetes cardonae	Least Concern		
Cordia sebestena	Least Concern		
Corvula batabana	Least Concern		
Corvus nasicus	Least Concern	✓	Occasional
Coryphaena equiselis	Data Deficient		
Coryphaena hippurus	Least Concern		
Coryphaena hippurus	Least Concern		
Coryphaena hippurus	Least Concern		
Coryphaenoides rudis	Least Concern		
Coryphopterus alloides	Vulnerable		
Coryphopterus dicrus	Least Concern		
Coryphopterus dicrus	Least Concern		
Coryphopterus eidolon	Vulnerable		
Coryphopterus eidolon	Vulnerable		
Coryphopterus glaucofraenum	Least Concern		
Coryphopterus glaucofraenum	Least Concern		
Coryphopterus hyalinus	Vulnerable		
Coryphopterus hyalinus	Vulnerable		
Coryphopterus lipernes	Vulnerable		

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

IUCN Red List species for TCI			
Species observed during Assessment Highlighted			
<i>Coryphopterus lipernes</i>	Vulnerable		
<i>Coryphopterus personatus</i>	Vulnerable		
<i>Coryphopterus personatus</i>	Vulnerable		
<i>Coryphopterus thrix</i>	Vulnerable		
<i>Coryphopterus thrix</i>	Vulnerable		
<i>Coryphopterus tortugae</i>	Vulnerable		
<i>Coryphopterus tortugae</i>	Vulnerable		
<i>Coryphopterus venezuelae</i>	Vulnerable		
<i>Cosmocampus albirostris</i>	Least Concern		
<i>Cosmocampus albirostris</i>	Least Concern		
<i>Cosmocampus brachycephalus</i>	Least Concern		
<i>Cosmocampus brachycephalus</i>	Least Concern		
<i>Croton discolor</i>	Least Concern		
<i>Croton glabellus</i>	Least Concern		
<i>Crotophaga ani</i>	Least Concern	✓	Heard in vicinity, nesting habitat potentially present
<i>Cryptopsaras couesii</i>	Least Concern		
<i>Cryptotomus roseus</i>	Least Concern		
<i>Cryptotomus roseus</i>	Least Concern		
<i>Ctenogobius boleosoma</i>	Least Concern		
<i>Ctenogobius boleosoma</i>	Least Concern		
<i>Ctenogobius saepepallens</i>	Least Concern		
<i>Ctenogobius saepepallens</i>	Least Concern		
<i>Ctenogobius stigmaturus</i>	Least Concern		
<i>Cubiceps caeruleus</i>	Least Concern		
<i>Cubiceps capensis</i>	Data Deficient		
<i>Cubiceps capensis</i>	Least Concern		
<i>Cubiceps pauciradiatus</i>	Least Concern		
<i>Cyclothone acclinidens</i>	Least Concern		
<i>Cyclothone alba</i>	Least Concern		
<i>Cyclothone braueri</i>	Least Concern		
<i>Cyclothone braueri</i>	Least Concern		
<i>Cyclothone microdon</i>	Least Concern		
<i>Cyclothone microdon</i>	Least Concern		
<i>Cyclothone obscura</i>	Least Concern		
<i>Cyclothone pallida</i>	Least Concern		
<i>Cyclothone parapallida</i>	Least Concern		
<i>Cyclothone pseudopallida</i>	Least Concern		
<i>Cyclura carinata</i>	Endangered		
<i>Cyema atrum</i>	Least Concern		
<i>Cynoscion jamaicensis</i>	Least Concern		
<i>Cyperus planifolius</i>	Least Concern		
<i>Cyperus squarrosus</i>	Least Concern		
<i>Cypselurus comatus</i>	Least Concern		
<i>Cypselurus comatus</i>	Data Deficient		
<i>Cystophora cristata</i>	Vulnerable		
<i>Cyttopsis rosea</i>	Least Concern		

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

IUCN Red List species for TCI	
Species observed during Assessment Highlighted	
Dactylopterus volitans	Least Concern
Dactylopterus volitans	Least Concern
Dactylopterus volitans	Least Concern
Dactyloscopus comptus	Least Concern
Dactyloscopus crossotus	Least Concern
Dactyloscopus crossotus	Data Deficient
Dactyloscopus poeyi	Least Concern
Dactyloscopus poeyi	Least Concern
Dactyloscopus tridigitatus	Least Concern
Dactyloscopus tridigitatus	Least Concern
Dajaus monticola	Least Concern
Damburneya coriacea	Least Concern
Danaphryne nigrifilis	Least Concern
Decapterus macarellus	Least Concern
Decapterus macarellus	Least Concern
Decapterus punctatus	Least Concern
Decapterus punctatus	Least Concern
Decapterus tabl	Least Concern
Decapterus tabl	Least Concern
Decodon puellaris	Least Concern
Decodon puellaris	Least Concern
Dendrocygna arborea	Near Threatened
Dendrocygna bicolor	Least Concern
Dendrogyra cylindrus	Vulnerable
Derilissus nanus	Data Deficient
Dermatolepis inermis	Data Deficient
Dermatolepis inermis	Least Concern
Dermochelys coriacea	Vulnerable
Desmanthus virgatus	Least Concern
Desmodema polystictum	Least Concern
Diaphus adenomus	Least Concern
Diaphus brachycephalus	Least Concern
Diaphus dumerilii	Data Deficient
Diaphus effulgens	Least Concern
Diaphus fragilis	Least Concern
Diaphus garmani	Least Concern
Diaphus lucidus	Least Concern
Diaphus luetkeni	Least Concern
Diaphus metopoclampus	Least Concern
Diaphus metopoclampus	Least Concern
Diaphus minax	Least Concern
Diaphus mollis	Least Concern
Diaphus perspicillatus	Least Concern
Diaphus problematicus	Least Concern
Diaphus rafinesquii	Least Concern
Diaphus rafinesquii	Least Concern
Diaphus roei	Least Concern

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

IUCN Red List species for TCI	
Species observed during Assessment Highlighted	
Diaphus splendidus	Least Concern
Diaphus subtilis	Data Deficient
Diaphus termophilus	Least Concern
Diceratias pileatus	Least Concern
Dichocoenia stellaris	Data Deficient
Dichocoenia stokesii	Vulnerable
Dicrolene introniger	Least Concern
Dicrolene kanazawai	Least Concern
Digitaria horizontalis	Least Concern
Diodon holocanthus	Least Concern
Diodon hystrix	Least Concern
Diodon hystrix	Least Concern
Diogenichthys atlanticus	Data Deficient
Diogenichthys atlanticus	Least Concern
Diplectrum formosum	Least Concern
Diplectrum formosum	Least Concern
Diplodus argenteus	Least Concern
Diplogrammus pauciradiatus	Least Concern
Diplogrammus pauciradiatus	Least Concern
Diplophos taenia	Least Concern
Diploria clivosa	Least Concern
Diploria labyrinthiformis	Least Concern
Diploria strigosa	Least Concern
Diplospinus multistriatus	Least Concern
Diretmichthys parini	Least Concern
Diretmoides pauciradiatus	Least Concern
Diretmus argenteus	Least Concern
Distichlis spicata	Least Concern
Ditropichthys storeri	Data Deficient
Dolicholagus longirostris	Least Concern
Dolichonyx oryzivorus	Least Concern
Dolichopteroides binocularis	Least Concern
Dolichopteryx longipes	Least Concern
Dolopichthys longicornis	Least Concern
Dolopichthys pullatus	Data Deficient
Doratonotus megalepis	Least Concern
Doratonotus megalepis	Least Concern
Dormitator maculatus	Least Concern
Dormitator maculatus	Least Concern
Doryteuthis plei	Least Concern
Drepanotrema cimex	Least Concern
Dumetella carolinensis	Least Concern
Dysalotus alcocki	Least Concern
Dysalotus oligoscolus	Least Concern
Echeneis naucrates	Least Concern
Echeneis naucrates	Least Concern

✓ Observed, wintering (non-nesting habitat)

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

IUCN Red List species for TCI			
Species observed during Assessment Highlighted			
Echeneis neucratoides	Data Deficient		
Echeneis neucratoides	Data Deficient		
Echidna catenata	Least Concern		
Echidna catenata	Least Concern		
Echinochloa colona	Least Concern		
Egretta caerulea	Least Concern		
Egretta rufescens	Near Threatened	✓	Common; canal could provide new habitat
Egretta thula	Least Concern	✓	Uncommon; canal could provide new habitat
Egretta tricolor	Least Concern	✓	Uncommon; canal could provide new habitat
Elacatinus chancei	Least Concern		
Elacatinus evelynae	Least Concern		
Elacatinus evelynae	Data Deficient		
Elacatinus genie	Least Concern		
Elacatinus louisae	Least Concern		
Elagatis bipinnulata	Least Concern		
Elagatis bipinnulata	Least Concern		
Elanoides forficatus	Least Concern		
Eleocharis cellulosa	Least Concern		
Eleocharis geniculata	Least Concern		
Eleotris amblyopsis	Least Concern		
Eleotris perniger	Least Concern		
Eleutherodactylus planirostris	Least Concern		
Elops smithi	Data Deficient		
Elops smithi	Data Deficient		
Emblemaria pandionis	Least Concern		
Emblemaria pandionis	Least Concern		
Emblemariopsis bahamensis	Least Concern		
Emblemariopsis bahamensis	Least Concern		
Emblemariopsis leptocirris	Least Concern		
Emblemariopsis occidentalis	Least Concern		
Emblemariopsis signifer	Least Concern		
Emmelichthyops atlanticus	Least Concern		
Emmelichthyops atlanticus	Least Concern		
Empidonax virescens	Least Concern		
Enchelycore carychroa	Least Concern		
Enchelycore carychroa	Least Concern		
Enchelycore nigricans	Least Concern		
Enchelycore nigricans	Least Concern		
Encyclia caicensis	Endangered		
Engyophrys senta	Least Concern		
Enneanectes atrorus	Least Concern		
Enoplometopus antillensis	Least Concern		
Epigonus denticulatus	Least Concern		
Epigonus denticulatus	Least Concern		

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

IUCN Red List species for TCI			
Species observed during Assessment Highlighted			
Epigonus macrops	Least Concern		
Epigonus occidentalis	Least Concern		
Epigonus pandionis	Least Concern		
Epinephelus adscensionis	Least Concern		
Epinephelus adscensionis	Least Concern		
Epinephelus guttatus	Least Concern		
Epinephelus guttatus	Least Concern		
Epinephelus itajara	Endangered		
Epinephelus itajara	Vulnerable		
Epinephelus morio	Vulnerable		
Epinephelus morio	Near Threatened		
Epinephelus striatus	Critically Endangered		
Epinephelus striatus	Critically Endangered		
Epinnula magistralis	Least Concern		
Equetus lanceolatus	Least Concern		
Equetus lanceolatus	Least Concern		
Equetus punctatus	Least Concern		
Equetus punctatus	Least Concern		
Erithalis fruticosa	Least Concern	✓	Abundant
Ernodea littoralis	Least Concern	✓	Uncommon
Ernodea millsbaughii	Near Threatened		
Erotelis smaragdus	Least Concern		
Erotelis smaragdus	Least Concern		
Erythroxyllum havanense	Least Concern		
Etelis oculatus	Data Deficient		
Etmopterus gracilispinis	Least Concern		
Etropus crossotus	Least Concern		
Euaxoctopus pillsburyae	Data Deficient		
Eucinostomus argenteus	Least Concern		
Eucinostomus argenteus	Least Concern		
Eucinostomus gula	Least Concern		
Eucinostomus gula	Least Concern		
Eucinostomus harengulus	Least Concern		
Eucinostomus harengulus	Least Concern		
Eucinostomus havana	Least Concern		
Eucinostomus havana	Least Concern		
Eucinostomus jonesii	Least Concern		
Eucinostomus jonesii	Least Concern		
Eucinostomus lefroyi	Least Concern		
Eucinostomus lefroyi	Least Concern		
Eucinostomus melanopterus	Least Concern		
Eucinostomus melanopterus	Least Concern		
Eudocimus albus	Least Concern		
Eugenia axillaris	Least Concern		
Eugenia foetida	Least Concern		
Eugenia rhombea	Least Concern		
Euleptorhamphus velox	Least Concern		

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

IUCN Red List species for TCI			
Species observed during Assessment Highlighted			
<i>Euleptorhamphus velox</i>	Least Concern		
<i>Eumecichthys fiski</i>	Least Concern		
<i>Eumegistus brevorti</i>	Least Concern		
<i>Eupera cubensis</i>	Least Concern		
<i>Euphagus cyanocephalus</i>	Least Concern		
<i>Euphorbia blodgettii</i>	Least Concern		
<i>Euphorbia gymnonota</i>	Near Threatened	✓	Occasional; could be salvaged/transplanted
<i>Euphorbia heterophylla</i>	Least Concern		
<i>Euphorbia mesembryanthemifol</i>	Least Concern		
<i>Euphorbia tithymaloides</i>	Least Concern	✓	Uncommon; could be salvaged/transplanted
<i>Euploca procumbens</i>	Least Concern		
<i>Eurypharynx pelecyanoides</i>	Least Concern		
<i>Eusmilia fastigiata</i>	Least Concern		
<i>Eustomias achirus</i>	Least Concern		
<i>Eustomias acinosus</i>	Data Deficient		
<i>Eustomias arborifer</i>	Least Concern		
<i>Eustomias bibulbosus</i>	Least Concern		
<i>Eustomias bigelowi</i>	Least Concern		
<i>Eustomias bimargaritatus</i>	Least Concern		
<i>Eustomias binghami</i>	Least Concern		
<i>Eustomias bituberatus</i>	Least Concern		
<i>Eustomias braueri</i>	Data Deficient		
<i>Eustomias brevibarbus</i>	Least Concern		
<i>Eustomias contiguus</i>	Data Deficient		
<i>Eustomias dendriticus</i>	Least Concern		
<i>Eustomias dubius</i>	Least Concern		
<i>Eustomias filifer</i>	Least Concern		
<i>Eustomias furcifer</i>	Least Concern		
<i>Eustomias hulleyi</i>	Least Concern		
<i>Eustomias lipochirus</i>	Least Concern		
<i>Eustomias longibarba</i>	Least Concern		
<i>Eustomias macronema</i>	Least Concern		
<i>Eustomias macrophthalmus</i>	Least Concern		
<i>Eustomias macrurus</i>	Least Concern		
<i>Eustomias micraster</i>	Least Concern		
<i>Eustomias monoclonus</i>	Least Concern		
<i>Eustomias paucifilis</i>	Least Concern		
<i>Eustomias polyaster</i>	Data Deficient		
<i>Eustomias satterleei</i>	Least Concern		
<i>Eustomias schmidtii</i>	Least Concern		
<i>Eustomias simplex</i>	Least Concern		
<i>Eustomias tenisoni</i>	Data Deficient		
<i>Eustomias variabilis</i>	Least Concern		
<i>Eutaeniophorus festivus</i>	Least Concern		
<i>Euthynnus alletteratus</i>	Least Concern		

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

IUCN Red List species for TCI	
Species observed during Assessment Highlighted	
Euthynnus alletteratus	Least Concern
Euthynnus alletteratus	Least Concern
Evermannella indica	Least Concern
Evermannichthys metzelaari	Least Concern
Evolvulus bracei	Least Concern
Exocoetus obtusirostris	Data Deficient
Exocoetus obtusirostris	Least Concern
Exocoetus obtusirostris	Least Concern
Exocoetus volitans	Data Deficient
Exocoetus volitans	Least Concern
Exocoetus volitans	Least Concern
Exostema caribaeum	Least Concern
Falco columbarius	Least Concern
Falco peregrinus	Least Concern
Falco sparverius	Least Concern
✓	Observed, nesting habitat would be impacted
Favia fragum	Least Concern
Ficus aurea	Least Concern
Ficus citrifolia	Least Concern
Fimbristylis cymosa	Least Concern
Fimbristylis inaguensis	Least Concern
Fistularia petimba	Least Concern
Fistularia petimba	Least Concern
Fistularia tabacaria	Least Concern
Fistularia tabacaria	Least Concern
Flagellostomias boureei	Least Concern
Foetorepus agassizii	Least Concern
Foetorepus agassizii	Least Concern
Forestiera segregata	Least Concern
Fowlerichthys ocellatus	Least Concern
Fregata magnificens	Least Concern
Fulica americana	Least Concern
Furcraea hexapetala	Least Concern
Gadella imberbis	Least Concern
Gadomus arcuatus	Least Concern
Gadomus longifilis	Least Concern
Galba cubensis	Least Concern
Galeus antillensis	Least Concern
Gallinago delicata	Least Concern
Gallinula galeata	Least Concern
Gelochelidon nilotica	Least Concern
Gempylus serpens	Least Concern
Gempylus serpens	Least Concern
Geocapromys ingrahami	Vulnerable
Geothlypis formosa	Least Concern
Geothlypis philadelphia	Least Concern
Geothlypis trichas	Least Concern

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

IUCN Red List species for TCI			
Species observed during Assessment Highlighted			
<i>Geotrygon chrysis</i>	Least Concern		
<i>Gephyroberyx darwinii</i>	Least Concern		
<i>Gerres cinereus</i>	Least Concern		
<i>Gerres cinereus</i>	Least Concern		
<i>Gibberichthys pumilus</i>	Least Concern		
<i>Gigantactis vanhoeffeni</i>	Data Deficient		
<i>Gigantura chuni</i>	Least Concern		
<i>Gigantura indica</i>	Least Concern		
<i>Gillellus greyae</i>	Least Concern		
<i>Gillellus greyae</i>	Least Concern		
<i>Gillellus uranidea</i>	Least Concern		
<i>Gillellus uranidea</i>	Least Concern		
<i>Ginglymostoma cirratum</i>	Vulnerable		
<i>Globicephala macrorhynchus</i>	Least Concern		
<i>Gnatholepis thompsoni</i>	Least Concern		
<i>Gobiesox lucayanus</i>	Least Concern		
<i>Gobiesox punctulatus</i>	Least Concern		
<i>Gobioclinus bucciferus</i>	Least Concern		
<i>Gobioclinus bucciferus</i>	Least Concern		
<i>Gobioclinus filamentosus</i>	Least Concern		
<i>Gobioclinus filamentosus</i>	Data Deficient		
<i>Gobioclinus gobio</i>	Least Concern		
<i>Gobioclinus gobio</i>	Least Concern		
<i>Gobioclinus guppyi</i>	Least Concern		
<i>Gobioclinus guppyi</i>	Least Concern		
<i>Gobioclinus haitiensis</i>	Least Concern		
<i>Gobioclinus haitiensis</i>	Least Concern		
<i>Gobioclinus kalisherae</i>	Least Concern		
<i>Gobioclinus kalisherae</i>	Least Concern		
<i>Gonichthys cocco</i>	Least Concern		
<i>Gonichthys coccoi</i>	Least Concern		
<i>Gonioplectrus hispanus</i>	Least Concern		
<i>Gonioplectrus hispanus</i>	Least Concern		
<i>Gonostoma atlanticum</i>	Least Concern		
<i>Gonostoma denudatum</i>	Least Concern		
<i>Gonostoma elongatum</i>	Least Concern		
<i>Gramma loreto</i>	Least Concern		
<i>Gramma loreto</i>	Least Concern		
<i>Gramma melacara</i>	Least Concern		
<i>Grammatostomias circularis</i>	Least Concern		
<i>Grammatostomias flagellibarba</i>	Least Concern		
<i>Grammicolepis brachiusculus</i>	Least Concern		
<i>Grammonus claudaei</i>	Least Concern		
<i>Grammonus claudaei</i>	Least Concern		
<i>Grampus griseus</i>	Least Concern		
<i>Guaiacum officinale</i>	Endangered	✓	Uncommon; could be salvaged/transplanted

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

IUCN Red List species for TCI Species observed during Assessment Highlighted

Guapira discolor	Least Concern	✓	Uncommon; could be salvaged/transplanted
Guapira obtusata	Least Concern		
Guettarda elliptica	Least Concern	✓	Uncommon; could be salvaged/transplanted
Guettarda krugii	Least Concern		
Guettarda scabra	Least Concern		
Guilandina bonduc	Least Concern		
Gyminda latifolia	Least Concern		
Gymnachirus nudus	Least Concern		
Gymnachirus nudus	Data Deficient		
Gymnanthes lucida	Least Concern		
Gymnothorax conspersus	Least Concern		
Gymnothorax miliaris	Least Concern		
Gymnothorax miliaris	Least Concern		
Gymnothorax moringa	Least Concern		
Gymnothorax moringa	Least Concern		
Gymnothorax vicinus	Least Concern		
Gymnothorax vicinus	Least Concern		
Gyrinomimus myersi	Data Deficient		
Haematopus palliatus	Least Concern	✓	Canal may increase available habitat
Haemulon album	Data Deficient		
Haemulon aurolineatum	Least Concern		
Haemulon aurolineatum	Least Concern		
Haemulon bonariense	Least Concern		
Haemulon carbonarium	Least Concern		
Haemulon carbonarium	Least Concern		
Haemulon chrysargyreum	Least Concern		
Haemulon chrysargyreum	Least Concern		
Haemulon flavolineatum	Least Concern		
Haemulon macrostomum	Least Concern		
Haemulon macrostomum	Least Concern		
Haemulon melanurum	Least Concern		
Haemulon melanurum	Least Concern		
Haemulon parra	Least Concern		
Haemulon parra	Least Concern		
Haemulon plumierii	Least Concern		
Haemulon sciurus	Least Concern		
Haemulon striatum	Least Concern		
Haemulon striatum	Least Concern		
Haemulon vittatum	Least Concern		
Haemulon vittatum	Least Concern		
Haemulopsis corvinaeformis	Least Concern		
Halichoeres bathyphilus	Least Concern		
Halichoeres bathyphilus	Least Concern		
Halichoeres bivittatus	Least Concern		
Halichoeres bivittatus	Least Concern		

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

IUCN Red List species for TCI	
Species observed during Assessment Highlighted	
Hylocereus undatus	Data Deficient
Hylocichla mustelina	Least Concern
Hymenocephalus aterrimus	Least Concern
Hymenocephalus italicus	Least Concern
Hymenocephalus italicus	Least Concern
Hypanus americanus	Near Threatened
Hypanus guttatus	Near Threatened
Hypelate trifoliata	Least Concern
Hypoleurochilus pseudoaequipinn	Least Concern
Hypoleurochilus springeri	Least Concern
Hypoleurochilus springeri	Least Concern
Hypoatherina harringtonensis	Least Concern
Hypoatherina harringtonensis	Least Concern
Hypoplectrus aberrans	Least Concern
Hypoplectrus aberrans	Least Concern
Hypoplectrus chlorurus	Least Concern
Hypoplectrus chlorurus	Least Concern
Hypoplectrus gummigutta	Least Concern
Hypoplectrus gummigutta	Least Concern
Hypoplectrus guttavarius	Least Concern
Hypoplectrus guttavarius	Least Concern
Hypoplectrus indigo	Least Concern
Hypoplectrus indigo	Least Concern
Hypoplectrus nigricans	Least Concern
Hypoplectrus nigricans	Least Concern
Hypoplectrus providencianus	Least Concern
Hypoplectrus puella	Least Concern
Hypoplectrus puella	Least Concern
Hypoplectrus randallorum	Least Concern
Hypoplectrus randallorum	Least Concern
Hypoplectrus unicolor	Least Concern
Hypoplectrus unicolor	Least Concern
Hyporhamphus unifasciatus	Least Concern
Hyporhamphus unifasciatus	Least Concern
Hyporthodus flavolimbatus	Vulnerable
Hyporthodus flavolimbatus	Least Concern
Hyporthodus mystacinus	Least Concern
Hyporthodus mystacinus	Least Concern
Hyporthodus nigrinus	Near Threatened
Ichthyapus ophioneus	Least Concern
Ichthyapus ophioneus	Least Concern
Ichthyococcus ovatus	Least Concern
Ichthyococcus ovatus	Least Concern
Icterus galbula	Least Concern ✓ Migrant
Icterus spurius	Least Concern
Idiacanthus fasciola	Least Concern
Ilyophis brunneus	Least Concern

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

IUCN Red List species for TCI			
Species observed during Assessment Highlighted			
Indotyphlops braminus	Least Concern		
Ipnots murrayi	Least Concern		
Ipomoea triloba	Least Concern		
Isophyllastrea rigida	Least Concern		
Isophyllia sinuosa	Least Concern		
Isostichopus badionotus	Least Concern		
Istiophorus platypterus	Least Concern		
Istiophorus platypterus	Least Concern		
Isurus oxyrinchus	Endangered		
Isurus paucus	Endangered		
Ixobrychus exilis	Least Concern		
Jacquinia keyensis	Least Concern	✓	Common; notable specimens could be salvaged/transplanted
Japetella diaphana	Least Concern		
Jatropha gossypifolia	Least Concern		
Jenkinsia lamprotaenia	Least Concern		
Jenkinsia lamprotaenia	Least Concern		
Jenkinsia majua	Least Concern		
Jenkinsia majua	Least Concern		
Junco hyemalis	Least Concern		
Justitia longimanus	Data Deficient		
Kajikia albida	Vulnerable		
Kajikia albida	Data Deficient		
Kajikia albida	Vulnerable		
Kali colubrina	Least Concern		
Kali indica	Least Concern		
Kali kerberti	Least Concern		
Kali macrura	Least Concern		
Kali parri	Least Concern		
Kathetostoma cubana	Least Concern		
Katsuwonus pelamis	Least Concern		
Katsuwonus pelamis	Least Concern		
Katsuwonus pelamis	Least Concern		
Kaupichthys hyoproroides	Least Concern		
Kaupichthys hyoproroides	Data Deficient		
Kaupichthys nuchalis	Least Concern		
Kaupichthys nuchalis	Least Concern		
Kogia breviceps	Least Concern		
Kogia sima	Least Concern		
Kryptolebias marmoratus	Least Concern		
Kyphosus sectatrix	Data Deficient		
Kyphosus sectatrix	Least Concern		
Kyphosus sectatrix	Least Concern		
Labrisomus nuchipinnis	Least Concern		
Labrisomus nuchipinnis	Least Concern		
Lachnolaimus maximus	Vulnerable		
Lachnolaimus maximus	Vulnerable		

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

IUCN Red List species for TCI			
Species observed during Assessment Highlighted			
Lactophrys bicaudalis	Least Concern		
Lactophrys trigonus	Least Concern		
Lactophrys trigonus	Least Concern		
Lactophrys triqueter	Least Concern		
Lagenodelphis hosei	Least Concern		
Lagocephalus laevigatus	Least Concern		
Lagocephalus laevigatus	Least Concern		
Lagocephalus lagocephalus	Least Concern		
Lagocephalus lagocephalus	Least Concern		
Lagocephalus lagocephalus	Data Deficient		
Laguncularia racemosa	Least Concern	✓	Uncommon
Lampadena anomala	Data Deficient		
Lampadena atlantica	Least Concern		
Lampadena chavesi	Least Concern		
Lampadena luminosa	Least Concern		
Lampanyctus alatus	Least Concern		
Lampanyctus festivus	Least Concern		
Lampanyctus nobilis	Least Concern		
Lampanyctus photnotus	Least Concern		
Lampanyctus pusillus	Least Concern		
Lampanyctus pusillus	Least Concern		
Lampanyctus tenuiformis	Least Concern		
Lampanyctus vadulus	Least Concern		
Lampris guttatus	Data Deficient		
Lampris guttatus	Least Concern		
Lampris guttatus	Least Concern		
Lamprogrammus niger	Least Concern		
Lanius ludovicianus	Near Threatened		
Lantana involucrata	Least Concern	✓	Common
Larimus breviceps	Least Concern		
Larus atricilla	Least Concern	✓	Common in vicinity, unlikely to nest on the property
Larus delawarensis	Least Concern		
Larus philadelphia	Least Concern		
Larus ridibundus	Least Concern		
Larus smithsonianus	Least Concern		
Lasiognathus saccostoma	Least Concern		
Lawsonia inermis	Least Concern		
Leiocephalus psammodromus	Vulnerable		
Leiothlypis celata	Least Concern		
Leiothlypis peregrina	Least Concern		
Leiothlypis ruficapilla	Least Concern		
Lepidium filicaule	Endangered	?	Species not encountered, but investigation not conducted during optimal time. May be present.
Lepidocybium flavobrunneum	Least Concern		
Lepidophanes gausi	Least Concern		

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

IUCN Red List species for TCI			
Species observed during Assessment Highlighted			
Lepidophanes guentheri	Least Concern		
Lepidopus altifrons	Least Concern		
Lepophidium kallion	Least Concern		
Lepophidium wileyi	Least Concern		
Leptoderma macrops	Least Concern		
Leptoseris caillieti	Least Concern		
Leptostomias bilobatus	Least Concern		
Leptostomias gladiator	Least Concern		
Leptostomias haplocaulus	Least Concern		
Leptostomias leptobolus	Least Concern		
Lestidiops affinis	Least Concern		
Lestidiops jayakari	Least Concern		
Lestidiops jayakari	Least Concern		
Lestidiops mirabilis	Least Concern		
Lestidium atlanticum	Least Concern		
Lestrolepis intermedia	Least Concern		
Leuconotopicus villosus	Least Concern		
Leurochilus acon	Least Concern		
Limnodromus griseus	Least Concern		
Limonium bahamense	Endangered	✓	Occasional; could potentially be salvaged/transplanted
Limosa fedoa	Least Concern		
Limosa haemastica	Least Concern		
Linophryne coronata	Least Concern		
Linophryne densiramus	Least Concern		
Liopropoma carmabi	Least Concern		
Liopropoma carmabi	Least Concern		
Liopropoma mowbrayi	Least Concern		
Liopropoma mowbrayi	Least Concern		
Liopropoma rubre	Least Concern		
Liopropoma rubre	Least Concern		
Lipogramma anabantoides	Least Concern		
Lipogramma anabantoides	Data Deficient		
Lipogramma rosea	Least Concern		
Lipogramma trilineata	Least Concern		
Lipogramma trilineata	Data Deficient		
Littoraria angulifera	Least Concern		
Lobianchia gemellarii	Data Deficient		
Lobianchia gemellarii	Least Concern		
Lobotes surinamensis	Least Concern		
Lobotes surinamensis	Least Concern		
Lobotes surinamensis	Least Concern		
Lophiodes beroe	Least Concern		
Lophiodes monodi	Least Concern		
Lophius gastrophysus	Least Concern		
Lophius gastrophysus	Least Concern		
Lophodolus acanthognathus	Least Concern		

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

IUCN Red List species for TCI			
Species observed during Assessment Highlighted			
Malacotenus triangulatus	Least Concern		
Malacotenus versicolor	Least Concern		
Malacotenus versicolor	Least Concern		
Malthopsis gnoma	Least Concern		
Mammillaria nivosa	Least Concern		
Manducus maderensis	Data Deficient		
Manicina areolata	Least Concern		
Manilkara jaimiqui	Least Concern		
Mareca americana	Least Concern		
Mareca strepera	Least Concern		
Margarops fuscatus	Least Concern		
Margrethia obtusirostra	Data Deficient		
Masturus lanceolatus	Least Concern		
Maurolicus muelleri	Least Concern		
Meandrina danae	Least Concern		
Meandrina meandrites	Least Concern		
Megaceryle alcyon	Least Concern		
Megalops atlanticus	Data Deficient		
Megalops atlanticus	Vulnerable		
Megaptera novaeangliae	Least Concern		
Melamphaes ebelingi	Data Deficient		
Melamphaes inconspicuus	Data Deficient		
Melamphaes longivelis	Data Deficient		
Melamphaes microps	Least Concern		
Melamphaes polylepis	Data Deficient		
Melamphaes pumilus	Data Deficient		
Melamphaes typhlops	Data Deficient		
Melampus coffeus	Least Concern		
Melanolagus bericoides	Least Concern		
Melanorhinus microps	Least Concern		
Melanorhinus microps	Least Concern		
Melanospiza bicolor	Least Concern		
Melanostomias macrophotus	Least Concern		
Melanostomias margaritifera	Least Concern		
Melanostomias melanopogon	Least Concern		
Melanostomias melanops	Least Concern		
Melanostomias spilorrhynchus	Least Concern		
Melanostomias valdiviae	Least Concern		
Melichthys niger	Least Concern		
Melichthys niger	Least Concern		
Melocactus intortus	Least Concern	✓	Occasional; could be salvaged/transplanted
Melospiza georgiana	Least Concern		
Melospiza lincolni	Least Concern		
Melospiza melodia	Least Concern		
Mentodus longirostris	Least Concern		
Mergus serrator	Least Concern		

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

IUCN Red List species for TCI			
Species observed during Assessment Highlighted			
Mesoplodon densirostris	Least Concern		
Mesoplodon europaeus	Least Concern		
Mesothuria lactea	Least Concern		
Mesothuria verrilli	Data Deficient		
Metopium toxiferum	Least Concern	✓	Occasional
Micrognathus crinitus	Least Concern		
Micrognathus crinitus	Least Concern		
Microligea palustris	Least Concern		
Microphis brachyurus	Least Concern		
Microspathodon chrysurus	Least Concern		
Microspathodon chrysurus	Least Concern		
Microstoma microstoma	Least Concern		
Mimus gundlachii	Least Concern	✓	Common; nesting habitat would be impacted
Mimus polyglottos	Least Concern	✓	Uncommon; potential nesting habitat would be impacted
Mniotilta varia	Least Concern		
Mobula birostris	Endangered		
Mobula hypostoma	Endangered		
Mobula mobular	Endangered		
Mobula tarapacana	Endangered		
Mobula thurstoni	Endangered		
Mola mola	Data Deficient		
Mola mola	Vulnerable		
Molothrus ater	Least Concern		
Molpadiodemas porphyryus	Least Concern		
Monacanthus ciliatus	Least Concern		
Monacanthus tuckeri	Least Concern		
Monomitopus agassizii	Least Concern		
Monopenchelys acuta	Data Deficient		
Monopenchelys acuta	Least Concern		
Montastraea annularis	Endangered		
Montastraea cavernosa	Least Concern		
Montastraea faveolata	Endangered		
Montastraea franksi	Vulnerable		
Moringua edwardsi	Least Concern		
Moringua edwardsi	Least Concern		
Morus bassanus	Least Concern		
Mugil cephalus	Least Concern		
Mugil curema	Least Concern		
Mugil curema	Least Concern		
Mugil liza	Data Deficient		
Mugil liza	Data Deficient		
Mugil trichodon	Data Deficient		
Mugil trichodon	Least Concern		
Mulloidichthys martinicus	Least Concern		
Mulloidichthys martinicus	Least Concern		

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

IUCN Red List species for TCI			
Species observed during Assessment Highlighted			
Nealotus tripes	Least Concern		
Negaprion brevirostris	Vulnerable		
Nemichthys curvirostris	Least Concern		
Nemichthys scolopaceus	Least Concern		
Nemichthys scolopaceus	Least Concern		
Neobathyclupea argentea	Least Concern		
Neobythites elongatus	Least Concern		
Neobythites marginatus	Least Concern		
Neobythites marginatus	Least Concern		
Neobythites unicolor	Least Concern		
Neoceratias spinifer	Least Concern		
Neopinnula americana	Least Concern		
Neonesthes capensis	Least Concern		
Neoniphon marianus	Least Concern		
Neoniphon marianus	Least Concern		
Neoscopelus macrolepidotus	Least Concern		
Neoscopelus microchir	Least Concern		
Nephila clavipes	Least Concern		
Nephrolepis exaltata	Least Concern		
Nephropsis aculeata	Least Concern		
Nephropsis agassizii	Least Concern		
Nephropsis neglecta	Least Concern		
Nephropsis rosea	Least Concern		
Nes longus	Least Concern		
Nes longus	Least Concern		
Nesiarchus nasutus	Least Concern		
Nesophlox evelynae	Least Concern		
Nettastoma melanurum	Least Concern		
Nettenchelys pygmaea	Least Concern		
Nettenchelys pygmaea	Least Concern		
Nezumia aequalis	Least Concern		
Nezumia aequalis	Least Concern		
Nezumia cyrano	Least Concern		
Nezumia suilla	Least Concern		
Nomeus gronovii	Least Concern		
Nomeus gronovii	Least Concern		
Nomonyx dominicus	Least Concern		
Notolychnus valdiviae	Least Concern		
Notoscopelus caudispinosus	Least Concern		
Notoscopelus resplendens	Least Concern		
Numenius phaeopus	Least Concern		
Nyctanassa violacea	Least Concern	✓	Occasional, canal could potentially provide additional habitat
Nycticorax nycticorax	Least Concern		
Oceanites oceanicus	Least Concern		
Oculina diffusa	Least Concern		
Oculina varicosa	Vulnerable		

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

IUCN Red List species for TCI	
Species observed during Assessment Highlighted	
Ocyurus chrysurus	Data Deficient
Odontoscion dentex	Least Concern
Odontoscion dentex	Least Concern
Odontostomops normalops	Least Concern
Ogcocephalus corniger	Least Concern
Ogcocephalus nasutus	Least Concern
Ogcocephalus parvus	Least Concern
Ogcocephalus pumilus	Least Concern
Ogilbichthys longimanus	Least Concern
Omosudis lowii	Least Concern
Onychoprion anaethetus	Least Concern
Onychoprion fuscatus	Least Concern
Ophidion nocomis	Least Concern
Ophioblennius macclurei	Least Concern
Ophioblennius macclurei	Least Concern
Opisthonema oglinum	Least Concern
Opisthonema oglinum	Least Concern
Opisthoproctus grimaldii	Least Concern
Opisthoproctus soleatus	Least Concern
Opistognathus aurifrons	Least Concern
Opistognathus aurifrons	Least Concern
Opistognathus gilberti	Least Concern
Opistognathus macrognathus	Least Concern
Opistognathus macrognathus	Least Concern
Opistognathus maxillosus	Least Concern
Opistognathus maxillosus	Least Concern
Opistognathus whitehursti	Least Concern
Opistognathus whitehursti	Least Concern
Oporornis agilis	Least Concern
Orcinus orca	Data Deficient
Osteopilus septentrionalis	Least Concern
Ostichthys trachypoma	Least Concern
Ostichthys trachypoma	Least Concern
Otophidium dormitator	Least Concern
Otophidium dormitator	Least Concern
Oxyporhamphus similis	Least Concern
Oxyporhamphus similis	Least Concern
Oxyura jamaicensis	Least Concern
Pachystomias microdon	Least Concern
Palinurellus gundlachi	Least Concern
Pandion haliaetus	Least Concern
Panicum trichoides	Least Concern
Panulirus argus	Data Deficient
Panulirus laevicauda	Data Deficient
Parabathymyrus oregoni	Least Concern
Parablennius marmoreus	Least Concern
Parablennius marmoreus	Least Concern

✓ Occasional

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

IUCN Red List species for TCI			
Species observed during Assessment Highlighted			
Paraclinus cingulatus	Least Concern		
Paraclinus fasciatus	Least Concern		
Paraclinus fasciatus	Least Concern		
Paraclinus nigripinnis	Least Concern		
Paraclinus nigripinnis	Least Concern		
Paraconger caudilimbatus	Least Concern		
Paraconger caudilimbatus	Least Concern		
Paralepis brevirostris	Least Concern		
Paralepis coregonoides	Least Concern		
Paranthias furcifer	Least Concern		
Parasudis truculenta	Least Concern		
Parasudis truculenta	Least Concern		
Parazen pacificus	Least Concern		
Pareques acuminatus	Least Concern		
Pareques acuminatus	Least Concern		
Parexocoetus hillianus	Least Concern		
Parexocoetus hillianus	Least Concern		
Parkesia motacilla	Least Concern		
Parkesia noveboracensis	Least Concern		
Parkinsonia aculeata	Least Concern		
Paroncheilus affinis	Least Concern		
Paroncheilus affinis	Least Concern		
Parophidion schmidtii	Least Concern		
Parophidion schmidtii	Least Concern		
Parribacus antarcticus	Least Concern		
Paspalidium geminatum	Least Concern		
Paspalum distichum	Least Concern		
Paspalum fimbriatum	Least Concern		
Paspalum paniculatum	Least Concern		
Paspalum setaceum	Least Concern		
Passer domesticus	Least Concern		
Passerina caerulea	Least Concern		
Passerina cyanea	Least Concern		
Passiflora pallida	Least Concern		
Passiflora pectinata	Least Concern	✓	Common; recommended for use in re-vegetation of canal sideslopes
Pavonia bahamensis	Near Threatened		
Pelecanus erythrorhynchos	Least Concern		
Pelecanus occidentalis	Least Concern		
Pempheris poeyi	Least Concern		
Pempheris poeyi	Least Concern		
Pempheris schomburgkii	Least Concern		
Pempheris schomburgkii	Least Concern		
Penetopteryx nanus	Least Concern		
Penopus microphthalmus	Least Concern		
Pentacheles validus	Least Concern		
Pentherichthys atratus	Least Concern		

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

IUCN Red List species for TCI	
Species observed during Assessment Highlighted	
Peponocephala electra	Least Concern
Peristedion brevirostre	Least Concern
Peristedion ecuadorensis	Least Concern
Peristedion greyae	Least Concern
Peristedion longispatha	Least Concern
Peristedion truncatum	Least Concern
Petrochelidon pyrrhonota	Least Concern
Petrotyx sanguineus	Least Concern
Petrotyx sanguineus	Least Concern
Phaeoptyx conklini	Least Concern
Phaeoptyx conklini	Least Concern
Phaeoptyx pigmentaria	Least Concern
Phaeoptyx pigmentaria	Least Concern
Phaeoptyx xenus	Least Concern
Phaeoptyx xenus	Least Concern
Phaethon aethereus	Least Concern
Phaethon lepturus	Least Concern ✓ Unlikely to affect
Phalaropus fulicarius	Least Concern
Phalaropus lobatus	Least Concern
Pheucticus ludovicianus	Least Concern
Phoenicopiterus ruber	Least Concern
Phonipara canora	Least Concern
Photocorynus spiniceps	Least Concern
Photonectes achirus	Least Concern
Photonectes caeruleus	Least Concern
Photonectes dinema	Least Concern
Photonectes leucospilus	Least Concern
Photonectes parvimanus	Least Concern
Photonectes phyllopopon	Least Concern
Photostomias goodyeari	Least Concern
Photostylus pycnopterus	Least Concern
Phragmites australis	Least Concern
Phtheichthys lineatus	Least Concern
Phtheichthys lineatus	Least Concern
Phylla nodiflora	Least Concern
Physalis cordata	Least Concern
Physeter macrocephalus	Vulnerable
Physiculus fulvus	Least Concern
Physiculus fulvus	Least Concern
Picramnia pentandra	Least Concern
Pinus caribaea	Least Concern
Piranga ludoviciana	Least Concern
Piranga olivacea	Least Concern
Piranga rubra	Least Concern
Pithecellobium unguis-cati	Least Concern
Platalea ajaja	Least Concern
Platybelone argalus	Least Concern

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

IUCN Red List species for TCI			
Species observed during Assessment Highlighted			
Platybelone argalus	Least Concern		
Platygilcellus rubrocinctus	Least Concern		
Platygilcellus rubrocinctus	Least Concern		
Plectranthias garrupellus	Least Concern		
Plectranthias garrupellus	Least Concern		
Plectrophenax nivalis	Least Concern		
Plectrypops retrospinis	Least Concern		
Plectrypops retrospinis	Least Concern		
Plegadis falcinellus	Least Concern		
Plumeria obtusa	Least Concern	✓	Occasional; could be salvaged/transplanted
Pluvialis dominica	Least Concern		
Pluvialis squatarola	Least Concern	✓	Uncommon; canal could provide additional habitat
Podilymbus podiceps	Least Concern		
Poecilopsetta beanii	Least Concern		
Poecilopsetta inermis	Least Concern		
Polioptila caerulea	Least Concern		
Pollichthys maui	Least Concern		
Polyacanthonotus merretti	Least Concern		
Polycheles perarmatus	Least Concern		
Polyipnus asteroides	Least Concern		
Polyipnus laternatus	Least Concern		
Polymetme thaeocoryla	Least Concern		
Polymixia lowei	Least Concern		
Polymixia nobilis	Least Concern		
Pomacanthus arcuatus	Least Concern		
Pomacanthus arcuatus	Least Concern		
Pomacanthus paru	Least Concern		
Pomacanthus paru	Least Concern		
Pontinus castor	Least Concern		
Pontinus castor	Least Concern		
Poecetes gramineus	Least Concern		
Porites astreoides	Least Concern		
Porites divaricata	Least Concern		
Porites furcata	Least Concern		
Porites porites	Least Concern		
Poromitra capito	Data Deficient		
Poromitra crassiceps	Least Concern		
Poromitra megalops	Data Deficient		
Porphyrio martinicus	Least Concern		
Porzana carolina	Least Concern		
Priacanthus arenatus	Data Deficient		
Priacanthus arenatus	Least Concern		
Priolepis hipoliti	Least Concern		
Priolepis hipoliti	Least Concern		
Prionace glauca	Near Threatened		

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

IUCN Red List species for TCI			
Species observed during Assessment Highlighted			
Pristipomoides aquilonaris	Least Concern		
Pristipomoides aquilonaris	Least Concern		
Pristipomoides macrophthalmus	Least Concern		
Pristipomoides macrophthalmus	Least Concern		
Pristis pectinata	Critically Endangered		
Prognathodes aculeatus	Least Concern		
Prognathodes aculeatus	Least Concern		
Prognathodes guyanensis	Least Concern		
Prognathodes guyanensis	Least Concern		
Progne dominicensis	Least Concern		
Progne subis	Least Concern		
Prognichthys glaphyrea	Least Concern		
Prognichthys occidentalis	Least Concern		
Prognichthys occidentalis	Least Concern		
Promethichthys prometheus	Least Concern		
Pronotogrammus martinicensis	Least Concern		
Pronotogrammus martinicensis	Least Concern		
Protonotaria citrea	Least Concern		
Psenes cyanophrys	Least Concern		
Psenes cyanophrys	Least Concern		
Psenes maculatus	Least Concern		
Psenes pellucidus	Least Concern		
Psenes pellucidus	Least Concern		
Pseudogramma gregoryi	Least Concern		
Pseudogramma gregoryi	Least Concern		
Pseudophoenix sargentii	Vulnerable		
Pseudorca crassidens	Near Threatened		
Pseudoscopelus altipinnis	Least Concern		
Pseudoscopelus obtusifrons	Least Concern		
Pseudoscopelus scriptus	Least Concern		
Pseudoscopelus scutatus	Least Concern		
Pseudupeneus maculatus	Least Concern		
Pseudupeneus maculatus	Least Concern		
Psilotris alepis	Least Concern		
Psilotris alepis	Least Concern		
Psilotris batrachodes	Least Concern		
Psychotria ligustrifolia	Least Concern		
Pteridium caudatum	Least Concern		
Pterodroma hasitata	Endangered		
Pteroplatytrygon violacea	Least Concern		
Pterycombus brama	Least Concern		
Pterycombus brama	Least Concern		
Puffinus lherminieri	Least Concern		
Pyrrhulagra violacea	Least Concern		
Quadrella cynophallophora	Least Concern	✓	Uncommon
Rachicallis americana	Least Concern	✓	Uncommon
Rachycentron canadum	Least Concern		

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

IUCN Red List species for TCI			
Species observed during Assessment Highlighted			
Rachycentron canadum	Least Concern		
Rallus crepitans	Least Concern		
Randia aculeata	Least Concern	✓	Abundant
Ranzania laevis	Least Concern		
Recurvirostra americana	Least Concern		
Regalecus glesne	Data Deficient		
Regalecus glesne	Least Concern		
Regulus calendula	Least Concern		
Remora australis	Data Deficient		
Remora australis	Least Concern		
Remora australis	Least Concern		
Remora brachyptera	Data Deficient		
Remora osteochir	Data Deficient		
Remora osteochir	Least Concern		
Remora osteochir	Least Concern		
Remora remora	Least Concern		
Remora remora	Least Concern		
Remora remora	Least Concern		
Rhamphocetichthys savagei	Least Concern		
Rhincodon typus	Endangered		
Rhizophora mangle	Least Concern	✓	Uncommon; recommend miro-siting landfalls to minimize impacts
Rhizoprionodon porosus	Vulnerable		
Rhomboplites aurorubens	Vulnerable		
Rhonciscus crocro	Data Deficient		
Rhonciscus crocro	Data Deficient		
Rhynchactis macrothrix	Data Deficient		
Rhynchohyalus natalensis	Least Concern		
Rhynchospira colorata	Least Concern		
Riparia riparia	Least Concern		
Risor ruber	Least Concern		
Risor ruber	Least Concern		
Rissa tridactyla	Vulnerable		
Rondeletia bicolor	Least Concern		
Rouleina attrita	Least Concern		
Rouleina maderensis	Least Concern		
Roystonea regia	Least Concern		
Ruvettus pretiosus	Least Concern		
Ruvettus pretiosus	Least Concern		
Rynchops niger	Least Concern		
Rypticus bistrispinus	Least Concern		
Rypticus bistrispinus	Least Concern		
Rypticus carpenteri	Least Concern		
Rypticus carpenteri	Least Concern		
Rypticus saponaceus	Least Concern		
Rypticus saponaceus	Least Concern		
Rypticus subbifrenatus	Least Concern		

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

IUCN Red List species for TCI			
Species observed during Assessment Highlighted			
Serranus tabacarius	Least Concern		
Serranus tigrinus	Least Concern		
Serranus tigrinus	Least Concern		
Serranus tortugarum	Least Concern		
Serranus tortugarum	Least Concern		
Serrivomer beanii	Least Concern		
Sesuvium portulacastrum	Least Concern	✓	Uncommon
Setaria parviflora	Least Concern		
Setophaga americana	Least Concern		
Setophaga caerulescens	Least Concern		
Setophaga castanea	Least Concern		
Setophaga citrina	Least Concern		
Setophaga coronata	Least Concern		
Setophaga discolor	Least Concern		
Setophaga dominica	Least Concern		
Setophaga fusca	Least Concern		
Setophaga kirtlandii	Near Threatened		
Setophaga magnolia	Least Concern		
Setophaga palmarum	Least Concern	✓	Wintering habitat would be impacted
Setophaga pensylvanica	Least Concern		
Setophaga petechia	Least Concern	✓	Nesting habitat would be impacted
Setophaga pityophila	Least Concern		
Setophaga ruticilla	Least Concern	✓	Not observed; potential wintering habitat could be impacted
Setophaga striata	Near Threatened	✓	Not observed; potential wintering habitat could be impacted
Setophaga tigrina	Least Concern	✓	Wintering habitat would be impacted
Setophaga townsendi	Least Concern		
Setophaga virens	Least Concern		
Siderastrea radians	Least Concern		
Siderastrea siderea	Least Concern	✓	W/in 100 m, on groyne near Coral Pavilion
Sideroxylon salicifolium	Least Concern		
Sitta pusilla	Least Concern		
Smilax gracilior	Least Concern		
Snyderidia canina	Least Concern		
Solenastrea bournoni	Least Concern		
Solenastrea hyades	Least Concern		
Sophora tomentosa	Least Concern		
Sparisoma atomarium	Least Concern		
Sparisoma atomarium	Least Concern		
Sparisoma aurofrenatum	Least Concern		
Sparisoma aurofrenatum	Least Concern		
Sparisoma chrysopterum	Least Concern		
Sparisoma chrysopterum	Least Concern		
Sparisoma radians	Least Concern		
Sparisoma radians	Least Concern		

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IUCN Red List species for TCI			
Species observed during Assessment Highlighted			
Starksia nanodes	Data Deficient		
Starksia smithvanizi	Least Concern		
Starnoenas cyanocephala	Endangered		
Stathmonotus gymnodermis	Least Concern		
Stathmonotus hemphillii	Least Concern		
Stathmonotus hemphillii	Least Concern		
Stathmonotus stahli	Least Concern		
Steganopus tricolor	Least Concern		
Stegastes adustus	Least Concern		
Stegastes adustus	Least Concern		
Stegastes diencaeus	Least Concern		
Stegastes diencaeus	Least Concern		
Stegastes leucostictus	Least Concern		
Stegastes leucostictus	Least Concern		
Stegastes partitus	Least Concern		
Stegastes partitus	Least Concern		
Stegastes planifrons	Least Concern		
Stegastes planifrons	Least Concern		
Stegastes xanthurus	Least Concern		
Steindachneria argentea	Least Concern		
Stelgidopteryx serripennis	Least Concern		
Stemonosudis intermedia	Least Concern		
Stemonosudis rothschildi	Least Concern		
Stemonosudis siliquiventer	Least Concern		
Stenandrium carolinae	Critically Endangered		
Stenella attenuata	Least Concern		
Stenella clymene	Least Concern		
Stenella coeruleoalba	Least Concern		
Stenella frontalis	Least Concern		
Stenella longirostris	Least Concern		
Steno bredanensis	Least Concern		
Stenostomum lucidum	Least Concern		
Stenostomum myrtifolium	Least Concern		
Stephanoberyx monae	Least Concern		
Stephanocoenia intersepta	Least Concern		
Stephanolepis hispidus	Least Concern		
Stephanolepis setifer	Least Concern		
Stercorarius parasiticus	Least Concern		
Stercorarius pomarinus	Least Concern		
Stereomastis sculpta	Least Concern		
Sterna dougallii	Least Concern		
Sterna forsteri	Least Concern		
Sterna hirundo	Least Concern		
Sternula antillarum	Least Concern	✓	Observed, islands in lagoon could potentially provide new nesting habitat
Stomias affinis	Least Concern		

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

IUCN Red List species for TCI			
Species observed during Assessment Highlighted			
Stomias brevibarbus	Least Concern		
Stomias longibarbus	Least Concern		
Streptopelia decaocto	Least Concern		
Strongylura notata	Least Concern		
Strongylura notata	Least Concern		
Strongylura timucu	Least Concern		
Strongylura timucu	Least Concern		
Strumpfia maritima	Least Concern	✓	Uncommon
Sturnus vulgaris	Least Concern		
Stygnobrotula latebricola	Least Concern		
Stygnobrotula latebricola	Least Concern		
Stylephorus chordatus	Least Concern		
Styracura schmardae	Endangered		
Sudis atrox	Least Concern		
Sudis hyalina	Data Deficient		
Sudis hyalina	Data Deficient		
Sula dactylatra	Least Concern		
Sula leucogaster	Least Concern		
Sula sula	Least Concern		
Suriana maritima	Least Concern		
Swietenia mahagoni	Near Threatened		
Syacium micrurum	Least Concern		
Syacium micrurum	Least Concern		
Symbolophorus rufinus	Least Concern		
Symbolophorus veranyi	Least Concern		
Symbolophorus veranyi	Least Concern		
Symphurus arawak	Least Concern		
Symphurus arawak	Data Deficient		
Symphurus marginatus	Least Concern		
Symphurus tessellatus	Least Concern		
Symphurus tessellatus	Data Deficient		
Symphysanodon berryi	Least Concern		
Symphysanodon octoactinus	Least Concern		
Synagrops bellus	Least Concern		
Synagrops bellus	Least Concern		
Synagrops spinosus	Least Concern		
Synagrops spinosus	Least Concern		
Syngnathus caribbaeus	Least Concern		
Syngnathus caribbaeus	Data Deficient		
Syngnathus pelagicus	Least Concern		
Syngnathus pelagicus	Least Concern		
Synodus foetens	Least Concern		
Synodus foetens	Least Concern		
Synodus intermedius	Least Concern		
Synodus intermedius	Least Concern		
Synodus poeyi	Least Concern		
Synodus poeyi	Least Concern		

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

IUCN Red List species for TCI			
Species observed during Assessment Highlighted			
Synodus synodus	Least Concern		
Synodus synodus	Least Concern		
Syringodium filiforme	Least Concern		
Taaningichthys bathyphilus	Least Concern		
Taaningichthys minimus	Least Concern		
Tabebuia bahamensis	Least Concern	✓	Uncommon
Tachybaptus dominicus	Least Concern		
Tachycineta bicolor	Least Concern		
Talismania antillarum	Least Concern		
Talismania homoptera	Least Concern		
Talismania mekistonema	Least Concern		
Taractichthys longipinnis	Least Concern		
Taractichthys longipinnis	Least Concern		
Tecoma stans	Least Concern		
Tetragonurus atlanticus	Least Concern		
Tetragonurus cuvieri	Least Concern		
Tetrapturus georgii	Data Deficient		
Tetrapturus georgii	Data Deficient		
Thalasseus maximus	Least Concern		
Thalasseus sandvicensis	Least Concern	✓	Observed in vicinity
Thalassia testudinum	Least Concern		
Thalassoma bifasciatum	Least Concern		
Thalassoma bifasciatum	Least Concern		
Thaumatichthys binghami	Least Concern		
Thunnus alalunga	Least Concern		
Thunnus alalunga	Least Concern		
Thunnus alalunga	Least Concern		
Thunnus albacares	Least Concern		
Thunnus albacares	Least Concern		
Thunnus atlanticus	Least Concern		
Thunnus atlanticus	Least Concern		
Thunnus obesus	Vulnerable		
Thunnus obesus	Near Threatened		
Thunnus thynnus	Endangered		
Thunnus thynnus	Least Concern		
Thunnus thynnus	Endangered		
Tigriobius dilepis	Least Concern		
Tigriobius dilepis	Least Concern		
Tigriobius gemmatus	Least Concern		
Tigriobius macrodon	Least Concern		
Tigriobius macrodon	Least Concern		
Tigriobius multifasciatus	Least Concern		
Tigriobius multifasciatus	Least Concern		
Tigriobius pallens	Least Concern		
Tigriobius saucrus	Vulnerable		
Tournefortia gnaphalodes	Least Concern		
Toxostoma rufum	Least Concern		

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

IUCN Red List species for TCI			
Species observed during Assessment Highlighted			
Trachinocephalus myops	Least Concern		
Trachinotus falcatus	Least Concern		
Trachinotus falcatus	Least Concern		
Trachinotus goodei	Least Concern		
Trachinotus goodei	Least Concern		
Trachonurus sulcatus	Least Concern		
Tremoctopus violaceus	Least Concern		
Trichechus manatus	Vulnerable		
Trichiurus lepturus	Least Concern		
Trinectes inscriptus	Least Concern		
Tringa flavipes	Least Concern	✓	Canal could potentially provide additional foraging habitat
Tringa melanoleuca	Least Concern	✓	Canal could potentially provide additional foraging habitat
Tringa semipalmata	Least Concern	✓	Canal could potentially provide additional foraging habitat
Tringa solitaria	Least Concern	✓	Canal could potentially provide additional foraging habitat
Tropidophis greenwayi	Vulnerable		
Turdus migratorius	Least Concern		
Turnera ulmifolia	Least Concern	✓	Uncommon; could be used for landscaping
Tursiops truncatus	Least Concern		
Tylosurus acus	Least Concern		
Tylosurus acus	Least Concern		
Tylosurus crocodilus	Least Concern		
Typhlatya garciai	Vulnerable		
Tyrannus caudifasciatus	Least Concern		
Tyrannus cubensis	Endangered		
Tyrannus dominicensis	Least Concern	✓	Common; nesting habitat could be impacted
Tyrannus forficatus	Least Concern		
Tyrannus tyrannus	Least Concern		
Tyto alba	Least Concern		
Umbrina coroides	Least Concern		
Umbrina coroides	Least Concern		
Uncisudis advena	Least Concern		
Uraspis secunda	Least Concern		
Uraspis secunda	Least Concern		
Urobatis jamaicensis	Least Concern		
Uropterygius macularius	Least Concern		
Uropterygius macularius	Data Deficient		
Vachellia choriophylla	Data Deficient	✓	Uncommon
Vachellia farnesiana	Least Concern		
Vachellia macracantha	Least Concern		
Vachellia tortuosa	Least Concern		
Vanellus vanellus	Near Threatened		

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

IUCN Red List species for TCI			
Species observed during Assessment Highlighted			
Varicus bucca	Least Concern		
Varronia bahamensis	Least Concern		
Varronia brittonii	Least Concern		
Varronia bullata	Least Concern		
Varronia lucayana	Near Threatened		
Ventrifossa macropogon	Least Concern		
Ventrifossa mucocephalus	Least Concern		
Verilus sordidus	Least Concern		
Verilus sordidus	Data Deficient		
Vermivora cyanoptera	Least Concern		
Vinciguerria attenuata	Least Concern		
Vinciguerria nimbaria	Least Concern		
Vinciguerria poweriae	Least Concern		
Vinciguerria poweriae	Least Concern		
Vireo altiloquus	Least Concern		
Vireo crassirostris	Least Concern	✓	Common resident, nesting habitat would be impacted
Vireo flavifrons	Least Concern		
Vireo griseus	Least Concern		
Vireo olivaceus	Least Concern		
Vireo philadelphicus	Least Concern		
Vitreledonella richardi	Least Concern		
Volkameria aculeata	Least Concern		
Waltheria indica	Least Concern	✓	Uncommon
Willemoesia forceps	Least Concern		
Xanthichthys ringens	Least Concern		
Xanthichthys ringens	Least Concern		
Xenodermichthys copei	Least Concern		
Xenomystax austrinus	Least Concern		
Xenomystax bidentatus	Least Concern		
Xenomystax congroides	Least Concern		
Xenophthalmichthys danae	Least Concern		
Ximenia americana	Least Concern		
Xiphias gladius	Near Threatened		
Xiphias gladius	Least Concern		
Xiphias gladius	Least Concern		
Xyelacyba myersi	Least Concern		
Xyrichtys novacula	Least Concern		
Xyrichtys novacula	Least Concern		
Xyrichtys novacula	Least Concern		
Xyrichtys splendens	Least Concern		
Xyrichtys splendens	Least Concern		
Zalieutes mcgintyi	Least Concern		
Zapogon evermanni	Least Concern		
Zapoteca formosa	Least Concern		
Zenaida asiatica	Least Concern	✓	Common; potential nesting habitat could be impacted

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

IUCN Red List species for TCI Species observed during Assessment Highlighted

Zenaida aurita	Least Concern	Resident; potential nesting habitat could be impacted
Zenaida macroura	Least Concern	✓ Uncommon; potential nesting habitat could be impacted
Zenion hololepis	Least Concern	
Ziphius cavirostris	Least Concern	
Zonotrichia leucophrys	Least Concern	
Zu cristatus	Least Concern	

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

APPENDIX V

Sail Rock Canal CEIA Landside Animal List

Appendix _ Sailrock Canal EIA Landside Animal List

The following species were observed during landside field assessments conducted from April 21-28, 2022. This list should be considered a work-in-progress, and that additional species would be identified if additional surveys were conducted, particularly during different times of the year.

Scientific Name	Common Name	Habitat	Abundance
MAMMALS			
<i>Equus asinus</i>	Donkeys	Free roaming throughout property	Common
CRUSTACEANS and ARTHROPODS			
<i>Cardisoma guanhumi</i>	Land Crab	Coastal lowlands	Occasional
<i>Coenobita clypeatus</i>	Land Hermit Crab	Above mean high water, among plants	Uncommon
<i>Panopeidae</i>	Mud Crab	Sediments under mangroves	Occasional
MOLLUSKS			
<i>Cerion</i> sp.	Peanut snail	Herbaceous & other low-growing vegetation	Common
<i>Hemiochus varians</i>	Seagrass snail	Coastal uplands	Occasional
<i>Littorina angulifera</i>	Mangrove periwinkle	Mangroves	Occasional
BIRDS			
<i>Phaethon lepturus</i>	White-tailed Tropicbird	Observed over open water to the east	Occasional
<i>Fregata magnificens</i>	Magnificent Frigatebird	Observed over ridge to the east	Aerial only
<i>Larus atricilla</i>	Laughing Gull	Shorelines, scavenger, numerous sightings of small numbers. In breeding plumage, but nesting on subject property unlikely	Common

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<i>Sterna antillarum</i>	Least Tern	Nearshore open waters, roosts on beaches and open disturbed area. Potential nesting habitat presently exists, and proposed land clearing could create additional nesting habitat.	Occasional
<i>Sterna sandvichensis</i>	Sandwich Tern	Nearshore open waters, roosts on beaches. Only observed from a distance. Unlikely to nest on the subject property.	Occasional
<i>Egretta thula</i>	Snowy Egret	Shorelines & shallow inland wetlands Not observed on subject property, but seen nearby, and suitable habitat appears to be present	Occasional
<i>Ardea herodias</i>	Great Blue Heron	Shorelines & shallow inland wetlands Not observed on subject property, but seen nearby, & suitable habitat appears to be present	Occasional
<i>Egretta rufescens</i>	Reddish Egret	Coastal wetlands, sand flats. Observed on shallow tidal flats west of proposed north channel connection	Common
<i>Egretta tricolor</i>	Tri-colored Heron	Shorelines & shallow inland wetlands Not observed on subject property, but seen nearby & suitable habitat appears to be present.	Occasional
<i>Bubulcus ibis</i>	Cattle Egret	Herbaceous & other low-growing vegetation. Not observed on subject property, but seen nearby, and could be attracted by land-clearing activities	Common
<i>Butorides virescens</i>	Green Heron	Shorelines & shallow inland wetlands. Observed in mangroves near proposed north channel connection.	Adults & young

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<i>Nyctanassa violacea</i>	Yellow-crowned Night-heron	Shorelines & shallow inland wetlands. Observed in vicinity, & crab parts indicate presence	Common
<i>Phoenicopterus ruber</i>	Flamingo	Salinas. Not observed on property, but seen in vicinity	Occasional
<i>Rallus longirostris coryi</i>	Clapper Rail	Mangrove wetlands. Heard in area west of proposed north channel entrance	Occasional
<i>Pluvialis squatarola</i>	Black-bellied Plover	Sandy Shorelines, Salinas. Observed along salina edge to south. Potentially suitable habitat on subject property minimal.	Occasional
<i>Charadrius vociferus</i>	Killdeer	Sandy beaches, saline flats, Heard in flight over subject property	Occasional
<i>Charadrius wilsonia</i>	Wilson's Plover	Sandy beaches. Observed nesting along fringe of salt pond along Transect 5	Occasional
<i>Charadrius semipalmatus</i>	Semi-palmated Plover	Sandy Shorelines, Salinas. Observed along salina edge to south. Potentially suitable habitat on subject property minimal.	Occasional
<i>Charadrius melodus</i>	Piping Plover	Sandy beaches, salt pond fringes. Reportedly documented on sandy beaches in vicinity. Potentially suitable habitat on subject property minimal, or non-existent.	Occasional
<i>Charadrius alexandrinus</i>	Snowy Plover	Sandy beaches, salt pond fringes. Observed in salina to south, potentially suitable habitat on subject property minimal, or non-existent.	Occasional
<i>Calidris minutilla</i>	Least Sandpiper	Shorelines, wetland. Observed in salina to south. Potentially suitable habitat on subject property.	Occasional

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<i>Arenaria interpres</i>	Ruddy Turnstone	Sandy beaches, rocky shorelines. Observed in salina to south. Potentially suitable habitat on subject property	Common
<i>Tringa flavipes</i>	Lesser Yellowlegs	Shallow inland wetlands. Observed in salina to south.	Occasional
<i>Catoptrophorus semipalmatus</i>	Willet	Tidal flats, beaches, mangroves, shorelines. Observed in salina to south. Potentially suitable habitat on subject property minimal, or non-existent.	Common
<i>Haematopus palliatus</i>	American Oystercatcher	Rocky Shorelines. Observed foraging in Sound, west of proposed north channel entrance	Occasional
<i>Himantopus mexicanus</i>	Black-necked Stilt	Saline ponds, observed on property, nesting unlikely	Occasional
<i>Anas bahamensis</i>	White-cheeked Pintail	Freshwater and moderate-salinity ponds	Occasional
<i>Anas discors</i>	Blue-winged Teal	Freshwater and moderate-salinity ponds. Not observed in April 2022, but confirm ID from photos taken within project area during Feb 2022 ¹	Occasional
<i>Pandion haliaetus</i>	Osprey	Coastal areas, feeds on fish, nests nr water. Two seen repeatedly in vicinity. Nests typically built at prominent locations, but no nests observed.	Uncommon
<i>Falco sparverius sparverioides</i>	Kestrel	Observed frequently in semi-open coppice areas. Likely year-round nesting resident within project area.	Uncommon
<i>Columba leucocephala</i>	White-crowned Pigeon	Coastal hammock, usu roosts & nests on islands. Observed repeatedly in flight, and roosting near northern tip of island. Unlikely	Uncommon

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<i>Columba passerina</i>	Common Ground-dove	Sparsely-vegetated uplands. Frequently observed on site, including w/ young-of-the-year. Likely to nest within project area.	Common
<i>Zenaida aurita</i>	Zenaida Dove	Typically in urban/residential areas, but heard frequently; likely to nest within project area.	Occasional
<i>Zenaida asiatica</i>	White-winged Dove	Scrublands, mangrove swamps, woodlands. Heard & seen frequently. Likely nests in project area, but no occupied nests observed.	Occasional
<i>Zenaida macroura</i>	Mourning Dove	Typically in urban/residential areas, but heard frequently; likely to nest within project area.	Occasional
<i>Crotophaga ani</i>	Smooth-billed Ani	Open areas, bushes, golf courses. Heard in vicinity.	Occasional
<i>Chordeiles gundlachii</i>	Antillean Nighthawk	Semi-open areas, including rocky shores. Heard aerially. Potentially suitable nesting habitat present in project area.	Uncommon
<i>Calliphlox evelynae</i>	Bahama Woodstar	Coppice, typically nr nectar-producing flowers. Observed frequently, including feeding on <i>Euphorbia gymnonota</i> . Likely nests in project area.	Uncommon
<i>Tyrannus dominicensis</i>	Gray Kingbird	Coppice & semi-open areas, insect-eater. Observed frequently; likely to nest in project area.	Common
<i>Polioptila caerulea</i>	Blue-gray Gnatcatcher	Coppices, forests, woodlands. Frequently heard and seen. Likely nests in project area.	Occasional
<i>Coccyzus minor</i>	Mangrove Cuckoo	Coastal coppices, mangroves	Occasional

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<i>Mimus polyglottos</i>	Northern Mockingbird	Typically in urban/residential areas, but seen & heard frequently. Potentially nests within project area.	Occasional
<i>Mimus gundlachii</i>	Bahama Mockingbird	Coppice, Scrub, woodlands. Seen & heard frequently. Likely nests within project area.	Occasional
<i>Dumetella carolinensis</i>	Gray Catbird	Thickets, shrublands. Migrant, heard occasionally. Likely non-nesting presence from fall thru spring.	Occasional
<i>Vireo crassirostris</i>	Thick-billed Vireo	Thick coppice, bushy forest edges. Frequently heard & seen. Likely nests within project area.	Common
<i>Corvus nasicus</i>	Cuban Crow	Coppice. Two individuals occasionally seen. Potentially nests on subject property, but unlikely to nest in project area.	Occasional
<i>Dendroica palmarum</i>	Palm Warbler	Coppice, thicket, urban areas, agricultural areas. Migrant, nests at northerly latitudes, but likely present on site fall through spring, &/or during migration.	Common
<i>Dendroica petechia petechia</i>	Yellow Warbler	Resident species typically nests in low-growing coastal mangroves. Heard & saw occasionally. Potentially suitable nesting habitat occurs on subject property, but limited within project area.	Uncommon
<i>Dendroica tigrina</i>	Cape May Warbler	Coppices, thickets & woodlands. Migrant, nests at northerly latitudes, but likely present on site fall through spring, &/or during migration.	Uncommon
<i>Coerba flaveola</i>	Bananaquit	Coppice, thicket & forest. Year-round, breeding resident. Heard & seen frequently. Likely nests in project area.	Common

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<i>Tiaris bicolor</i>	Black-faced Grassquit	Semi-open grasslands. Year-round, breeding resident. Heard & seen frequently. Likely nests in project area.	Common
<i>Icterus glabula</i>	Baltimore Oriole	Woodlands & semi-open areas. Migrant, nests at northerly latitudes, likely present on site only during migration.	Occasional
REPTILES and AMPHIBIANS			
<i>Anolis sagrei ordinatus</i>	Bahamian Brown Anole	Semi-open uplands	Common
<i>Anolis scriptus scriptus</i>	Turks and Caicos Anole	Semi-open uplands	Common
<i>Spondylurus caicosae</i>	Caicos Skink	On ground in Dry Broadleaf Forest. Observed Feb, 2022	Uncommon
Snakes			
<i>Chilabothrus chrysogaster</i>	Turks & Caicos Rainbow Boa	Coppices; photos taken on subject property in Feb. 2022 ¹	
<i>Tropidophis greenwayi lathanus</i>	Turks & Caicos Pygmy Boa	Coppice, Photos taken on subject property in Feb. 2022 ¹	Occasional
INSECTS			
Butterflies and Moths			
<i>Agraulis (Dione) vanillae</i>	Gulf Fritillary Butterfly	Semi-open areas, host plant is Passifloraceae	Common
<i>Heraclides andreamon bonhotei</i>	Bahama Swallowtail	Likely forage on Asclepiaceae	Occasional
<i>Kricogonia lyside</i>	Lyside Sulphur	feeds on "tiny leaf" need Tanya ID	Uncommon
<i>Memphis intermedia</i>	Turks Island Leafwing Butterfly	Feeds on <i>Metopium</i> ; observed on <i>Rhizophora</i>	Uncommon
<i>Pieridae</i>	Small Yellow Butterfly	Observed in weedy groundcovers	Uncommon
Spiders			

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<i>Gasteracantha cancriformis</i>	Crab Spider	Coppice	Uncommon
Other Insects			
Acrididae	Grasshopper	Evergreen shrublands	Occasional
<i>Aedes</i> sp.	Mosquitos	Shorelines, coppice, forests, wetlands	Abundant
Apoidea	Bees	Observed feeding on <i>Passiflora pectinata</i>	Occasional
Coccinellinae	Ladybug Beetle	Observed on <i>Heliotropium curassivicum</i>	Uncommon
Formicidae	Ants	Agricultural shrublands	Abundant
Hymenoptera	Wasp	Evergreen shrublands	Occasional
<i>Musca domestica</i>	House Fly	Urban environments	Occasional
<i>Nasutitermes costalis</i>	West Indian nasute termites	Coppice and forests	Common
Odonata	Dragonfly	Typically near freshwater & coastal wetlands	Uncommon
<i>Pepsis</i> sp.	Tarantula Hawk Wasp	Encountered in Sand Strand <i>Bontia daphneoid</i>	Uncommon
Psychidae	Bagworm Moth	Open Coppices	Uncommon

1 = Not observed during field assessment, but photos provided by residents

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APPENDIX VI

Sail Rock Canal CEIA Landside - Plant List

Sailrock Canal and Docks - Plant List

The following species were observed and identified during a habitat assessment conducted for the Sailrock Canal and Dock EIA from April 22-29, 2022. The list should be considered as a work-in-progress, and that additional species would be identified if additional surveys were to be conducted, particularly during different times of the year, when other plants would be in bloom. Nomenclature follows "Flora of the Bahama Archipelago" by D.S. Correll and H.B. Correll and/or "Flowers of the Bahamas and the Turks and Caicos Islands" by K McNary Wood.

Family/Scientific Name	Common Name	Life Form	Habitat	Abundance	Comments
MONOCOTS					
ARECACEAE (PALMAE)					
<i>Coccothrinax inaguensis</i>	Thatch Palm	Tree	Coastal Coppices, Coppices, Whitelands	Common	Lucayan Endemic
BROMELIACEAE					
<i>Tillandsia circinnata</i>	Silvery Wild Pine Air Plant	Epiphyte	On shrubs in coppices and scrublands	Common	
CYPERACEAE					
Cyperaceae	Sedge		Soil pockets in coppice rocks		
<i>Fimbristylis</i> sp.	Sedge	Herb	Moist saline soils	Uncommon	
ORCHIDACEAE					
<i>Encyclia altissima</i>	Tall Orchid	Epiphyte	Coppices, Rocky Scrublands	Occasional	NPSCC
POACEAE (GRAMMINEAE)					
<i>Dactyloctenium aegyptium</i>	Crowfoot Grass	Herb	Road shoulders, disturbed areas	Occasional	
<i>Distichlis</i> (fka <i>Monanthochloe</i>) <i>littoralis</i>	Shoregrass	Herb	Muddy shorelines, saline flats	Occasional	
Genus & species unidentified	Grass	Herb	Roadside disturbed areas	Occasional	
<i>Lasiacis divaricata</i>	Wild Cane	Herb	Coppices, Roadsides	Common	
DICOTS					
AIZOACEAE					
<i>Sesuvium portulacastrum</i>	Pondweed, Sea purslane	Ground cover	Sandy beaches, saline flats, rocky areas	Common	
ANACARDIACEAE					
<i>Metopium toxiferum</i>	Poisonwood	Tree	Coppices, Scrublands	Occasional	

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APOCYNACEAE					
Plumeria obtusa	White Frangipani	Tree	Rocky scrublands, coppices	Occasional	
Pentalinon luteum	Wild Uction, Lice Bush	Vine	Climbing on shrubs in coppices & rocky soils	Occasional	
ASCLEPIADACEAE					
Metastelma (fka Cynanchum) angus	Marsh Cynanchum	Vine	Borders of slat marshes and saline flats	Occasional	
Metastelma bahamense		Vine	Whitelands, scrublands, coastal thickets	Occasional	
Metastelma (fka Cynanchum) inagu	Marsh Cynanchum	Vine	Whitelands, scrublands, dune areas	Occasional	
ASTERACEAE					
Borrichia arborescens	Lavender, Sea Marigold	Shrub	Coastal sands and rock, brackish margins	Abundant	
Gundlachia corymbosa	Horse Bush	Shrub	Rocky saline flats, Marshes, Coppice edges	Common	
Launaea (Lactuca) intybacea	Wild Lettuce	Herb	Disturbed Areas,	Occasional	
Pluchea odorata	Marsh Fleabane	Herb	Marshlands, wet depressions, disturbed areas	Occasional	
Wedelia bahamensis	Rong Bush	Shrub	Coastal thickets & scrublands	Occasional	Lucayan Endemic
AVICENNACEAE	Mangrove				
Avicennia germinans	Black Mangrove	Tree	Mangrove lagoons, tidal shores	Common	
BATAACEAE					
Batis maritima	Saltwort	Ground cover	Mangrove mud, salt flats and marshes	Occasional	
BORAGINACEAE					
Bourreria ovata	Strong-back	Shrub/Tree	Scrublands, Coppices	Occasional	
Heliotropium angiospermum	Horse-bush, Scorpion-tail	Shrub	Open coppices, disturbed areas	Occasional	
Heliotropium curassavicum	Seaside Heliotrope	Shrub	Sandy soils around ponds & saline flats	Occasional	
Myriopus volubilis	Soldier-bush	Vine	Coppices, coppice edges	Occasional	
BURSERACEAE					
Bursera inauensis		Tree	Coppices, Scrublands	Occasional	Lucayan Endemic
BUXACEAE					
Buxus bahamensis	Box Wood	Shrub	Coppices, scrublands	Occasional	
CACTACEAE					

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Melocactus intortus	Turk's Cap Cactus	Herb	Open rock flats & thin-soiled outcrops	Occasional	
Opuntia bahamiana	Bahama Prickly Pear	Shrub	Open sandy areas	Occasional	NPSCC
Opuntia lucayana	Turk's Head Prickly Pear	Shrub	Open flats, rocky slopes	Occasional	TCI Endemic
Pilocereus polygonus	Old Man's Cactus	Shrub	Maritime and coastal rocks, dunes	Common	formerly Pilocerus
CAPPARIDACEAE					
Quadralla (fka Capparis) cynophallo	Black willow, Black Scrub	Tree	Scrublands, Thickets	Occasional	
CELASTRACEAE					
Crossopetalum rhacoma	Maiden Berry, Mating Berry	Shrub	Coppices, Thickets, Scrublands	Common	
CHENOPODIACEAE					
Sarcocornia virginica	Woody Glasswort	Groundcover	Coastal salt marshes and flats	Occasional	formerly Salicornia
Suaeda conferta		Groundcover	Coastal saline flats	Occasional	
COMBRETACEAE					
Conocarpus erectus	Buttonwood	Shrub/Tree	Coastal wetlands, savannas, salina edges	Abundant	
Conocarpus erectus v. sericea	Silver Buttonwood	Shrub/Tree	Coastal wetlands, savannas, salina edges	Occasional	
Laguncularia racemosa	White Mangrove	Tree	Borders of mangrove mud	Occasional	
CONVOLVULACEAE					
Evolvulus alsinoides		Herb	Open rocky & disturbed areas	Uncommon	
Evolvulus bahamensis (fka E. arbuscula)	Broom Bush	Shrub	Limestone outcrops	Uncommon	TCI Endemic (but r
Evolvulus squamosus	Broom Bush	Shrub	Rocky Coppice, Scrublands	Occasional	
Jacquemontia cayensis	Black Wiss – Sandyplain Clustervine	Vine	Saline Coastal habitata	Occasional	
Jacquemontia havanaensis	Jacquemontia	Vine	Coppices, pinelands	Occasional	
ERYTHROXYLACEAE					
Erythroxylum rotundifolium	Rat-wood	Shrub	Coppices, thickets, scrublands	Occasional	
EUPHORBIACEAE					
Argythamnia candicans		Shrub	Rocky soils in coppice edges	Occasional	
Ateramnus (fka Gymnanthes) lucida	Crabwood	Shrub	Coastal coppices	Occasional	
Croton linearis	Granny-bush, Bay Wormwood	Shrub	Scrublands, rock formations, sandy areas	Occasional	
Croton lucidus	Fire-Bush	Shrub	Coppice, coastal ridges, rock flats	Occasional	

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Euphorbia gymnonota		Shrub	Scrub lands, open coppices, rock flats	Occasional	Lucayan Endemic
Euphorbia inaguaensis	Wild Thyme (per TCIG)	Shrub	Salina edges, thinly-coppices slopes	Common	Lucayan Endemic
Euphorbia tithymaloides bahamensis	Monkey-fiddle	Shrub	Open coppices & disturbed areas	Occasional	NPSCC
Euphorbia vaginulata		Shrub	Coastal Sands	Occasional	
Hippomane mancinella	Manchineel	Tree	Scrublands, Open coppices	Occasional	
Phyllanthus epiphyllanthus	Abraham-bush, Hardhead	Herb	Rocky places, Whitelands	Common	
FABACEAE					
Caesalpinia reticulata		Shrub	Costal coppices	Occasional	Lucayan Endemic
Centrosema virginianum	Butterfly Pea, Wild Pea	Vine	Variable habitats, disturbed areas	Occasional	
Galactia sp	Pink Milk-pea	Vine	Disturbed Areas	Occasional	
Mimosa bahamensis	Haulback	Shrub	Scrublands, thickets	Occasional	Correll says Endem
Pithecellobium keyense	Blackbead	Tree	Coppices	Occasional	
Pithecellobium unguis-cati	Bread-and-Cheese, Cat's claw	Shrub/ Tree	Coppices	Common	
Senna (fka Cassia) chapmanii	Bahama Senna, Stinking Pea	Shrub	Coastal dunes, coppices	Uncommon	formerly Cassia ch
Senna sp	Pea	Shrub	Coppices	Uncommon	Only saw 1
Sophora tomentosa	Coast Sophora, Necklace pod	Tree	Coastal Coppices, Beach backdunes	Occasional	
Stylosanthes hamata	Sweet Weed, Pencil Flower	Ground cover	Variable, mostly dryish soils	Occasional	
Vachellia (fka Acacia) acuífera	Pork and DoughBoy, Rosewood	Tree	Coppices	Common	TCI - Native Plant d
Vachellia (fka Acacia) macracantha	Porknut	Shrub	Coppices	Common	TCI - Native Plant d
GENTIANACEAE					
Eustoma exaltatum	Marsh Gentian	Herb	Damp or wet fields and flats	Occasional	
LAURACEAE					
Cassytha filiformis	Woe-vine, Love Vine	Vine	Beach backdune, coppices, disturbed areas	Common	
MALPIGHIACEAE					
Byrsonima lucida	Locust-berry	Shrub	Depressions in Coppices & rock flats	Common	
MALVACEAE					
Helicteres jamaicensis	Cow-bush, Blind Eye Bush	Shrub	Coppices, rock flats, saline fields	Occasional	

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

Sailrock Canal and Docks – Plant List

Herissantia crispa	Bladderpod	Shrub	Vacant lots, waste places	Occasional	
Sida ciliaris	Fringed Sida	Shrub	Dryish open soils, disturbed areas	Uncommon	
Sida procumbens	Creeping Sida	Ground cover	Disturbed areas, rock flats, open fields	Occasional	
MYOPORACEAE					
Bontia daphnoides	White alling	Shrub	Limestone flats, open rocky slopes	Occasional	
NYCTAGINACEAE					
Guapira discolor	Blolly	Tree	Coppices, Scrublands, rock flats	Occasional	PROTECTED in Bah
PASSIFLORACEAE					
Passiflora pectinata	Wild Apricot	Vine	Littoral sands, coastal coppice, savannas	Occasional	
Passiflora suberosa	Juniper-berry, Small Passion-f	Vine	Variable habitats	Occasional	
PHYTOLACCACEAE					
Rivina humilis	Wild tomato, Pigeon-berry	Shrub	Low coppices, disturbed areas, scrublands	Occasional	
PLUMBAGINACEAE					
Limonium bahamense	Heather, Sea-lavender	Ground cover	Saline flats & open saline brushlands	Occasional	TCI endemic
POLYGONACEAE					
Coccoloba krugii	Crabwood, Bow-pigeon, wild nane	Shrub/ Tree	Scrublands and Coppices	Occasional	
Coccoloba uvifera	Seagrape	Tree	Coastal thickets, coastal coppices	Common	
RHAMNACEAE					
Reynosa septentrionalis	Darling Plum	Shrub	Coppices, scrublands, and rocky flats	Occasional	
Ziziphus taylorii	Taylor's jujube	Shrub	Coppices, scrublands, and rocky flats	Occasional	NPSCC
RHIZOPHORACEAE					
Rhizophora mangle	Red Mangrove	Tree	Muddy shores, estuarine swamps	Abundant	
RUBIACEAE					
Borreria sp.		Ground cover	Sandy and rocky soils	Occasional	
Casasia (now Genipa) clusiifolia	Seven-year Apple	Shrub	Coastal Rocks, Coppices	Abundant	
Catesbaea parviflora	Catesbaea	Shrub	Beach Coppices & coastal rock	Occasional	
Erithalis fruticosa	Black Torch, Candlewood	Shrub	Beach dunes, coastal coppices, pinelands,	Common	

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

Sailrock Canal and Docks – Plant List

<i>Ernodea littoralis</i>	Golden Creeper, Cough Bush	Shrub	Dunes, coastal coppices, disturbed areas	Occasional	
<i>Genipa (fka Casasia) clusifolia</i>	Seven-year Apple	Shrub	Coastal Rocks, Coppices	Abundant	
<i>Guettarda elliptica</i>	Common Velvet-seed	Shrub	Coppices and scrublands	Occasional	
<i>Randia aculeata minor</i>	Box briar	Shrub	Ubiquitous	Common	
<i>Rhachicallis americana</i>	Hog-bush, Sandfly-bush	Shrub	Maritime rocks, coastal coppices	Common	
<i>Strumpfia maritima</i>	Mosquito Bush, Candle Torch	Shrub	Coastal rocks, rocky flats, Coastal coppices	Common	
RUTACEAE					
<i>Amyris elemifera</i>	Torchwood	Tree	Thickets, rocky coppices and sandy soils	Occasional	
<i>Zanthoxylum flavum</i>	Yellow-wood, Satin-wood	Tree	Coppices, hills, dunes, scrublands	Common	
SANATALACEAE					
<i>Dendropemon purpureus</i>	Smooth Mistletoe	Shrub	Parasitic epiphyte in Coppices	Uncommon	TCI -NPSCC
SAPINDACEAE					
<i>Dodonaea ehrenbergii</i>	Dogwood, Swamp Bush	Shrub	Coastal coppices, edges of marshlands	Common	
<i>Thouinia discolor</i>	Nakedwood, quicksilver-bush	Tree	Coppices, scrublands	Occasional	Endemic (C&C, Fre
SAPOTACEAE					
<i>Manilkara bahamensis</i>	Wild Dilly	Tree	Coppices, Scrublands, Coastal areas	Common	
<i>Sideroxylon (Bumelia) americana</i>	Wild Saffron, Milk-berry	Shrub	Coppices	Occasional	
SCROPHULARIACEAE					
<i>Capraria biflora</i>	Goat Weed, Stow-weed	Herb	Waste areas, fields, open coppices	Occasional	
SOLANACEAE					
<i>Lycium tweedianum</i>	Inagua lycium	Shrub	Roadsides, saline soils, scrublands, rocky hills	Occasional	
<i>Solanum bahamense</i>	Canker Berry, Bahamas Nightst	Shrub	Disturbed areas	Occasional	
STERCULIACEAE					
<i>Helicteres jamaicensis</i>	Cow-bush, Blind Eye Bush	Shrub	Coppices, rock flats, saline fields	Occasional	
<i>Melochia tomentosa</i>	Velvety Melochia	Shrub	Whitelands, Scrublands, Coppices	Occasional	
SURIANACEAE					
<i>Suriana maritima</i>	Bay Cedar	Shrub	Beach mid-dune, Rocky shorelines	Common	

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

Sailrock Canal and Docks – Plant List

THEOPHRASTACEAE					
Jacquinia keyensis	Joe-wood, Ironwood	Shrub	Coastal rocks, Coppices, Scrublands	Common	
TILIACEAE					
Corchorus hirsutus	Woolly Corchorus, Jack Switch	Shrub	Coppices, Scrublands, Fields	Common	
TURNERACEAE					
Turnera diffusa		Shrub	Old fields, edges of Coppices	Occasional	
Turnera ulmifolia	Buttercups, Yellow Alder	Shrub	Beaches, Coastal dunes, Scrublands	Occasional	
VERBENACEAE					
Lantana involucrata	Sage Cop, Wild Sage	Shrub	Scrublands, Edges of thickets	Common	Lucayan Arch End
ZYGOPHYLLACEAE					
Guaiacum officinale	Lignum vitae	Tree	Coastal coppices, coppices	Occasional	NPSCC
Guaiacum sanctum	Lignum vitae	Tree	Coastal coppices, coppices	Common	NPSCC

Notes:

Habitats from Correll & Correll: Flora of the Bahama Archipelago

Occurrence Categories:

Abundant = Present in more than 20 of the 125 plots

Common = Present in 11-20 of the 125 plots

Occasional = present in 1-10 of the 125 plots

Uncommon = Observed on the property, but was not present in any of the plots

Green shading = Species identified as protected by the Government of the Bahamas and/or international treaties

Pink shading = Species identified in Bahamas National Invasive Species Strategy

Endemic status based on designations by Freid, et. al. (2014) and Correll & Correll (1982)

APPENDIX VII

Latitude and Longitude Coordinates for Landside Vegetation Analysis Plots

Table_
Latitude Longitude Coordinates for Landside Vegetation Analysis Plots

Plot	Latitude	Longitude		Plot	Latitude	Longitude
1a	21° 33' 00.8" N	71° 30' 27.3" W		5e	21° 32' 56.8" N	71° 30' 10.8" W
1b	21° 33' 00.3" N	71° 30' 27.7" W		5f	21° 32' 57.1" N	71° 30' 13.5" W
1c	21° 32' 59.6" N	71° 30' 28.4" W		6a	21° 33' 03.5" N	71° 29' 57.0" W
1d	21° 33' 58.9" N	71° 30' 28.8" W		6b	21° 33' 03.3" N	71° 30' 00.9" W
1e	21° 33' 58.6" N	71° 30' 29.2" W		6c	21° 33' 03.2" N	71° 30' 04.1" W
2a	21° 32' 57.4" N	71° 30' 21.5" W		6d	21° 33' 03.1" N	71° 30' 06.5" W
2b	21° 32' 56.5" N	71° 30' 21.5" W		7a	21° 32' 56.5" N	71° 30' 08.6" W
2c	21° 32' 56.1" N	71° 30' 22.2" W		7b	21° 33' 11.5" N	71° 29' 55.9" W
2d	21° 32' 55.9" N	71° 30' 22.5" W		7c	21° 33' 11.4" N	71° 29' 56.5" W
2e	21° 32' 55.6" N	71° 30' 22.9" W		7d	21° 33' 11.3" N	71° 29' 56.9" W
3a	21° 32' 40.2" N	71° 29' 56.3" W		7e	21° 33' 11.6" N	71° 29' 57.6" W
3b	21° 32' 40.2" N	71° 29' 57.3" W		8a	21° 33' 17.9" N	71° 29' 53.4" W
3c	21° 32' 39.4" N	71° 29' 59.8" W		8b	21° 33' 18.0" N	71° 29' 54.8" W
3d	21° 32' 38.9" N	71° 30' 00.6" W		8c	21° 33' 17.7" N	71° 29' 55.8" W
3e	21° 32' 38.5" N	71° 30' 04.9" W		8d	21° 33' 18.1" N	71° 29' 56.2" W
4a	21° 32' 47.4" N	71° 29' 55.7" W		8e	21° 33' 18.0" N	71° 29' 56.8" W
4b	21° 32' 47.1" N	71° 29' 58.6" W		9a	21° 33' 22.7" N	71° 29' 51.3" W
4c	21° 32' 47.2" N	71° 30' 00.2" W		9b	21° 33' 22.7" N	71° 29' 52.6" W
4d	21° 32' 47.3" N	71° 30' 04.3" W		9c	21° 33' 22.7" N	71° 29' 52.9" W
4e	21° 32' 47.0" N	71° 30' 07.8" W		9d	21° 33' 22.4" N	71° 29' 53.8" W
4f	21° 32' 47.2" N	71° 30' 09.8" W		9e	21° 33' 22.7" N	71° 29' 54.7" W
5a	21° 32' 56.3" N	71° 29' 54.3" W		10a	21° 33' 28.6" N	71° 29' 49.9" W
5b	21° 32' 56.2" N	71° 30' 02.2" W		10b	21° 33' 28.6" N	71° 29' 51.3" W
5c	21° 32' 56.7" N	71° 30' 04.9" W		10c	21° 33' 28.8" N	71° 29' 51.9" W

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

Table_
Latitude Longitude Coordinates for Landside Vegetation Analysis Plots

5d	21° 32' 56.5" N	71° 30' 08.6" W	10d	21° 33' 28.7" N	71° 29' 52.4" W
Plot	Latitude	Longitude			
10e	21° 33' 28.7" N	71° 29' 53.4" W			
11a	21° 33' 35.2" N	71° 29' 51.7" W			
11b	21° 33' 35.4" N	71° 29' 52.3" W			
11c	21° 33' 35.2" N	71° 29' 52.6" W			
11d	21° 33' 35.5" N	71° 29' 53.4" W			
11e	21° 33' 35.7" N	71° 29' 54.7" W			
12a	21° 33' 42.7" N	71° 29' 51.8" W			
12b	21° 33' 42.5" N	71° 29' 52.9" W			
12c	21° 33' 42.6" N	71° 29' 53.7" W			
12d	21° 33' 42.5" N	71° 29' 54.4" W			
12e	21° 33' 42.3" N	71° 29' 55.3" W			
13a	21° 33' 50.1" N	71° 29' 51.2" W			
13b	21° 33' 50.0" N	71° 29' 52.1" W			
13c	21° 33' 50.2" N	71° 29' 53.3" W			
13d	21° 33' 50.0" N	71° 29' 53.1" W			
13e	21° 33' 50.8" N	71° 29' 54.8" W			
14a	21° 34' 01.7" N	71° 29' 52.7" W			
14b	21° 34' 02.2" N	71° 29' 53.1" W			
14c	21° 34' 02.5" N	71° 29' 54.0" W			
14d	21° 33' 03.0" N	71° 29' 54.8" W			
15a	21° 34' 04.2" N	71° 29' 54.1" W			
15b	21° 34' 03.4" N	71° 29' 54.9" W			
15c	21° 34' 02.9" N	71° 29' 55.1" W			

Table_
Latitude Longitude Coordinates for Landside Vegetation Analysis Plots

15d	21 ⁰ 34' 02.5" N	71 ⁰ 29' 55.2" W
15e	21 ⁰ 34' 02.3" N	71 ⁰ 29' 55.5" W

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

APPENDIX VIII

Dry Sieve Analysis

Radioecological Laboratory
University of the West Indies
Department of Physics
Mona Campus
Kingston 7
Jamaica
Tel: 876 -927-2480

Dry Sieve Analysis Report

Report No	220307	Report Date	March 7, 2022
Client:	Smith Warner International Limited Attention To Mr. Roberto Lyn		
Sample Collected by	Client	Sample Type	sand
Sample Quantity and Packing	3 plastic bags approximately 2 kg	Sample List	SR North, SR South, GTM Beach
Sample Description	Light brown sand		
Date Sample was received	25/02/2022	Date of analysis	07/03/2022

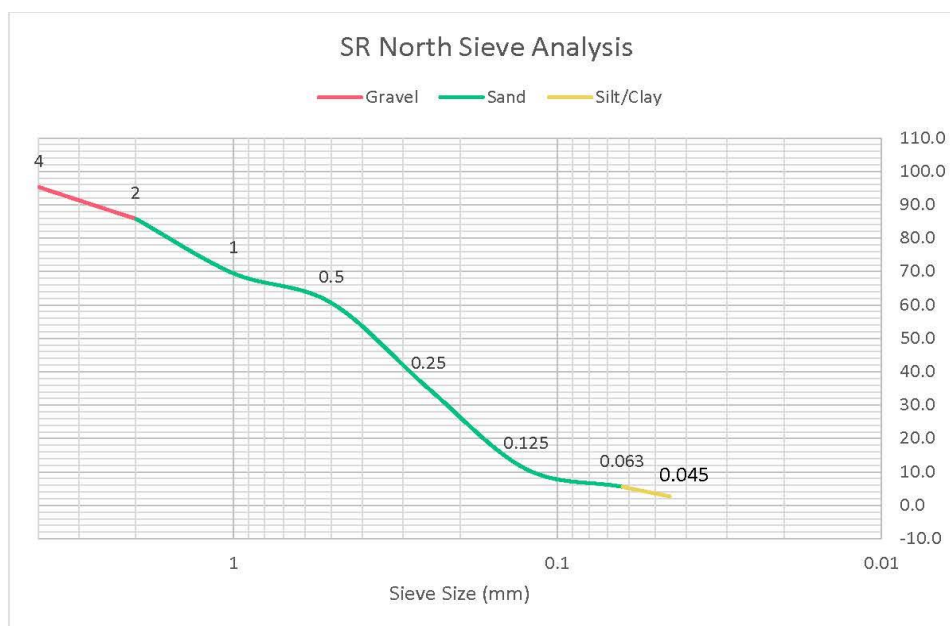
Sample	D10	D16	D30	D50	D60	D90
SR North	0.118	0.151	0.218	0.362	0.486	2.860
SR South	0.257	0.292	0.363	0.518	0.673	1.820
GTM Beach	0.176	0.206	0.281	0.382	0.450	0.926

	%Gravel	%Sand	%silt/clay	Cc	Cu
SR North	14.2	80.2	5.6	0.829	4.119
SR South	6.3	93.3	0.4	0.762	2.619
GTM Beach	2.8	97.0	0.2	0.997	2.557

These results are for the exclusive use of the client for whom they were obtained. They apply only to the samples tested and are not indicative of apparently identical samples.

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

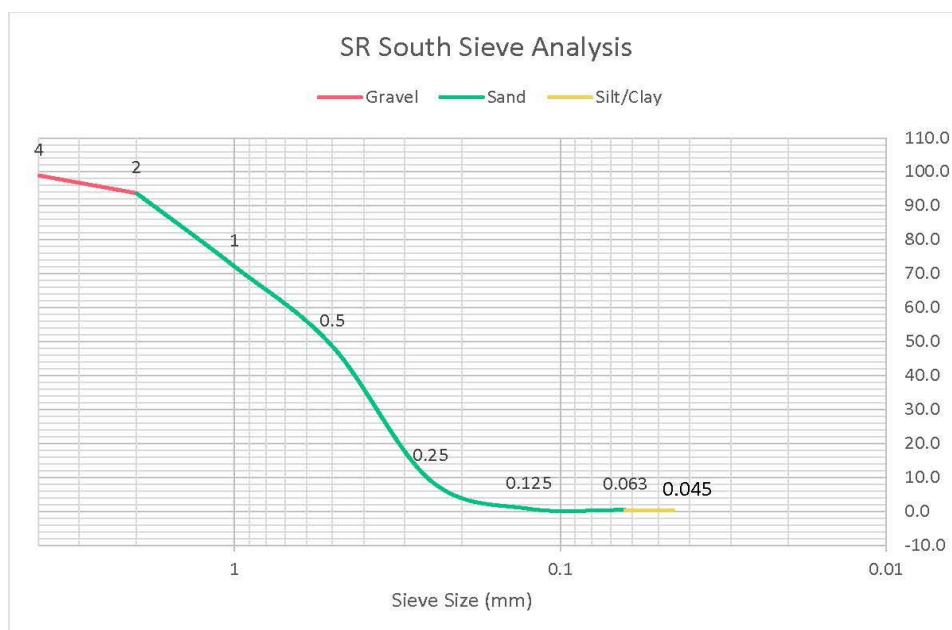
SR North					
Sample mass (g) = 386.8					
	Retained		Cumulative		pass %
sieve (mm)	retained weight (g)	retained %	cumulative weight (g)	cumulative %	
4	18.0	4.7	18.0	4.7	95.3
2	36.9	9.5	54.9	14.2	85.8
1	63.0	16.3	117.9	30.5	69.5
0.5	34.1	8.8	152.0	39.3	60.7
0.25	99.6	25.7	251.6	65.0	35.0
0.125	92.8	24.0	344.4	89.0	11.0
0.063	20.9	5.4	365.3	94.4	5.6
0.045	11.1	2.9	376.4	97.3	2.7
Pan	10.4	2.7	386.8	100.0	0.0



These results are for the exclusive use of the client for whom they were obtained. They apply only to the samples tested and are not indicative of apparently identical samples.

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

SR South					
Sample mass (g) = 658.9					
	Retained		Cumulative		pass %
sieve (mm)	retained weight (g)	retained %	cumulative weight (g)	cumulative %	
4	6.5	1.0	6.5	1.0	99.0
2	34.7	5.3	41.2	6.3	93.7
1	142.1	21.6	183.3	27.8	72.2
0.5	155.7	23.6	339.0	51.4	48.6
0.25	260.3	39.5	599.3	91.0	9.0
0.125	54.4	8.3	653.7	99.2	0.8
0.063	2.5	0.4	656.2	99.6	0.4
0.045	1.2	0.2	657.4	99.8	0.2
Pan	1.5	0.2	658.9	100.0	0.0



Analyzed by: André M Gordon
Verified by:

These results are for the exclusive use of the client for whom they were obtained. They apply only to the samples tested and are not indicative of apparently identical samples.

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

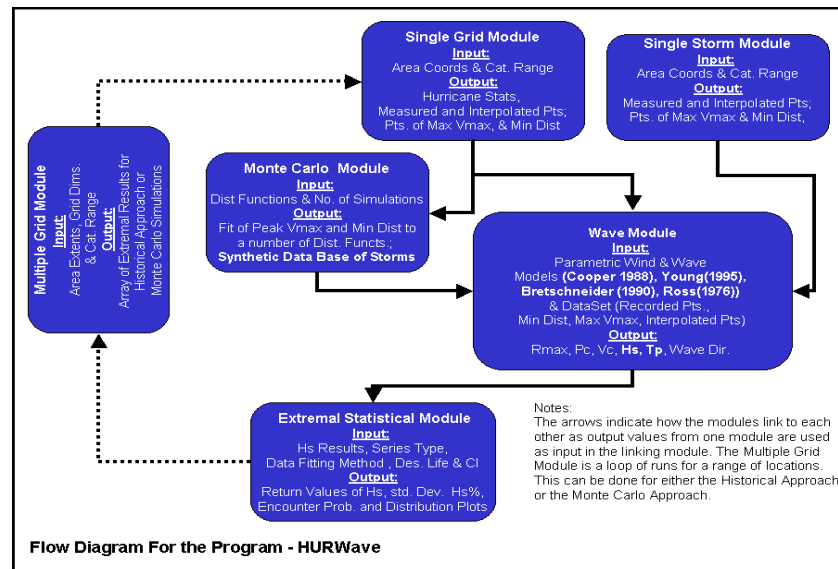
PENDIX IX

HURWave – A package of Hurricane Parametric Wave Models and Extremal Statistical Analysis by Jamel D. Banton

HURWave

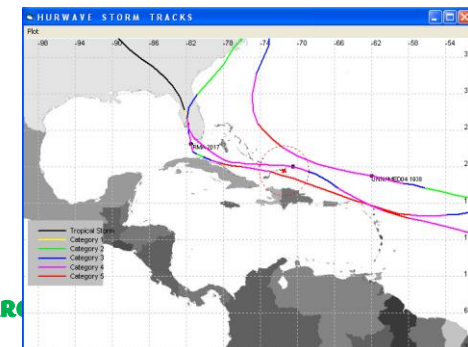
A package of Hurricane Parametric Wave Models and Extremal Statistical Analyses by Jamel D. Banton

HURWave combines the database of the National Oceanic and Atmospheric Administration (NOAA), of hurricane tracks, with wind and wave distribution algorithms to statistically determine deep-water design wave conditions at any location within the Caribbean and the Gulf of Mexico.



The program consists of six main modules, namely: The Single Grid Module; The Single Storm Module; The Wave Module; The Extremal Statistical Module; The Monte Carlo Module; and The Multiple Grid Module. These are shown in the flow chart following.

The NOAA database consists of Atlantic hurricane track positions along with wind and pressure conditions at 6-hour intervals, since the late 19th century. For any specified location within the North Atlantic Basin, HURWave searches this database for Tropical storms and hurricanes that have passed within a



specified distance from the point of interest. The program produces several statistical descriptions for this result.

Several widely used wind and wave models are applied to produce a hindcast dataset of hurricane wave conditions at the point in question. These models include Cooper (1988) and Young (1995).

The Cooper model was developed by statistically analysing the output from numerical wind and wave models for six Gulf of Mexico hurricanes. The storms used covered a wide cross-section of hurricane conditions.

In the case of Young, he first developed an extensive synthetic database by running a numerical wave prediction model for a wide range of hurricane parameters. The data from these numerical experiments were then used to clarify the wave generation process within hurricanes and further to develop the parametric model suitable for wave prediction in deep water. This model was further calibrated with over 100 measurements made by the GEOSAT satellite.

With the results of these models, a range of extremal statistical analyses may be carried out in HURWave. The extremal methods applied are based on work published by Yoshima Goda in 1988 for statistically analysing extreme events such as hurricane waves. Distribution functions such as Weibull and Fischer Tippet (Type I) are fitted to the model results and the best fit chosen. The results include the values for wind, wave and water level conditions for various return periods.

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

Return Wave Heights and Variations																				
Refresh																				
Rp	FT - I				Return Values For The Peak Value Series															
									Weibull											
	Hs	σ	Hs%	EP	k = 0.75	σ	Hs%	EP	k = 1.00	σ	Hs%	EP	k = 1.40	σ	Hs%	EP	k = 2.00	σ	Hs%	EP
2	4.15	0.2	4.4	100.0	3.54	0.2	3.8	100.0	3.81	0.2	4.1	100.0	4.09	0.2	4.4	100.0	4.32	0.2	4.6	100.0
5	5.92	0.3	6.2	100.0	5.52	0.4	5.8	100.0	5.82	0.4	6.1	100.0	6.02	0.4	6.3	100.0	6.11	0.3	6.4	100.0
10	7.14	0.4	7.4	99.5	7.25	0.5	7.5	99.5	7.34	0.6	7.6	99.5	7.29	0.4	7.6	99.5	7.18	0.3	7.5	99.5
20	8.33	0.5	8.6	92.3	9.16	0.7	9.5	92.3	8.87	0.8	9.2	92.3	8.47	0.5	8.8	92.3	8.11	0.4	8.4	92.3
25	8.70	0.5	9.0	87.0	9.80	0.8	10.1	87.0	9.36	0.8	9.6	87.0	8.84	0.6	9.1	87.0	8.39	0.4	8.7	87.0
50	9.87	0.6	10.2	63.6	11.89	1.0	12.2	63.6	10.88	1.0	11.2	63.6	9.93	0.6	10.2	63.6	9.20	0.5	9.5	63.6
100	11.03	0.7	11.3	39.5	14.09	1.2	14.4	39.5	12.40	1.2	12.7	39.5	10.97	0.7	11.3	39.5	9.95	0.5	10.2	39.5
CI =	95 %																			
	Cor=	0.996			Cor=	0.867			Cor=	0.951			Cor=	0.991			Cor=	0.998		

APPENDIXX – X

List of Site Photos – Terrestrial Assessment



Wilson's Plovers at Sail Rock Site - April 2022



Woodstar at Sail Rock Site - April 2022

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS



Yellow Warbler at Sail Rock Site - April 2022



Yellow Crown Night Heron at Sail Rock Site - April 2022

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS



Hemitrochus snail at Sail Rock Site - April 2022



*Vahellia acuifera - Pork and Doughboy- Fabuceae- Pork at Sail Rock Site
- April 2022*

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

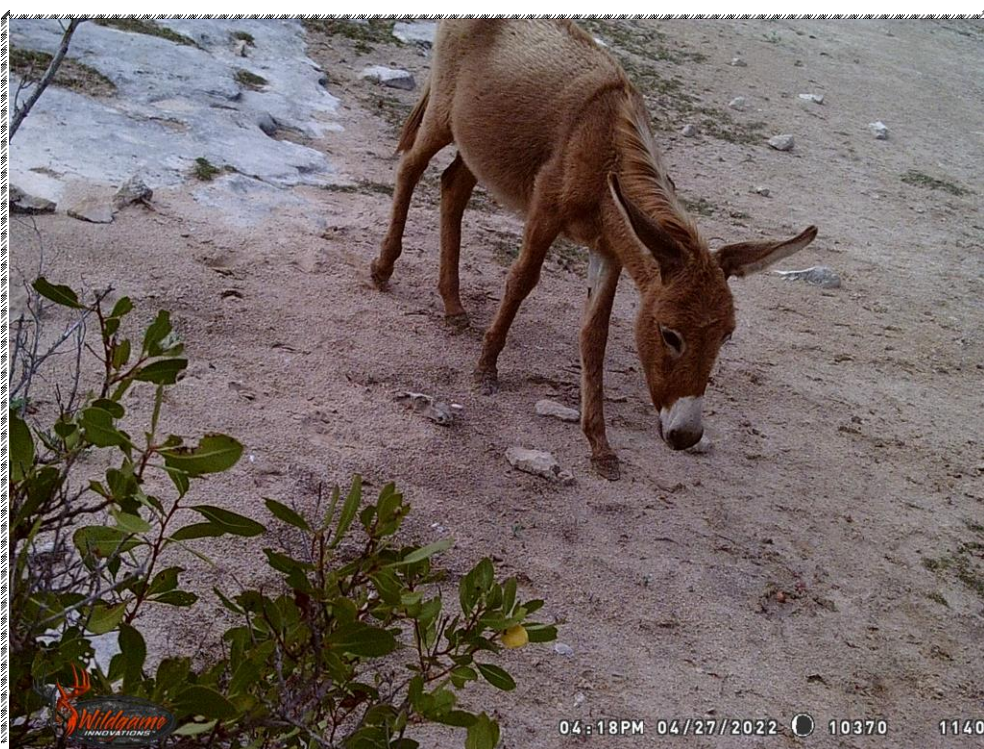


Melocactus Intortus - Turk's Cap at Sail Rock Site - April 2022

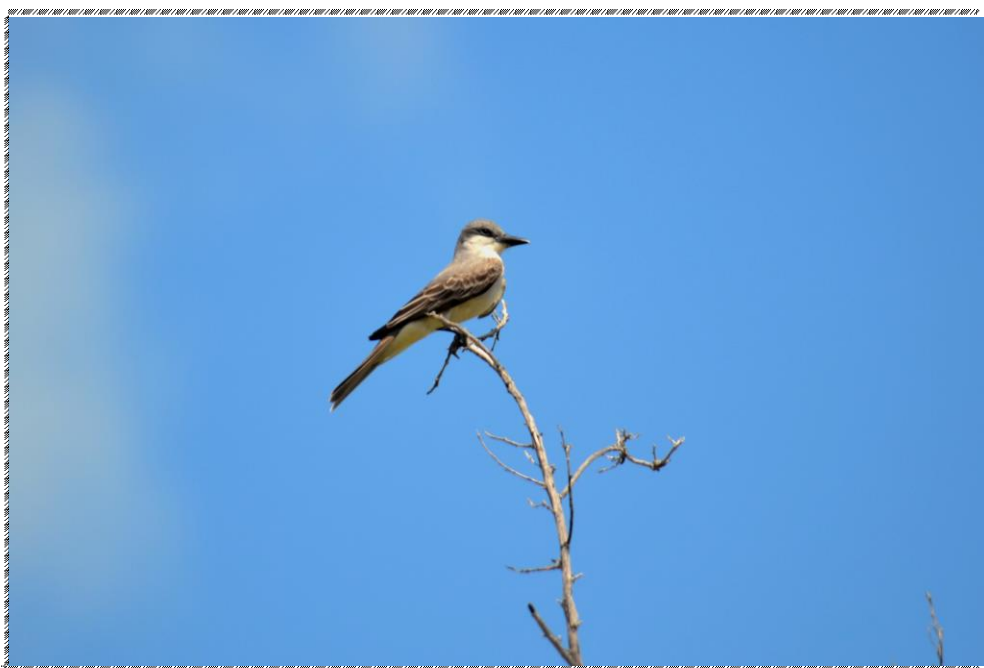


Coastal Dwarf Shrubland at Sail Rock Site - April 2022

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS



Donkey in Season Wetland at Sail Rock Site - April 2022



Gray Kingbird at Sail Rock Site - April 2022

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS



Encyclia altissima & Pilocereus at Sail Rock Site - April 2022

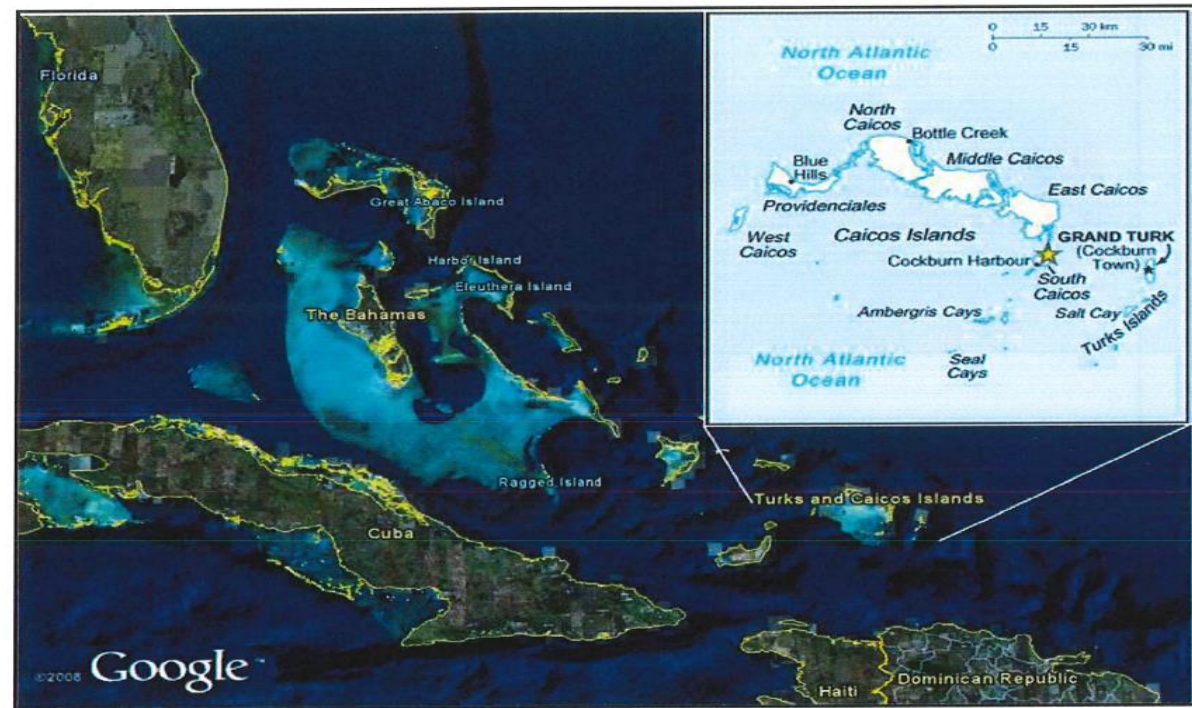


Peanut Snails at Sail Rock Site - April 2022

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

APPENDIX – XI

Project Plans – Site Location Plan – Regional Context



Site Location Plan – Regional Context

CARIBBEAN ENVIRONMENTAL DESIGN ASSOCIAT(CEDA) - MARCH 2023

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

APPENDIX – XII

Project Plans – Site Location Plan – Island Context



Site Location Plan – South Caicos

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

APPENDIX – XIII

Project Plans – Site Location Plan – Sail Rock Peninsula



Site Location Plan

CARIBBEAN ENVIRONMENTAL DESIGN ASSOCIAT(CEDA) – MARCH 2023

APPENDIX – XIV

Topography Plan Sail Rock Peninsula



Topography Plan Sail Rock Peninsula

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

APPENDIX – XV

Topography Sail Rock Peninsula



Topography Plan Sail Rock Peninsula

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

APPENDIX – XVI

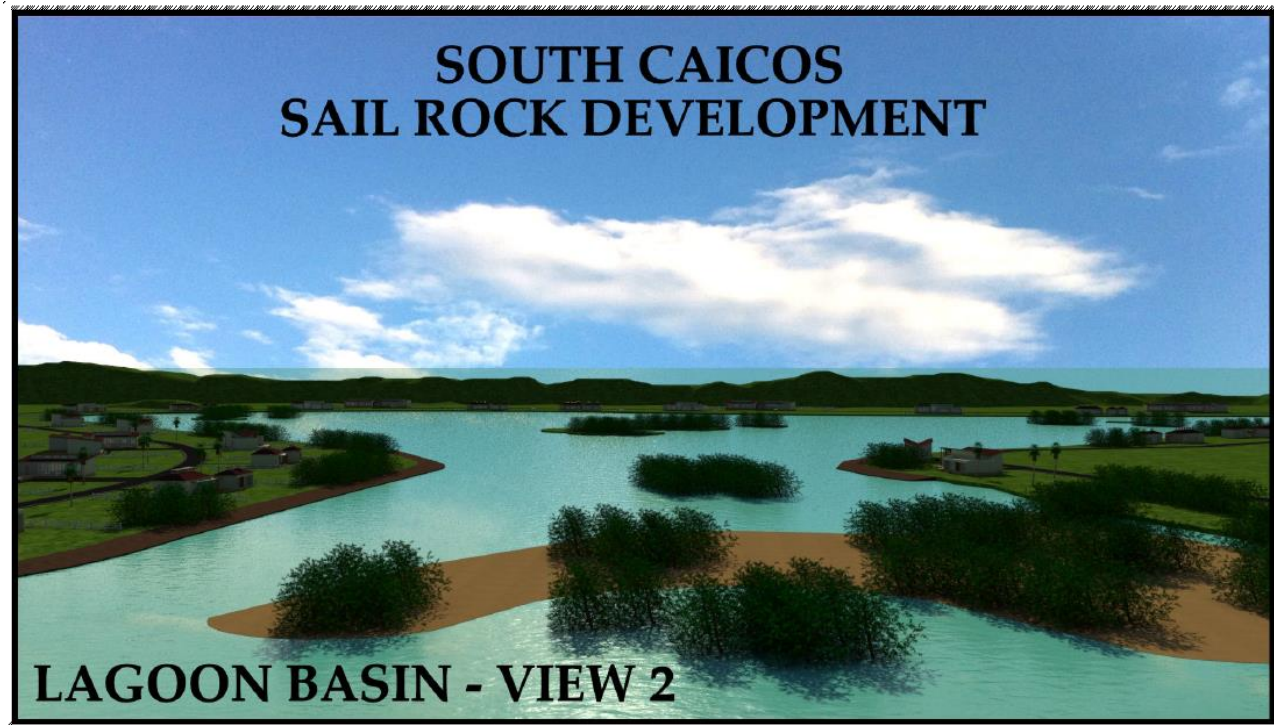
Topography Plan Sail Rock Peninsula



Topography Plan Sail Rock Peninsula

APPENDIX – XVII

Lagoon Basin Plan – Rendering Plan



Blue Water Lagoon Basin - Rendering

CARIBBEAN ENVIRONMENTAL DESIGN ASSOCIAT(CEDA) - MARCH 2023

**COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER
LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT
DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS**

APPENDIX – XVIII

Lagoon Basin Plan – Rendering Plan

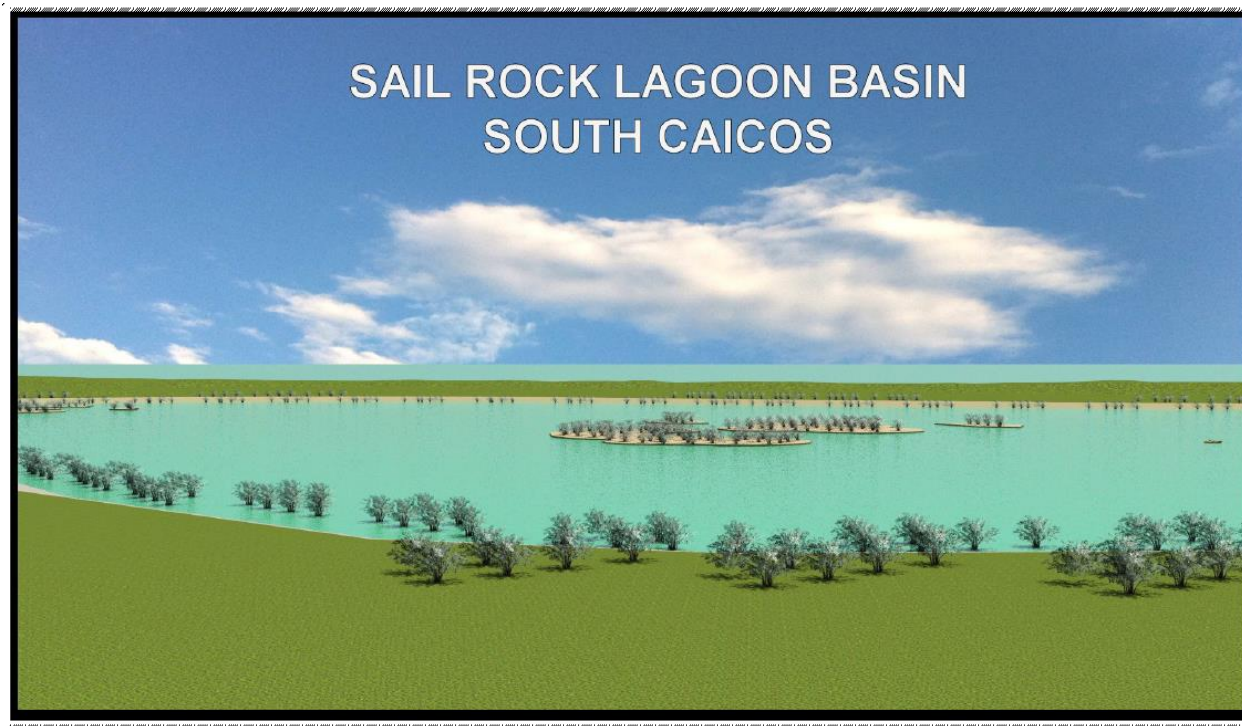


Blue Water Lagoon Basin - Rendering

CARIBBEAN ENVIRONMENTAL DESIGN ASSOCIAT(CEDA) - MARCH 2023

APPENDIX – XIX

Lagoon Basin Rendering Plan



Blue Water Lagoon Basin – Rendering

CARIBBEAN ENVIRONMENTAL DESIGN ASSOCIAT(CEDA) – MARCH 2023

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

APPENDIX – XX

Recent Drone Image of Sail Rock Peninsula



Recent Drone Image of Sail Rock Peninsula

CARIBBEAN ENVIRONMENTAL DESIGN ASSOCIAT(CEDA) – MARCH 2023

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

APPENDIX – XXI

Recent Drone Image of Sail Rock Peninsula



Recent Drone Image of Sail Rock Peninsula

CARIBBEAN ENVIRONMENTAL DESIGN ASSOCIAT(CEDA) – MARCH 2023

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

APPENDIX – XXII

Recent Drone Image of Sail Rock Peninsula



Recent Drone Image of Sail Rock Peninsula

CARIBBEAN ENVIRONMENTAL DESIGN ASSOCIAT(CEDA) – MARCH 2023

APPENDIX – XXIII

Recent Drone Image of Sail Rock Peninsula



Recent Drone Image of Sail Rock Peninsula

CARIBBEAN ENVIRONMENTAL DESIGN ASSOCIAT(CEDA) – MARCH 2023

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

APPENDIX – XXIV

Recent Drone Image of Sail Rock Peninsula



Recent Drone Image of Sail Rock Peninsula

CARIBBEAN ENVIRONMENTAL DESIGN ASSOCIAT(CEDA) – MARCH 2023

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

APPENDIX – XXV

Recent Drone Image of Sail Rock Peninsula – Former Coast Guard Site



Recent Drone Image of Sail Rock Peninsula

CARIBBEAN ENVIRONMENTAL DESIGN ASSOCIAT(CEDA) – MARCH 2023

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

APPENDIX – XXVI

Recent Drone Image of Sail Rock Peninsula



Recent Drone Image of Sail Rock Boutique Hotel and Villa Development

CARIBBEAN ENVIRONMENTAL DESIGN ASSOCIAT(CEDA) – MARCH 2023

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

APPENDIX – XXVII

Recent Drone Image of Sail Rock Villas



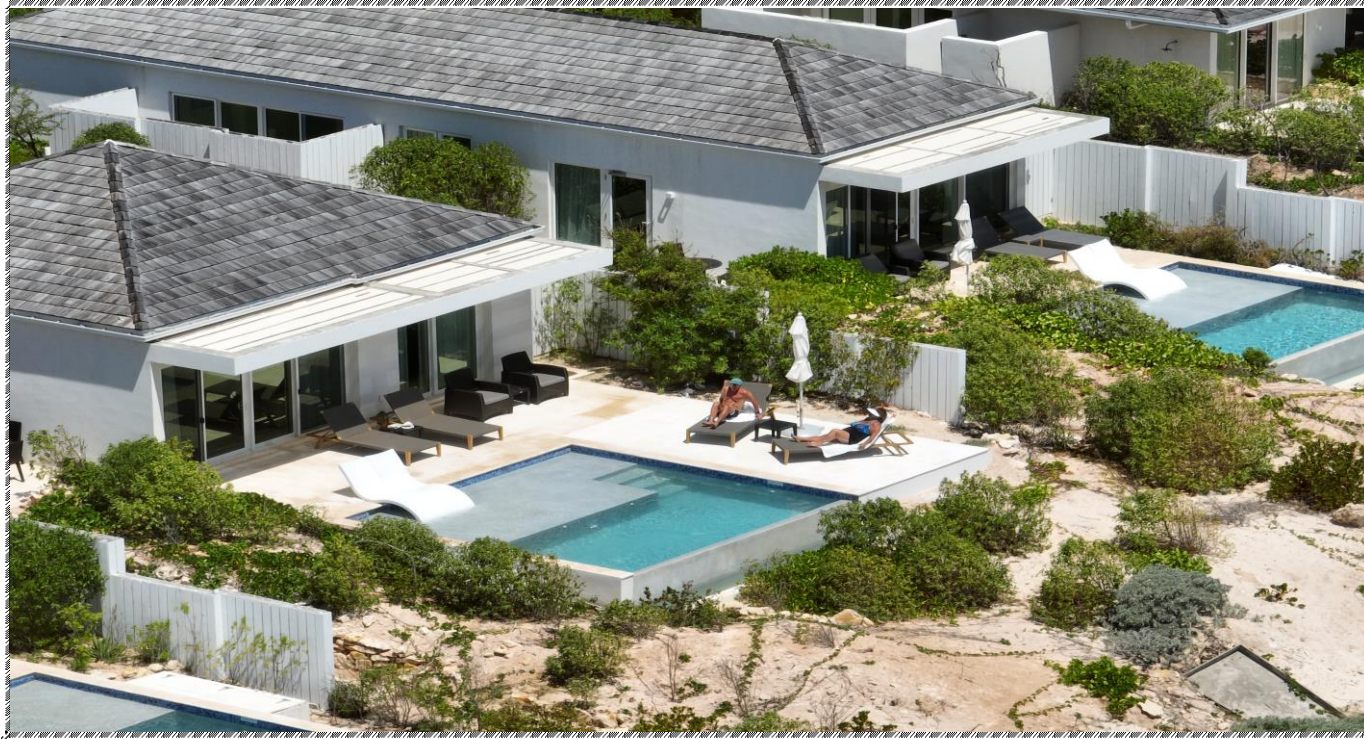
Recent Drone Image of Sail Rock Boutique Hotel and Villa Development

CARIBBEAN ENVIRONMENTAL DESIGN ASSOCIAT(CEDA) – MARCH 2023

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

APPENDIX – XXVIII

Recent Drone Image of Sail Rock Peninsula – Boutique Hotel & Villas



Recent Drone Image of Sail Rock Boutique Hotel and Villa Development

CARIBBEAN ENVIRONMENTAL DESIGN ASSOCIAT(CEDA) – MARCH 2023

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

APPENDIX – XXIX

Recent Drone Image of Sail Rock Peninsula – Beach Bar & Restaurant



Recent Drone Image of Sail Rock Boutique Hotel and Villa Development

CARIBBEAN ENVIRONMENTAL DESIGN ASSOCIAT(CEDA) – MARCH 2023

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

APPENDIX – XXX

Recent Drone Image of Sail Rock Peninsula – Former High Point Hotel Development



Recent Drone Image of Neighbouring High Point Hotel Development

CARIBBEAN ENVIRONMENTAL DESIGN ASSOCIAT(CEDA) – MARCH 2023

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

APPENDIX – XXXI

Recent Drone Image of Sail Rock Peninsula – Bell Sound Nature Reserve



Recent Drone Image of Bell Sound Nature Reserve

CARIBBEAN ENVIRONMENTAL DESIGN ASSOCIAT(CEDA) – MARCH 2023

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

APPENDIX – XXXII

Recent Drone Image of Cockburn Harbour



Recent Drone Image of Cockburn Harbour

CARIBBEAN ENVIRONMENTAL DESIGN ASSOCIAT(CEDA) – MARCH 2023

APPENDIX – XXXIII

Grant of Outline Development Permission – Master Plan

FORM DOP 10

TURKS AND CAICOS ISLANDS
THE PHYSICAL PLANNING ORDINANCE 1989
(No. 10 of 1989)
THE PHYSICAL PLANNING (DEVELOPMENT PERMISSION)
REGULATIONS 1990

GRANT OF OUTLINE DEVELOPMENT PERMISSION
(Section 30)

APPLICATION NO: SC 600 **BLOCK & PARCEL NO:** 20215 / 20218/20219/20220

To: CMK DEVELOPMENT LTD

In pursuance of powers conferred under the above mentioned Ordinance, the Board hereby GRANTS in accordance with the terms and conditions authorised by the Ordinance, approval in principle to undertake the following development:

Master Plan

as described in your application for a grant of outline development permission dated 25/May/2007 and in the plans and drawings attached thereto, subject to compliance with the relevant statutory provisions and with the following conditions:

1. The submission to and approval by the Board of full details of the development.
2. See Notes 1 and 2
3. Parcels that are not under the ownership of the applicant, but are the subject of development, must be accompanied by a letter of awareness from the rightful owners. In the case of Crown Land as shown on the plans, including any construction in the marine environment, written permission must be sought and obtained from the Cabinet, TCI Government.
4. A strategic environmental impact assessment or feasibility study must be carried out on the proposed plan to determine the suitability of the types of land usage, layout and configuration, densities, etc. Terms of Reference (TOR) for the study must be prepared by the Director of Planning. The individuals who will be engaged in carrying out the study must be approved by the Director of Planning. The phasing plan for the entire development must be included in the feasibility study.
5. Specific phases of the development will require a site specific environmental impact assessment (EIA) to be carried out prior to submission of detailed planning applications, for example: Creation of a Marina; Installation of Wastewater Treatment and Disposal Facilities; Storage and Containment of Hazardous Fuels; and any dredging and reclamation works. Subsequent, separate and full outline planning application must be submitted for creation of the marina and canals as shown on the plans. The provisions of Section 7, of the latest edition of the TCI Development Manual must be complied with.
6. Subsequent planning applications for any development, including subdivision(s), shall not be submitted or given favourable consideration until the feasibility study have been carried out and determined. Decisions arising out of the study may effect modifications and/or additions to the master plan.
7. Consent must be sought from the Crown for connection from an existing thoroughfare over Crown Land to the lands under consideration as shown on sheet "SP1". The connection must meet the existing thoroughfare at a right angle and as far away as possible from any road junctions or curves.
8. All development must comply with planning standards as provided in the latest edition of the TCI Development Manual.
9. Any advertisement sign(s) to be erected shall be the subject of a subsequent and separate planning application for consideration and determination by the Physical Planning Board.

Page 1 of 2

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

GRANT OF OUTLINE DEVELOPMENT PERMISSION

(Section 30)

10. Full compliance shall be demonstrated with all the conditions of this grant of this outline development permission.


The reason(s) for the imposition of the condition(s) specified (or attached) is/are:

One copy of the application and the accompanying plans and drawings are returned with this Grant.

Dated:

JUL 09 2007

Signed:


DIRECTOR OF PLANNING

NOTES

1. An outline development permission means a development permission granted on the basis of an application for outline development permission, which gives approval in principle to the development the subject of the application for outline development permission, but does not of itself permit any development to be commenced. See Section 29(a) Physical Planning Ordinance.
2. An application for a detailed development permission must be submitted to the Director of Planning within one year of the date of notification of this Grant, failing which, this grant will lapse and cease to have any effect. You may however ask for an extension of that one year period, and if it is granted, this Grant will remain valid, and effective for the period of extension. See Section 37 Planning Ordinance.

All communications relating to this decision should be addressed to:

The Director of Planning
Department of Planning
Grand Turk

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

APPENDIX – XXXIV

Grant of Outline Development Permission – Creation of a Peninsula Channel

FORM DOP 10

TURKS AND CAICOS ISLANDS
THE PHYSICAL PLANNING ORDINANCE 1989
(No. 10 of 1989)
THE PHYSICAL PLANNING (DEVELOPMENT PERMISSION)
REGULATIONS 1990

GRANT OF OUTLINE DEVELOPMENT PERMISSION
(Section 30)

APPLICATION NO: SC 808 BLOCK & PARCEL NO: 20202 / 24

To: SAILROCK EATATES LIMITED

In pursuance of powers conferred under the above mentioned Ordinance, the Board hereby GRANTS in accordance with the terms and conditions authorised by the Ordinance, approval in principle to undertake the following development:

Creation of a Peninsula Channel on Block & Parcel 20202/24, 267, 269, 270, 331, 334, 356, 357

as described in your application for a grant of outline development permission dated 12/Jun/2020 and in the plans and drawings attached thereto, subject to compliance with the relevant statutory provisions and with the following conditions:

1. The submission to and approval by the Board of full details of the development.
2. See Notes 1 and 2
3. The applicant and/or developer shall explain the works/diggings currently on the site.
4. The nature and scope of the project requires an Environmental Impact Assessment (EIA) to determine the potential impact of the propose project to the ecology/environment, socio-cultural and socio-economic aspect of South Caicos and TCI in general. An ecosystem study and economic analysis must be conducted to determine the best use of the area, without affecting the ecological integrity of the area during the present and future generations.
5. Although the applicant indicated that an EIA has been conducted, an updated EIA with renewed Terms of Reference (ToR) must be conducted by qualified and experienced professionals with excellent track records.
6. The DECR in cooperation with other departments and units shall prepare the Terms of Reference for the EIA, with the basic mandate due regard to the need to foster and protect an environment that is not harmful to the health or well-being of present and future generation, while promoting justifiable economic and social development (Sec. 18.1), TCI Constitution.
7. Prior to any works related to the application, the DECR requires drone-taken imageries through Block/parcel 20202-24, 267, 269, 270, 334, 356, 257. A detailed mapping by drones should be taken and processed by industry standard software (for example by <https://www.dronedeploy.com/> or any similar processing platform). Drone imageries should be taken before, during and after the project. The DECR require both the raw data and processed data (imageries).
8. The southern end of the proposed canal will connect to the Bell Sound Nature Reserve. The DECR is aware of the proposal to adjust the boundaries of the Protected Areas and declassify the Nature Reserve to National Park, however, the proposed amendments is not yet completed. It is a position of the TCI government that any changes in boundaries of the Protected Areas that are considered "contentious", an environmental impact assessment (EIA) must be conducted by qualified, experienced and independent professionals, to provide informed decision.
9. The northern opening of the proposed canal is the subject of planning application SC 808 and SAC 809 and should be viewed as one project and not independent of each other. The EIA shall be done as one project to determine the cumulative impact of the other project.
10. The nature and scope of the proposed project, including related projects/developments of Sailrock Development

Page 1 of 2

GRANT OF OUTLINE DEVELOPMENT PERMISSION

(Section 30)

Ltd. the DECR will require an Environmental Management Plan (EMP) to be prepared by qualified, experienced and independent professionals.

11. The dredging sequencing plan shall be submitted for consideration and determination.

12. The applicant shall indicate the design and type of the edge treatment on the canal.

13. Any temporary site structures/development shall be strictly prohibited unless development permission is sought and obtained from the Physical Planning Board.

14. The Crown Land Unit shall provide consent to the creation of openings to the ocean and any dredging outside the confines of the applicants parcel boundaries.

15. Full compliance shall be demonstrated with all the conditions of this grant of outline development permission.

The reason(s) for the imposition of the condition(s) specified (or attached) is/are:

One copy of the application and the accompanying plans and drawings are returned with this Grant.

Dated: October 2, 2020

Signed:


DIRECTOR OF PLANNING

NOTES

1. An outline development permission means a development permission granted on the basis of an application for outline development permission, which gives approval in principle to the development the subject of the application for outline development permission, but does not of itself permit any development to be commenced. See Section 29(a) Physical Planning Ordinance.
2. An application for a detailed development permission must be submitted to the Director of Planning within one year of the date of notification of this Grant, failing which, this grant will lapse and cease to have any effect. You may however ask for an extension of that one year period, and if it is granted, this Grant will remain valid, and effective for the period of extension. See Section 37 Planning Ordinance.

All communications relating to this decision should be addressed to:

The Director of Planning
Department of Planning
Grand Turk

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

APPENDIX – XXXV

Grant of Outline Development Permission – Boat Dock

FORM DOP 10

TURKS AND CAICOS ISLANDS
THE PHYSICAL PLANNING ORDINANCE 1989
(No. 10 of 1989)
THE PHYSICAL PLANNING (DEVELOPMENT PERMISSION)
REGULATIONS 1990

GRANT OF OUTLINE DEVELOPMENT PERMISSION
(Section 30)

APPLICATION NO: SC 809 BLOCK & PARCEL NO: 20202 / 236

To: SAILROCK ESTATES LTD

In pursuance of powers conferred under the above mentioned Ordinance, the Board hereby GRANTS in accordance with the terms and conditions authorised by the Ordinance, approval in principle to undertake the following development:


Boat Dock

as described in your application for a grant of outline development permission dated 17/Jun/2020 and in the plans and drawings attached thereto, subject to compliance with the relevant statutory provisions and with the following conditions:

1. The submission to and approval by the Board of full details of the development.
2. See Notes 1 and 2
3. Due to initial information from DECR South Caicos Office about parcel 236, the applicant is required to verify if the parcel indicated in the application document is correct.
4. The applicant shall verify if this is a private boat dock.
5. If parcel 236 is indeed the correct parcel a full EIA is required, the policy and procedures on EIA, public consultation, review process shall apply.
6. The DECR in cooperation with other departments and units shall prepare the Terms of Reference for the EIA, with the basic mandate due regard to the need to foster and protect an environment that is not harmful to the health or well-being of present and future generation, while promoting justifiable economic and social development (Sec. 18.1), TCI Constitution.
7. The northern opening of the proposed canal is the subject of planning application SC 808 and SAC 809 and should be viewed as one project and not independent of each other. The EIA shall be done as one project to determine the cumulative impact of the other project.
8. The Crown Land Unit shall provide consent for any works outside the confines of the applicants parcel boundaries.
9. Full compliance shall be demonstrated with all the conditions of this grant of outline development permission.

The reason(s) for the imposition of the condition(s) specified (or attached) is/are:

One copy of the application and the accompanying plans and drawings are returned with this Grant.

Dated: October 2, 2020 Signed: 
DIRECTOR OF PLANNING

NOTES

Page 1 of 2

APPENDIX XXXVI

Grant of Extension of Time to Implement a Grant of Development Permission –
Creation of a Peninsula Channel

FORMDOP 22

TURKS AND CAICOS ISLANDS
PHYSICAL PLANNING ORDINANCE
DEVELOPMENT PERMISSION REGULATIONS

**GRANT OF EXTENSION OF TIME TO IMPLEMENT
A GRANT OF DEVELOPMENT PERMISSION**

(Section 49(2))

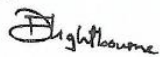
To: SAIL ROCK ESTATES LTD

Application No: SC 834

Parcel No(s): 20202/24, 267, 269, 270, 331, 334, 256, 357

In pursuance of powers conferred under the above mentioned Ordinance, the Board hereby Grants an extension of One (1) Year from September 2, 2021 to enable you to implement the grant of development permission dated October 2, 2020 for the following development:

Creation of a Peninsula Channel

Dated: OCT 06 2021 Signed: 
DIRECTOR OF PLANNING

NOTES:

A further extension of time may be applied for using the appropriate form but no undertaking whatsoever is hereby given or implied that a further extension, if applied for, will be granted.

Any communication about this matter should be addressed to:

The Director of Planning
Department of Planning
Grand Turk

APPENDIX XXXVII

Grant of Extension of Time to Implement a Grant of Development Permission – Boat Dock

FORM DOP 22

TURKS AND CAICOS ISLANDS
PHYSICAL PLANNING ORDINANCE
DEVELOPMENT PERMISSION REGULATIONS

**GRANT OF EXTENSION OF TIME TO IMPLEMENT
A GRANT OF DEVELOPMENT PERMISSION**

(Section 49(2))

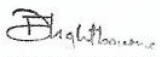
To: SAIL ROCK ESTATES LTD

Application No: SC 835

Parcel No(s): 20202/236

In pursuance of powers conferred under the above mentioned Ordinance, the Board hereby Grants an extension of One (1) Year from September 2, 2021 to enable you to implement the grant of development permission dated October 2, 2020 for the following development:

Boat Dock

Dated: OCT 06 2021..... Signed: 
DIRECTOR OF PLANNING

NOTES:

A further extension of time may be applied for using the appropriate form but no undertaking whatsoever is hereby given or implied that a further extension, if applied for, will be granted.

Any communication about this matter should be addressed to:
The Director of Planning
Department of Planning
Grand Turk

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

APPENDIX – XXXVIII

Grant of Detailed Development Permission – Excavation and Enhancement of Lagoon

FORM DOP 11

TURKS AND CAICOS ISLANDS
THE PHYSICAL PLANNING ORDINANCE 1989
(No. 10 of 1989)
THE PHYSICAL PLANNING (DEVELOPMENT PERMISSION)
REGULATIONS 1990

GRANT OF DETAILED DEVELOPMENT PERMISSION
(Section 30)

APPLICATION NO: SC 796 **BLOCK & PARCEL NO:** 20202 / 249

To: SAIL ROCK DEVELOPMENT LTD

In pursuance of powers conferred under the above mentioned Ordinance, the Board hereby GRANTS in accordance with the terms and conditions authorised by the Ordinance, detailed development permission to undertake the following development:

Excavation and Enhancement of Lagoon

more particularly described in your application for a grant of detailed development permission dated 24/May/2019 and in the plans and drawings attached thereto, subject to compliance with the relevant statutory provisions and with the following conditions:

1. See Notes 2, 3 and 4 below.
2. The Strategic Environmental Impact Assessment referred to in this application was prepared in 2008. There have been major hurricanes that struck the TCI, hence the bio-physical data needs to be updated. In short, a comprehensive environmental impact assessment (EIA) needs to be conducted. A time series aerial imagery (use available historical images) must be studied and analyzed by qualified, experienced and independent professionals to determine how the area withstand major hurricanes and see what happens thereafter.
3. It is not safe to assume that the level of protection (Protected Areas of the Bell Sound Nature Reserve) will be classified into National Park. Even if it is a national park, there are strict rules to follow before a development is approved.
4. An ecosystem services and economic valuation study must be conducted by qualified, experienced and independent professionals to determine the best use of the area/parcel. Currently, the DECR does not support the destruction of the "beautiful by nature" environment and replace it with manmade/artificial structures and materials like core stones around the lagoon.
5. A mining license under the Mineral (Exploration and Exploitation) Ordinance is required and royalty must be paid to the TCI Government, in accordance with applicable laws
6. Note that connecting this application (parcel 249) to Bell Sound will require clearing of vegetation and excavations involving other parcels to improve flushing. A flushing study (can be part of the EIA mentioned above) must be conducted.
7. Protection/conservation of rare, endangered and endemic species and ecosystems must be given utmost attention and consideration, against destruction.
8. Introduction of alien invasive in species for landscaping or other purposes is discouraged.
9. All developments and environmental damage incurred before the approval of this application should be dealt with in accordance with law.
10. Additional information must be submitted before a Building Permit is issued, including the following:

Page 1 of 4

GRANT OF DETAILED DEVELOPMENT PERMISSION

(Section 30)

-updated representation of the GPS points as a reference to the area where the works will be carried out on detailed dimensioning of the technical plans, detailed plans of the proposed treatment for the edges of the lagoon solutions for the mosquito control and, proposed flushing solution.

11.All works must be in compliance with the latest TCIG Building Code and Development Manual.

12.All works must be carried out to the satisfaction of the Director of Planning and the Director - Environment and Coastal Resources.

13.The applicant shall be financially responsible for any corrective action that may need to be implemented by TCI Government within a five (5) year period after the proposed works in the area.

14.A Dredging License shall be obtained prior to the commencement of the subject development.

15.The applicant shall carry out all surveys and mapping which may reasonably be required for the operation of the dredging license including setting control points marking the extremities and depths allowed for the channel and to utilize excavation equipment that is equipped with a global positioning system (GPS) approved by the Survey and Mapping Department.

16.The dredged sand (minerals) shall not be sold without prior approval from TCIG and shall be subject to royalties.

17.The applicant shall inform DECR of its intention to move minerals from the site not less than 48 hours prior to doing so.

18.No native vegetation shall be destroyed by the dredging equipment.

19.The applicant shall develop a Disaster Mitigation Plan (DMP) - Hurricane and Oil Spill Mitigation Plan - for approval by the Department of Disaster Management and Emergencies (DDME).

20.The specifications of the equipment to be used for the purposes of the License prior to works being carried out shall be submitted to the Department of Planning and DECR.

21.The applicant shall permit the Government, its duly authorized officers and agents with or without workmen and others at all reasonable times during the term of the license, to enter upon the site, to inspect the site and to monitor the environmental impact of the dredging operations and to inspect all vehicles, machinery and sand stock-filing site and to view the operations and the state and condition thereof and to leave on the site notice in writing addressed to the Licensee of all defects and breaches of the license.

22.The applicant shall ensure that the Government, its duly authorized officers and agents may at any time or place be permitted to stop and inspect any vehicle or trailer carrying sand removed from the site and to measure the volume of the sand carried.

23.The applicant shall not permit or suffer to be done anything on the site which may pollute any underground water source or otherwise cause damage to the site or the surrounding land.

24.The applicant shall not sink any shaft or hole without the prior written approval of the Department of Planning and DECR.

25.The applicant shall install all precautionary/safety buoys with lights.

26.A Notice of work shall be published in a national newspaper for at least 2 weeks, and broadcast on local radio stations.

Page 2 of 4

GRANT OF DETAILED DEVELOPMENT PERMISSION

(Section 30)

27. The applicant shall not use any dynamite or other explosive substance on the site.
28. The applicant shall ensure that all reasonable precautions are taken to prevent injury or damage to any visitor or trespasser upon the site and to exercise the license and rights hereby granted in such manner and to such extent as to cause no damage or injury to the owners or occupiers of any adjacent or neighboring land.
29. The applicant shall not by act or omission, cause or permit in the course of the dredging operations hereby licensed any damage or risk of damage to the environment, including the waters, seabed, shores, flora and fauna, either by direct injury, or by pollution, or otherwise, and shall promptly and accurately report to DECRA any event which may constitute such damage or risk.
30. The applicant shall not assign or otherwise dispose of the benefit of the license or any part thereof or any interest therein without the express written consent of the Crown and the Government first had and obtained which consent shall be in the absolute discretion of the Crown and the Government.
31. Dredging operations on the site shall take place during usual work days during daylight hours (Sundays excluded) unless the written authority of the Department of Planning is first sought and obtained.
32. Immediately upon the grant of the Dredging License, the applicant shall submit to the Department of Planning and the DECRA clear plans for site biological restoration using local species and proceed to restore the site in accordance with Planning Department and DECRA requirements immediately upon the approval of those plans.
33. The applicant shall comply with any reasonable direction given by the DECRA and/or by the Department of Planning for the purpose of ensuring the operations on site are undertaken in accordance with the terms of the license and for securing safe condition at the site or in the vicinity thereof.
34. Turbidity curtains shall be used in the aquatic environment along the entire length of the parcel boundary during construction to contain debris and sediment.
35. All areas affected by the works shall be properly restored similar or better to that existing prior to the development or to the satisfaction of the Director of Planning.
36. Lighting inclusive of navigational lighting shall be installed on the where necessary to ensure user and boat safety.
37. The premises and every part thereof shall never appear unsightly and injurious to the amenities of the area.
38. The storage of machinery, articles or materials of whatever kind on the parcel that appears unsightly and injurious to the area shall be strictly prohibited. Failure to comply shall result in enforcement procedures, including penalties, being initiated in accordance with the provisions of the Physical Planning Ordinance, 2014 and Regulations made thereunder.
39. During operation of the development, rubble, waste, abandoned and/or derelict machinery or articles or materials of whatever of kind shall be prohibited from being stored on the parcel.
40. Prior to the issuance of any occupancy certificate(s), temporary or otherwise, all freight containers, plant and machinery and all other construction related articles or materials of whatever kind shall be removed from the parcel to an authorized location.
41. No nuisances whether by noise, dust, smoke, fumes or otherwise shall be caused to the neighbors on the adjoining parcel(s).
42. Full compliance shall be demonstrated with all the conditions of this grant of detailed development permission prior to the issuance of any building permit(s), partial or otherwise

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

GRANT OF DETAILED DEVELOPMENT PERMISSION

(Section 30)

The reason(s) for the imposition of the condition(s) specified (or attached) is/are:

One copy of the application and the accompanying plans and drawings are returned with this Grant.

Dated: 11/12/2019

Signed: _____

Flightbourne
DIRECTOR OF PLANNING

NOTES

1. You may appeal to the Minister against the conditions imposed on this grant of detailed development permission. Any appeal must be made on the appropriate form within 28 days of the date of notification of this grant.
2. This grant of detailed permission is valid for three years from the date of notification. If, within that period of three years, you have not commenced the development for which you have obtained this grant of detailed development permission, the grant lapses and ceases to have any effect. You may, however, before end of the period of three years, seek an extension of the period from the Board. The fee for applying for an extension is \$50. See Section 37, Physical Planning Ordinance.
3. If the period of three years has passed and you wish to renew your application, you may do so by submitting a new application and paying appropriate fee for that application. Any new application will be considered on its merits as an application separate and different from any previous application and the Board will have the power to refuse the application or impose such conditions as it thinks fit on such an application irrespective of whether they were imposed on a previous application for grant of detailed development permission for the same development.
4. This grant of detailed development permission does not itself permit CONSTRUCTION to take place unless this grant of detailed development permission is accompanied by a BUILDING PERMIT issued by the Director of Planning. See Section 66 Physical Planning Ordinance 1989.

All communication relating to this decision should be addressed to:

The Director of Planning
Department of Planning
Grand Turk

APPENDIX – XXXIX

TERMS OF REFERENCE



DEPARTMENT OF ENVIRONMENT AND COASTAL RESOURCES
Ministry Tourism, Environment, Heritage, Maritime, Disaster Management and Gaming
Turks and Caicos Islands Government
OFFICE OF THE DIRECTOR



Terms of Reference for Comprehensive Impact Assessment (CIA) for SC808 & SC809 – Sail Rock Peninsula Canal and Dock

(Block/Parcel 20202-24, 267, 269, 270, 334, 356, 257)

I. Introduction and Overview

Comprehensive Impact Assessment (CIA) to determine the potential impact of the proposed project to the ecology/environment, socio-cultural and socio-economic aspect of South Caicos and TCI in general, and Bell Sound Nature Reserve (NR13) (with consideration to current boundaries) in particular. An ecosystem study and economic analysis must be conducted to determine the best use of the area, without affecting the economical integrity of the area during the present and future generations.

1. Non-technical summary (including aims, objectives and scoping)
2. A brief description of the proposed development
3. Overview of the areas/topics to be addressed in this CIA (present the results of scoping exercise; including complete listing of persons consulted)
4. Impact Assessment methods/analyses

II. Baseline Studies

1. Historical overview of the site and existing development- use historical and current aerial maps (time-series visualization) and official TCI generated map (Block/Parcel). Recent drone-taken images, processed by drone mapping software and/or high-resolution imageries are highly recommended. Consider current boundaries to Bell Sound Nature Reserve (NR13).
2. Physical environmental baseline assessment
 - a. Any areas to be affected by the proposed development. The areas within reasonable distance (not less than 300 feet radius) should be assessed and characterized.
 - b. Coastal profiles extending from within 500 metres of the proposed development site in both directions along the shoreline,
 - c. Bathymetry extending to 500 metres from the coast,
 - d. Geology and geomorphology of both the terrestrial (including wetlands) and marine environment,
 - e. Substrate and sediment analyses, including grain size characteristics,
 - f. Topography of the proposed area to be developed or affected area with the proposed development, include proposed further developments related to the project.
 - g. Geology and geomorphology of area to be affected, including presence of sinkholes or any topographic depression formed when underlying limestone bedrock is dissolved by groundwater
 - h. Climate and meteorology
 - i. Hydrology -occurrence, distribution, connectivity, movement, and quantity of water within the property and how it will affect the surrounding community and/or any improvements thereof (as applicable)

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS



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- j. Historical and archaeological features (anthropogenic features, artefacts, structures) from prior human habitation or use of site
3. Biological environmental baseline assessment
 - a. Baseline terrestrial (including wetlands) environment – to include a quantitative description of any terrestrial and wetland ecological assets within 100 feet and/or areas to be directly impacted by the proposed project and a qualitative assessment of assets that may be indirectly impacted, including mapping in accordance with the National Standardized Vegetation Classification, 2010 (digital copies can be provided by DEMA upon request). Mapping should also be provided to DEMA in GIS digital format. Secondary data may be used, subject to submission of report and full description of the methodology (DoP and DECR will review the report and indicate comments).
 - b. Baseline marine environment – to include qualitative description of all marine habitats extending from the coastline, extending to 500 metres from the property line in all directions,
 - c. Quantitative description of marine habitats, flora and fauna, within the above described zone,
 - d. Quantitative description of terrestrial flora and fauna, including population estimates for any rare, threatened, endangered or endemic species, and
 - e. Baseline aesthetics;
4. Coastal processes and dynamics, including:
 - a. Tides,
 - b. Currents, and
 - c. Sediment transport;
5. Coastal water quality, including a baseline for nitrogen (nitrite, nitrate, ammonia), phosphate (ortho and organic) and sulphide to an ultra-low level, in addition to fecal coliform, TSS, BOD and chlorophyll a, b and c; and,
6. Conservation/Preservation zones; any recommended area or species within the proposed development site.

III. Project Description and Alternatives

This section will outline a detailed description of the proposed project and possible alternatives to be considered, and will include the following:

1. Project justification, including an analysis of cost and expenditure versus need and benefit, bio-physical, ecological justifications, socio-economic justifications, other justifications;
2. Description of the development (include all project components, drawings prepared by qualified professionals);
3. Description of construction phase activities, including:
 - a. Construction methods and sequencing,
 - b. Excavation, terraforming, and mineral movement (including soil, mangrove peat, sand, rock, coral rag, aragonite, or other natural substrate)
 - c. Construction materials,
 - d. Schedule and working hours,
 - e. Equipment,
 - f. Construction access and staging,
 - g. Solid waste management,
 - h. Liquid waste management,

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- i. Control of runoff,
 - j. Control of potential air, land and water pollutants,
 - k. Control of noise,
 - l. Storage of fuels and other toxic substances, and
 - m. Emergency mitigation plan;
4. Description of operational phase activities;
5. Description of decommissioning phase activities;
6. Description of dredging operations, including location for the storage and de-watering of fill material and quantity and type of minerals to be generated, and documentation of any works already carried out;
7. Description of shoreline protection and any coastal engineering structures, including modelling of how these structures will affect the flow of currents and transport of sediments;
8. Source of beach sand; and documentation of any prior sand movement by applicant;
9. Restoration and landscaping plan, including detailed plant and materials lists;
10. Financial resources to ensure that once commenced, the project is completed;
11. Modelling of the flushing capacity and characteristics of the canal;
12. Modelling of runoff and drainage from the developed site; and
13. Consideration of Alternatives, including:
 - a. 'No-go' alternative,
 - b. Design alternatives,
 - c. Activity alternatives,
 - d. Site layout alternatives,
 - e. Technology alternatives, and
 - f. Summary of alternatives.

IV. Legislative and Regulatory Context – to include a discussion of any aspects of law, regulation and/or policy relevant to the project, such as but not limited to the following:

1. TCI Development Plan/Master Plan
2. TCI Physical Planning Ordinance
3. TCI Development Manual
4. TCI Building Code
5. TCI National Parks Ordinance
6. Mineral Exploration and Exploitation Ordinance
7. Ordinance and subsidiary legislation (in relation to the protected area Bell Sound Nature Reserve)
8. TCI Coast Protection Ordinance
9. TCI Marine Pollution Ordinance
10. Etc.

V. Environmental Impact Assessment

This section will assess the potential environmental impacts faced during the construction and operational phases. Potential impacts to the following environmental aspects are to be addressed:

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1. The biotic environment, including all terrestrial, coastal and marine habitats within the specified area of study;
2. The physical environment, including beach profile and bathymetry;
3. Coastal water quality;
4. Sedimentation;
5. Public access and recreational use;
6. Impacts to future neighbouring developments and businesses;
7. Social and economic impacts;
8. Aesthetics; and
9. Other impacts including flooding or storm surge.

Note: Address any potential cumulative impacts of other project components

VI. Monitoring

This section shall describe an environmental monitoring program relevant to the environmental issues identified. Identify specific variables to be monitored, environmental standards and detection to be used, including but not limited to:

1. Monitoring for pre-, during- and post-construction construction;
2. Post-construction monitoring, to include a schedule of activities for monitoring the following:
 - a. Marine biota within the canal and in coastal areas within a 500 metre radius of the property boundary,
 - b. Bathymetry within the canal and within a 500 metre radius of the property, and
 - c. Water quality within the canal and in coastal areas within a 500 metre radius of the property, using the same parameters as tested for baseline studies;
3. Field team for monitoring; and
4. Government oversight.

VII. Mitigation

To include a description of activities that will require mitigation, corrective, compensatory and other measures to be used to eliminate, minimizing or mitigate adverse/significant impacts and how these measures will be selected. The mitigation measures shall aim to avoid, minimize, remedy or compensate for the predicted adverse impacts of the project. This section should also include the following:

1. Proposed actions to mitigate against any environmental impact;
2. A storm surge analysis and mitigation plan for sea level rises associated with tropical cyclones and climate change, including measures to minimize potential impacts;
3. A summary of financial and economic values for mitigation methods;
4. Risk prevention mechanisms or activities and a schedule and proposed budget to avoid the occurrence of negative impacts and/or control measures;
5. Involvement of key stakeholders in a public consultation process. Describe the methods and information to be discussed.

An Environmental Management Plan (EMP) must be prepared with the following minimum components:

1. Summary of the potential impacts of the proposal;
2. Description of the recommended mitigation measures;

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Ministry Tourism, Environment, Heritage, Maritime, Disaster Management and Gaming
Turks and Caicos Islands Government
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3. Statement of their compliance with relevant standards;
4. Allocation of resources and responsibilities for plan implementation;
5. Schedule of the actions to be taken;
6. Programme for surveillance, monitoring and auditing; and
7. Contingency plan when impacts are greater than expected.

VIII. Recommendations and Conclusions

This section will include incorporating information and guidance gleaned from the assessment.

IX. Appendices

To include the qualifications of the team of experts and the special requirements and information needed to form the team to conduct the EIA for this project.

1. The Terms of Reference (ToR) for the EIA as issued by DoP, TCIG.
2. Qualifications of the EIA team of experts and the special requirements and information needed to form the team to conduct the EIA for this project. The contact information (functional phone numbers and email addresses) must be provided.
3. Government Permits (e.g. work permits, research permit, etc., if required).
4. Site Plan, project plans, architectural drawing and other related documents.
5. Portable data format (pdf) file of the reports of independent consultants involved in the EIA, if any.
6. Scientific analyses reports (pdf copy from the Laboratory that analyzed the samples, and the like), if any.
7. Standards or protocols and assumptions used in predicting the environmental impacts.
8. Public Consultative Meeting and Stakeholders meeting reports. Include evidence of advertisement for Public Consultative Meetings, the names and contact information for those who attended the meetings, issues raised and conclusions.
9. Photo documentations (with captions – dates, place, description of the subject to the photo).
10. Certification/legal document from the EIA group/company that submits the EIS, that all submitted reports/documents and etc. as part of the EIA report/EIS were first-hand information and if it taken from secondary source, the authors should be properly acknowledged or compensated.

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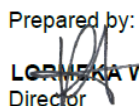


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Ministry Tourism, Environment, Heritage, Maritime, Disaster Management and Gaming
Turks and Caicos Islands Government
OFFICE OF THE DIRECTOR



Note: The EIA Report must be submitted in digital files, in addition to the number of printed copies required by DoP.

Prepared by:


LORMEKA WILLIAMS, MSc.
Director
Department of Environment and Coastal Resources
Turks and Caicos Islands Government

Date: 12 May 2021

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

APPENDIX – XL

Additional Information submitted for Approval of CEIA Team



CARIBBEAN ENVIRONMENTAL DESIGN ASSOCIATES
Architects & Planners



January 21, 2022

Mr. Dainer Lightbourne
Director of Planning
South Base
Grand Turk.

Mrs. Lormeka Williams
Director of the Department of Environment and Coastal Resources
Lower Bight Road
The Bight
Providenciales

Re: Additional Information Submitted on Application for Approval of EIA Team for Sail Rock Peninsula Channel and Construction of Boat Dock, Sail Rock, South Caicos, Turks and Caicos Islands submitted by Caribbean Environmental Design Associates.

We refer to your comments on the above mention application.

As per your request, we submit the following additional information in support of our application for approval of the assembled EIA Team to carry out the Comprehensive Environmental Impact Assessment for Sail Rock Peninsula Channel and Boat Dock, Sail Rock, South Caicos, Turks and Caicos.

1. An updated copy of D. Greg Braun's CV.
2. A copy of Bahamian Predensa Moore's CV. Predensa is added to the Team to assist Greg Braun with fieldwork. We believed her experience with Bahamian flora, seeing that its similar to that of the Turks and Caicos would add value to the Team in this area.
3. We also have strengthened the Team with Marine Biologist Janeen Marlo Bullard as pre-your request, her outstanding resume is attached.

Kind Regards.

.....
Oswald R. Williams BSc. MA. MRTPI
Caribbean Environmental Design Associates

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

APPENDIX – XLI

LETTER OF APPROVAL OF Comprehensive Environmental Impact Assessment (CEIA) TEAM



**MINISTRY OF PHYSICAL PLANNING AND
INFRASTRUCTURES DEVELOPMENT
DEPARTMENT OF PLANNING**

March 21, 2022

Mr. Oswald Williams
CEDA
Grand Turk
Turks and Caicos Islands

Dear Mr. Williams,

Re: Consideration of Team – Environmental Impact Assessment – SC 808 Creation of Peninsula Channel and Construction of Boat Dock (20202/24, 236, 267, 270, 331, 334, 356 and 257)

Please be advised that in accordance with the sections 45 (1) (b) of the Physical Planning Ordinance, 2018, and as per your communication dated 18th January, 2022, the subject EIA team has been approved. Find attached terms of reference (TOR) for conducting the Environmental Impact Assessment (EIA) for the above captioned project.

During the assessment, the applicant shall consult with the relevant government departments and agencies. The list of the Team members are as follows:

1. **Philip Warner** - Smith Warner International Ltd. - Coastal Engineers
2. **Janeen Marlo Bullard** - JSS Consultants - Marine Biologist (Nassau Bahamas)
3. **Greg Braun** - Sustainable Ecosystems International -Terrestrial Ecologist
4. **Predensa Moore** - Assistant Terrestrial Ecologist to Greg Braun - (Nassau Bahamas).
5. **Ezekiel Hall** - EnvironmentalAll - Hydrogeopgical and Archeological.
6. **Oswald R. Williams** - Caribbean Environmental Design Associates - Physical Planning Aspects, Socio-economic and Cultural.

Once Completed, five (5) hard copies and one (1) soft copy of the EIA document shall be submitted to the Department of Planning.

Please be advised and guided accordingly.

Respectfully,

Reginald Charles
Assistant Director Planning (Ag) / Secretary Physical Planning Board
For: *Director of Planning*

TELEPHONE: (649) 338-2203

EMAIL: rlcharles@gov.tc

South Base
Grand Turk
TURKS & CAICOS ISLANDS
BRITISH WEST INDIES

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

APPENDIX – XLII

Scientific Research Permit – Sail Rock Peninsula Channel and Boat Dock



Department of Environment and Coastal Resources
Ministry of Tourism, Environment, Fisheries, Maritime Affairs, Culture & Heritage, Agriculture, Religious Affairs and Gaming, Turks and Caicos Islands Government
 Lower Bight Road, Providenciales
 Turks and Caicos Islands
SCIENTIFIC RESEARCH PERMIT

SRP No.: 2022-04-12-14

Main Title of Research:	Sail Rock Peninsula Channel and Boat Dock
Principal:	Caribbean Environmental Design Associates (Oswald R. Williams)
Other applicants:	EnvironmentalAll (Ezekiel Hall), Sustainable Ecosystems International (D. Greg Braun & Predensa Wilhelmina Moore) & Smith Warner International (Philip Warner) & JSS Consulting (Janeen Marlo Bullard)
Partners/collaborators in TCI (if any):	EnvironmentalAll (Ezekiel Hall),
Type of application:	Commercial
Location:	Sail Rock, South Caicos, Turks and Caicos Islands
Total duration of application:	One Year (Three months)
Period covered by this application:	1 May 2022 – 30 April 2023 (May – August 2022)
Research Fee:	\$500 TCIG Receipt 1533688648


Authorized Approving Officer:



LORMEKA WILLIAMS, MSc.
 Director, DECR

Date: 12 April 2022

Not Valid without the
Official Seal of the DECR



Note:

This Permit should be presented to authorized-DECOR Officers or TCIG officials when requested during monitoring activities which may be done anytime throughout the duration of the approved activities. The Application for Research Permit, Conditions of Approval and required attachments may be requested too.

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

APPENDIX – XLIII

Assignment of Sections of ToR to CEIA Team

Terms of Reference for Comprehensive Impact Assessment (CIA) for SC808 & SC809 – Sail Rock Peninsula Canal and Dock , Turks and Caicos Islands – Block/Parcel 20202/24, 267, 269, 270, 334, 356, 257

Sections Assignment to EIA Team

Smith Warner International – Coastal Engineers	Sustainable Ecosystems International - Terrestrial	EnvironmentAll - Hydrogeologist	Caribbean Environmental Design Associates (CEDA) – Project Coordinator
<p>I Introduction and Overview</p> <p>Comprehensive Impact Assessment (CIA) to determine the potential impact of the proposed project to the ecology/environment, socio-cultural and socio-economic aspect of South Caicos and TCI in general, and Bell Sound Nature Reserve (NR13) (with consideration to current boundaries) in particular. An ecosystem study and economic analysis must be conducted to determine the best use of the area, without affecting the economical integrity of the area during the present and future generations.</p> <ol style="list-style-type: none"> 1. Non-technical summary (including aims, objectives and scoping) 2. A brief description of the proposed development 3. Overview of the areas/topics to be addressed in this CIA (present the results of scoping exercise; including complete listing of persons consulted) 4. Impact Assessment methods/analyses 	<p>I Introduction and Overview</p> <p>Comprehensive Impact Assessment (CIA) to determine the potential impact of the proposed project to the ecology/environment, socio-cultural and socio-economic aspect of South Caicos and TCI in general, and Bell Sound Nature Reserve (NR13) (with consideration to current boundaries) in particular. An ecosystem study and economic analysis must be conducted to determine the best use of the area, without affecting the economical integrity of the area during the present and future generations.</p> <ol style="list-style-type: none"> 1. Non-technical summary (including aims, objectives and scoping) 	<p>I Introduction and Overview</p> <p>Comprehensive Impact Assessment (CIA) to determine the potential impact of the proposed project to the ecology/environment, socio-cultural and socio-economic aspect of South Caicos and TCI in general, and Bell Sound Nature Reserve (NR13) (with consideration to current boundaries) in particular. An ecosystem study and economic analysis must be conducted to determine the best use of the area, without affecting the economical integrity of the area during the present and future generations.</p>	<p>I Introduction and Overview</p> <p>Comprehensive Impact Assessment (CIA) to determine the potential impact of the proposed project to the ecology/environment, socio-cultural and socio-economic aspect of South Caicos and TCI in general, and Bell Sound Nature Reserve (NR13) (with consideration to current boundaries) in particular. An ecosystem study and economic analysis must be conducted to determine the best use of the area, without affecting the economical integrity of the area during the present and future generations.</p> <ol style="list-style-type: none"> 1. Non-technical

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

<p>II Baseline Studies</p> <p>4. Historical overview of the site and existing development- use historical and current aerial maps (time-series visualization) and official TCI generated map (Block/Parcel). Recent drone-taken images, processed by done mapping software and/or high-resolution imageries are highly recommended. Consider current boundaries to Bell Sound Nature Reserve (NR13).</p> <p>5. Physical environmental baseline assessment</p> <p>a. Any areas to be affected by the proposed development. The areas within reasonable distance (not less than 300 feet radius) should be assessed and characterized.</p> <p>b. Coastal profiles extending from within 500 metres of the proposed development site in both directions along the shoreline,</p> <p>c. Bathymetry extending to 500 metres from the coast,</p> <p>d. Geology and geomorphology of both the terrestrial (including wetlands) and marine environment,</p> <p>e. Substrate and sediment analyses, including grain size characteristics,</p> <p>3. Biological environmental baseline assessment</p>	<p>2. A brief description of the proposed development</p> <p>3. Overview of the areas/topics to be addressed in this CIA (present the results of scoping exercise; including complete listing of persons consulted) 4. Impact Assessment methods/analyses</p> <p>II Baseline Studies</p> <p>1. Historical overview of the site and existing development- use historical and current aerial maps (time-series visualization) and official TCI generated map (Block/Parcel). Recent drone-taken images, processed by done mapping software and/or high-resolution imageries are highly recommended. Consider current boundaries to Bell Sound Nature Reserve (NR13).</p> <p>2.</p> <p>3. Biological environmental baseline assessment</p> <p>a. a. Baseline terrestrial (including wetlands) environment – to include a</p>	<p>1. Non-technical summary (including aims, objectives and scoping)</p> <p>2. A brief description of the proposed development</p> <p>3. Overview of the areas/topics to be addressed in this CIA (present the results of scoping exercise; including complete listing of persons consulted) 4. Impact Assessment methods/analyses</p> <p>II Baseline Studies</p> <p>1. Historical overview of the site and existing development- use historical and current aerial maps (time-series visualization) and official TCI generated map (Block/Parcel). Recent drone-taken images, processed by done mapping software and/or high-resolution imageries are highly recommended.</p>	<p>summary (including aims, objectives and scoping)</p> <p>2. A brief description of the proposed development</p> <p>3. Overview of the areas/topics to be addressed in this CIA (present the results of scoping exercise; including complete listing of persons consulted) 4. Impact Assessment methods/analyses</p> <p>II Baseline Studies</p> <p>1. Historical overview of the site and existing development- use historical and current aerial maps (time-series visualization) and official TCI generated map (Block/Parcel). Recent drone-taken images, processed by done mapping software and/or high-resolution imageries are highly recommended. Consider current boundaries to Bell Sound Nature Reserve (NR13).</p>
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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

<p>b. Baseline marine environment – to include qualitative description of all marine habitats extending from the coastline, extending to 500 metres from the property line in all directions,</p> <p>c. Quantitative description of marine habitats, flora and fauna, within the above described zone,</p> <p>4. Coastal processes and dynamics, including:</p> <ol style="list-style-type: none"> Tides, Currents, and Sediment transport; <p>5. Coastal water quality, including a baseline for nitrogen (nitrite, nitrate, ammonia), phosphate (ortho and organic) and sulphide to an ultra-low level, in addition to fecal coliform, TSS, BOD and chlorophyll a, b and c; and,</p> <p>III Project Description and alternatives</p> <p>This section will outline a detailed description of the proposed project and possible alternatives to be considered, and will include the following:</p> <ol style="list-style-type: none"> Project justification, including an analysis of cost and expenditure versus need and benefit, bio-physical, ecological justifications, socio-economic justifications, other justifications; <p>3. Description of construction phase activities, including:</p> <ol style="list-style-type: none"> Construction methods and sequencing, Excavation, terraforming, and mineral 	<p>quantitative description of any terrestrial and wetland ecological assets within 100 feet <u>and/or</u> areas to be directly impacted by the proposed project and a qualitative assessment of assets that may be indirectly impacted, including mapping in accordance with the National Standardized Vegetation Classification, 2010 (digital copies can be provided by DEMA upon request). Mapping should also be provided to DEMA in GIS digital format. Secondary data may be used, subject to submission of report and full description of the methodology (DoP and DECR will review the report and indicate comments).</p> <p>d. Quantitative description of terrestrial flora and fauna, including population estimates for any rare, threatened, endangered or endemic species, and</p>	<p>Consider current boundaries to Bell Sound Nature Reserve (NR13).</p> <p>2. Physical environmental baseline assessment.</p> <p>d. Geology and geomorphology of both the terrestrial (including wetlands) and marine environment,</p> <p>f. Topography of the proposed area to be developed or affected area with the proposed development, include proposed further developments related to the project.</p> <p>g. Geology and geomorphology of area to be affected, including presence of sinkholes or any topographic depression formed when underlying limestone bedrock is dissolved by groundwater</p> <p>h. Climate and meteorology</p> <p>i. Hydrology -occurrence, distribution, connectivity, movement, and quantity of</p>	<p>3. Biological environmental baseline assessment</p> <p>e. Baseline aesthetics;</p> <p>6. Conservation/Preservation zones; any recommended area or species within the proposed development site.</p> <p>III Project Description and alternatives</p> <ol style="list-style-type: none"> Description of the project (include drawings prepared by qualified professionals). Project design based on appropriate computer modelling. Project justification- socio-economic justifications, other justifications. <p>3. Construction materials, storage and work hours.</p> <p>a. Construction materials,</p>
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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

<p>movement (including soil, mangrove peat, sand, rock, coral rag, aragonite, or other natural substrate)</p> <p>m. Emergency mitigation plan;</p> <p>5 Description of decommissioning phase activities;</p> <p>6. Description of dredging operations, including location for the storage and de-watering of fill material and quantity and type of minerals to be generated, and documentation of any works already carried out;</p> <p>7. Description of shoreline protection and any coastal engineering structures, including modelling of how these structures will affect the flow of currents and transport of sediments;</p> <p>8. Source of beach sand; and documentation of any prior sand movement by applicant;</p> <p>10. Financial resources to ensure that once commenced, the project is completed;</p> <p>13. Consideration of Alternatives, including:</p> <ul style="list-style-type: none"> a. "No go" alternative b. Design Alternative c. Activity alternative d. Site layout alternatives e. Technology and materials alternatives 	<p>III Project Description and alternatives</p> <p>This section will outline a detailed description of the proposed project and possible alternatives to be considered, and will include the following:</p> <p>1. Project justification, including an analysis of cost and expenditure versus need and benefit, bio-physical, ecological justifications, socio-economic justifications, other justifications;</p> <p>m. Emergency Mitigation Plan</p> <p>5. Description of decommissioning phase activities;</p> <p>5. Restoration and landscaping plan, including detailed plant and materials lists;</p> <p>10. Financial resources to ensure that once commenced, the project is completed;</p>	<p>water within the property and how it will affect the surrounding community and/or any improvements thereof (as applicable)</p> <p>j. Historical and archaeological features (anthropogenic features, artefacts, structures) from prior human habitation or use of site</p> <p>III Project Description and alternatives</p> <p>This section will outline a detailed description of the proposed project and possible alternatives to be considered, and will include the following:</p> <p>1. Project justification, including an analysis of cost and expenditure versus need and benefit, bio-physical, ecological justifications, socio-economic justifications, other justifications;</p> <p>m. Emergency mitigation</p>	<p>including sources.</p> <ul style="list-style-type: none"> b. Schedule of working hours c. Storage of construction materials, and other items needed for the project, if any. 4. Construction phase activities. a. Construction methods and program b. Access and staging c. Solid waste management d. Handling of fuels and other hazardous substances, if any e. Emergency mitigation plan 5. Description of operational phase 6. Decommissioning phase 7. Potential alternatives – based on appropriate computer models b. "No go" alternative
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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

<p>f. Summary of alternatives/ 15 Others</p>		<p>plan</p> <p>10. Financial resources to ensure that once commenced, the project is completed;</p> <p>12. Modelling of runoff and drainage from the developed site; and</p> <p>13. Consideration of Alternatives, including:</p> <p>a. "No go" alternative b. Design Alternative c. Activity alternative d. Site layout alternatives e. Technology and materials alternatives f. Summary of alternatives/ 15 Others</p>	<p>c. Design Alternatives d. Activity alternatives e. Site layout alternatives</p> <p>IV Legislative and Regulative Context – to include a discussion of any aspects of law, regulation and/or policy relevant to the project, such as but not limited to the following:</p> <p>1. TCI Development Plan/Master Plan 2. TCI Physical Planning Ordinance 3. TCI Development Manual 4. TCI Building Code 5. TCI National Parks 6. Mineral Exploration and exploitation ordinance 7. Ordinance and subsidiary legislation (in relation to the protected area Bell Sound Nature Reserve) 8. TCI Coast Protection Ordinance 9. TCI Marine Pollution Ordinance 10. Etc.</p>
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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

<p>V Environmental Impact Assessment</p> <p>This section will assess the potential environmental impacts faced during the construction and operational phases. Potential impacts to the following environmental aspects are to be addressed:</p> <ol style="list-style-type: none"> 1. The biotic environment, including all terrestrial, coastal and marine habitats within the specified area of study; 2. The physical environment, including beach profile and bathymetry; 3. Coastal water quality; 4. Sedimentation; 5. Public access and recreational use; 8. Aesthetics. 9. Other impacts including flooding or storm surge. <p>Note: Address any potential cumulative impacts of other project components.</p>	<p>V Impact Assessment</p> <p>This section will assess the potential environmental impacts faced during the construction and operational phases. Potential impacts to the following environmental aspects are to be addressed:</p> <ol style="list-style-type: none"> 1. The biotic environment, including all terrestrial, coastal and marine habitats within the specified area of study; 8. Aesthetics. 9. Other impacts including flooding or storm surge. <p>Other impacts.</p> <p>Note: Address any potential</p>	<p>V Impact Assessment</p> <p>This section will assess the potential environmental impacts faced during the construction and operational phases. Potential impacts to the following environmental aspects are to be addressed:</p> <ol style="list-style-type: none"> 3. Water quality <p>Other impacts.</p> <p>Note: Address any potential cumulative impacts of other project components</p>	<p>V Environmental Impact Assessment</p> <p>This section will assess the potential environmental impacts faced during the construction and operational phases. Potential impacts to the following environmental aspects are to be addressed:</p> <ol style="list-style-type: none"> 5. Public access and recreational use 7. Social, cultural and economic impacts- impact of the development in proposed development to the adjacent properties and 6.8. Aesthetics 9. Other impacts <p>Note: Address any potential cumulative impacts of other project</p>

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

	cumulative impacts of other project components.		components
<p>VI Monitoring</p> <p>This section shall describe an environmental monitoring program relevant to the environmental issues identified. Identify specific variables to be monitored, environmental standards and detection to be used, including but not limited to:</p> <ol style="list-style-type: none"> 1. Monitoring for pre-, during- and post-construction construction; 2. Post-construction monitoring, to include a schedule of activities for monitoring the following: <ol style="list-style-type: none"> a. Marine biota within the canal and in coastal areas within a 500-metre radius of the property boundary, b. Bathymetry within the canal and within a 500-metre radius of the property, and c. Water quality within the canal and in coastal areas within a 500-metre radius of the property, using the same parameters as tested for baseline studies; 3. Field team for monitoring; and 4. Government oversight. 	<p>VI Monitoring</p> <p>This section shall describe an environmental monitoring program relevant to the environmental issues identified. Identify specific variables to be monitored, environmental standards and detection to be used, including but not limited to:</p> <ol style="list-style-type: none"> 1. Monitoring for pre-, during- and post-construction construction; 2. Post-construction monitoring, to include a schedule of activities for monitoring the following: 3. Field team for monitoring; and 4. Government oversight. 	<p>VI Monitoring</p> <p>This section shall describe an environmental monitoring program relevant to the environmental issues identified. Identify specific variables to be monitored, environmental standards and detection to be used, including but not limited to:</p> <ol style="list-style-type: none"> 1. Monitoring for pre-, during- and post-construction construction; 2. Post-construction monitoring, to include a schedule of activities for monitoring the following: 3. Field team for monitoring; and 4. Government oversight. 	<p>VI Monitoring</p> <p>This section shall describe an environmental monitoring program relevant to the environmental issues identified. Identify specific variables to be monitored, environmental standards and detection to be used, including but not limited to:</p> <ol style="list-style-type: none"> 1. Monitoring for pre-, during- and post-construction construction; 1. Post-construction monitoring, to include a schedule of activities for monitoring the following: 2. Field team for monitoring; and 4. Government oversight. <p>VII Mitigation</p>

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

<p>VII Mitigation</p> <p>To include a description of activities that will require mitigation, corrective, compensatory and other measures to be used to eliminate, minimizing or mitigate adverse/significant impacts and how these measures will be selected. The mitigation measures shall aim to avoid, minimize, remedy or compensate for the predicted adverse impacts of the project. This section should also include the following:</p> <ol style="list-style-type: none"> 1. Proposed actions to mitigate against any environmental impact; 2. A storm surge analysis and mitigation plan for sea level rises associated with tropical cyclones and climate change, including measures to minimize potential impacts; 3. A summary of financial and economic values for mitigation methods; 4. Risk prevention mechanisms or activities and a schedule and proposed budget to avoid the occurrence of negative impacts and/or control measures; 5. Involvement of key stakeholders in a public consultation process. Describe the methods and information to be discussed. 	<p>VII Mitigation</p> <p>To include a description of activities that will require mitigation, corrective, compensatory and other measures to be used to eliminate, minimizing or mitigate adverse/significant impacts and how these measures will be selected. The mitigation measures shall aim to avoid, minimize, remedy or compensate for the predicted adverse impacts of the project. This section should also include the following:</p> <p>Proposed actions to mitigate against any environmental impact;</p> <p>3.A summary of financial and economic values for mitigation methods;</p> <p>5. Involvement of key stakeholders in a public consultation process. Describe the methods and information to be discussed.</p>	<p>VII Mitigation</p> <p>To include a description of activities that will require mitigation, corrective, compensatory and other measures to be used to eliminate, minimizing or mitigate adverse/significant impacts and how these measures will be selected. The mitigation measures shall aim to avoid, minimize, remedy or compensate for the predicted adverse impacts of the project. This section should also include the following:</p> <p>Proposed actions to mitigate against any environmental impact;</p> <p>3.A summary of financial and economic values for mitigation methods;</p> <p>5.Involvement of key stakeholders in a public consultation process. Describe the methods and</p>	<p>To include a description of activities that will require mitigation, corrective, compensatory and other measures to be used to eliminate, minimizing or mitigate adverse/significant impacts and how these measures will be selected. The mitigation measures shall aim to avoid, minimize, remedy or compensate for the predicted adverse impacts of the project. This section should also include the following:</p> <p>Proposed actions to mitigate against any environmental impact;</p> <p>3.A summary of financial and economic values for mitigation methods;</p> <p>5.Involvement of key stakeholders in a public consultation process. Describe the methods and information to be discussed.</p>
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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

<p>An Environmental Management Plan (EMP) must be prepared with the following minimum components:</p> <ol style="list-style-type: none"> 1. Summary of the potential impacts of the proposal; 2. Description of the recommended mitigation measures; 3. Statement of their compliance with relevant standards; 4. Allocation of resources and responsibilities for plan implementation; 5. Schedule of the actions to be taken; 6. Programme for surveillance, monitoring and auditing; and 7. Contingency plan when impacts are greater than expected. <p>The EMP shall be a separate document in accordance with the requirements of the DECR.</p>	<p>An Environmental Management Plan (EMP) must be prepared with the following minimum components:</p> <ol style="list-style-type: none"> 1. Summary of the potential impacts of the proposal; 2. Description of the recommended mitigation measures; 3. Statement of their compliance with relevant standards; 4. Allocation of resources and responsibilities for plan implementation; 5. Schedule of the actions to be taken; 6. Programme for surveillance, monitoring and auditing; and 7. Contingency plan when impacts are greater than expected. 	<p>information to be discussed.</p> <p>An Environmental Management Plan (EMP) must be prepared with the following minimum components.</p> <ol style="list-style-type: none"> 1. Summary of the potential impacts of the proposal; 2. Description of the recommended mitigation measures; 3. Statement of their compliance with relevant standards; 4. Allocation of resources and responsibilities for plan implementation; 5. Schedule of the actions to be taken; 6. Programme for surveillance, monitoring and auditing; and 7. Contingency plan when impacts are greater than 	<p>An Environmental Management Plan (EMP) must be prepared with the following minimum components:</p> <ol style="list-style-type: none"> 1. Summary of the potential impacts of the proposal; 2. Description of the recommended mitigation measures; 3. Statement of their compliance with relevant standards; 4. Allocation of resources and responsibilities for plan implementation; 5. Schedule of the actions to be taken; 6. Programme for surveillance, monitoring and auditing; and 7. Contingency plan when impacts are greater than expected.
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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

		expected.	
VIII Recommendations and Conclusion	VII Recommendations and Conclusion	VII Recommendations and Conclusion	VII Recommendations and Conclusion
Public Consultation Meeting	Public Consultation Meeting	Public Consultation Meeting	Public Consultation Meeting
IX Appendices	IX Appendices	IX Appendices	IX Appendices

IX Appendices

To include the qualifications of the team of experts and the special requirements and information needed to form the team to conduct the EIA for this project.

1. The Terms of Reference (TOR) for the EIA as issued by DoP, TCIG.
2. Qualifications of the EIA team of experts and the special requirements and information needed to form the team to conduct the EIA for this project. The contact information (phone numbers and email addresses) must be provided.
3. Government Permits (e.g. work permit, research permit, etc, if required).
4. Site Plan, project plans, architectural drawings and other related documents.
5. Portable data format (pdf) file of the reports of independent consultants involved in the EIA.

APPENDIX – XLIV

Sections of ToR Assigned to Marine Biologist on CEIA Team

Terms of Reference for Comprehensive Impact Assessment (CIA) for SC808 & SC809 – Sail Rock Peninsula Canal and Dock, Turks and Caicos Islands – Block/Parcel 20202/24, 267, 269, 270, 334, 356, 257

Sections Assignment – Marine Biologist

JSS Consulting – (Environmental Consulting Services) – Marine Biologist

I Introduction and Overview

Comprehensive Impact Assessment (CIA) to determine the potential impact of the proposed project on the environment aspect of South Caicos and TCI in general, and Bell Sound Nature Reserve (NR13) (with consideration to current boundaries) in particular. An ecosystem study and economic analysis must be conducted to determine the best use of the area, without affecting the economic integrity of the area during the present and future generations.

1. Non-technical summary (including aims, objectives, and scoping)
2. Overview of the areas/topics to be addressed in this CIA (present the results of scoping exercise; including a complete listing of persons consulted)
3. 4. Impact Assessment methods/analyses

II Baseline Studies

4. Historical overview of the site and existing development- use historical and current aerial maps (time-series visualization) and official TCI generated map (Block/Parcel). Recent drone-taken images, processed by drone mapping software and/or high-resolution imageries are highly recommended. Consider current boundaries to Bell Sound Nature Reserve (NR13).
5. Physical environmental baseline assessment
 - a. Any areas to be affected by the proposed development. The areas within a reasonable distance (not less than 300 feet radius) should be assessed and characterized.
 - b. Coastal profiles extending from within 500 meters of the proposed development site in both directions along the

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

shoreline,

c. Bathymetry extending to 500 meters from the coast,

3. Biological environmental baseline assessment

b. Baseline marine environment – to include a qualitative description of all marine habitats extending from the coastline, extending to 500 meters from the property line in all directions,

c. Quantitative description of marine habitats, flora, and fauna, within the above-described zone,

4. Coastal processes and dynamics, including:

a. Tides,

b. Currents, and

c. Sediment transport.

5. Coastal water quality, including a baseline for nitrogen (nitrite, nitrate, ammonia), phosphate (ortho and organic) and sulfide to an ultra-low level, in addition to fecal coliform, TSS, BOD, and chlorophyll a, b and c; and,

III Project Description and alternatives

This section will outline a detailed description of the proposed project and possible alternatives to be considered, and will include the following:

1. Project justification, including an analysis of cost and expenditure versus need and benefit, biophysical, ecological justifications, socio-economic justifications, and other justifications.

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

m. Emergency mitigation plan.

5 Description of decommissioning phase activities.

6. Description of dredging operations, including location for the storage and de-watering of fill material and quantity and type of minerals to be generated, and documentation of any works already carried out.
7. Description of shoreline protection and any coastal engineering structures, including modeling of how these structures will affect the flow of currents and transport of sediments.
8. Source of beach sand; and documentation of any prior sand movement by the applicant.

10. Financial resources to ensure that once commenced, the project is completed.

13. Consideration of Alternatives, including:

- a. "No go" alternative
- b. Design Alternative
- c. Activity alternative
- d. Site layout alternatives
- e. Technology and materials alternatives
- f. Summary of alternatives/

15 Others

V Environmental Impact Assessment

This section will assess the potential environmental impacts faced during the construction and operational phases. Potential impacts to the following environmental aspects are to be addressed:

1. The biotic environment, including all coastal and marine habitats within the specified area of study.
2. The physical environment, including beach profile and bathymetry.
3. Coastal water quality.

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

4. Sedimentation.
5. Public access and recreational use.
6. 8.Aesthetics.
9. Other impacts include flooding or storm surges.

Note: Address any potential cumulative impacts of other project components.

VI Monitoring

This section shall describe an environmental monitoring program relevant to the environmental issues identified. Identify specific variables to be monitored, environmental standards, and detection to be used, including but not limited to:

1. Monitoring for pre-, during- and post-construction construction.
2. Post-construction monitoring, to include a schedule of activities for monitoring the following:
 - a. Marine biota within the canal and in coastal areas within a 500-meter radius of the property boundary,
 - b. Bathymetry within the canal and within a 500-meter radius of the property, and
 - c. Water quality within the canal and in coastal areas within a 500-meter radius of the property, using the same parameters as tested for baseline studies.
3. Field team for monitoring; and
4. Government oversight.

VII Mitigation

To include a description of activities that will require mitigation, corrective, compensatory and other measures to be used to eliminate, minimize or mitigate adverse/significant impacts and how these measures will be selected. The mitigation measures shall aim to avoid, minimize, remedy, or compensate for the predicted adverse impacts of the project. This section should also include the following:

1. Proposed actions to mitigate against any environmental impact.
2. A storm surge analysis and mitigation plan for sea level rises associated with tropical cyclones and climate change, including measures to minimize potential impacts;

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

3. A summary of financial and economic values for mitigation methods.
4. Risk prevention mechanisms or activities and a schedule and proposed budget to avoid the occurrence of negative impacts and/or control measures.
5. Involvement of key stakeholders in a public consultation process. Describe the methods and information to be discussed.

An Environmental Management Plan (EMP) must be prepared with the following minimum components:

1. Summary of the potential impacts of the proposal.
2. Description of the recommended mitigation measures.
3. Statement of their compliance with relevant standards.
4. Allocation of resources and responsibilities for plan implementation.
5. Schedule of the actions to be taken.
6. Programmed for surveillance, monitoring, and auditing; and
7. Contingency plan when impacts are greater than expected.

The EMP shall be a separate document in accordance with the requirements of the DECR.

VIII Recommendations and Conclusion

Public Consultation Meeting

IX Appendices

IX Appendices

To include the qualifications of the team of experts and the special requirements and information needed to form the team to conduct the EIA for this project.

APPENDIX – XLV

CEIA Team Virtual Meeting Agenda

Agenda

Sail Rock Peninsula Comprehensive Environmental Impact Assessment

Agenda for a virtual meeting scheduled for the week of June 13, 2022. The proposed date and time are Tuesday, June 14, 2022, at 10:00 am.

Once Team members confirmed the date and time for the meeting virtual meeting would the virtual meeting access code and password would be shared with Team members.

1. Introduction of the EIA Team
2. The Terms of Reference (ToR).
3. Assignment of EIA sections to the EIA Team.
4. Overlapping of sections of the EIA between team members to the EIA Team.
5. Scoping Exercise
6. Stakeholders Meeting Reports
7. Bell Sound Nature Reserve – Boundaries and outcome of discussions for changes.
8. Matters arising for discussions from ToR.
 - Coastal profiles extending from within 500 – meters of the proposed development site in both directions along the shoreline. DECR clarifications.
 - Geology and geomorphology of both the terrestrial (including wetlands) and the marine environment.
 - Baseline terrestrial assessment – The National Standardized Vegetation Classifications, 2010.
 - Conservation/Preservation Zones – Any recommended areas or species within the proposed development site.
 - Project justifications – including an analysis of cost and expenditure versus needs and benefits:

- Bio-physical justifications
 - Ecological justifications
 - Socio-economic justifications, and
 - Other justifications
 - Emergency Mitigation Plan EMP Vs. Environmental Management Plan (EMP).
 - Sources of beach sand and documentation of any prior sand movement by the applicant.
 - Considerations of alternatives:
 - 'No-go alternative
 - Design alternative
 - Activity alternative
 - Site layout alternative
 - Technology alternative
 - Summary of alternatives
 - Legislative and Regulative Context – to include a discussion of any aspect of law, regulations, and/or policy-relevant to sections assigned to each Team member.
 - Address any potential cumulative impacts of other project components.
 - Recommendations and Conclusions
 - Public Consultation Meeting and Stakeholders meeting reports.
9. The Report Format
- Layout
 - Font Type
 - Font Size
 - CEIA vs. CEIS
 - Etc.
10. Team Members' Preliminary Report – Each Team member to make a brief presentation on their Preliminary Assessment.
11. Timeline for submission of Draft Report.
12. Any other matters for discussion.

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

Prepared By:

Oswald R. Williams

Caribbean Environmental Design Associates

APPENDIX – XLVI

Scoping Exercise Report

SCOPING EXERCISE – QUESTIONS AND ANSWERS

COMPREHENSIVE IMPACT ASSESSMENT (CIA) SAIL ROCK PENINSULA CANAL AND DOCK – SC 808 & SC 809 – BLOCK/PARCEL 20202/24, 256, 267, 269, 270, 334 AND 356 – SAIL ROCK, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

Introduction and Overview

1. An ecosystem study and economic analysis must be conducted to determine the best use of the area, without affecting the economic integrity of the area during the present and future generations.
2. Overview of the areas/topics to be addressed in this CIA (Present the results of scoping exercise; including a complete listing of persons consulted).
3. Identification of the current boundaries of Bell Sound Nature Reserve (NR13). The latest status of Bell Sound Nature Reserve.
4. Conservation/Preservation zones - any recommended area or species within the proposed development site.
5. Project justifications, including an analysis of cost and expenditure versus need and benefit, bio-physical, ecological justifications, socio-economic justifications, and other justifications.
6. Description of dredging operations, including location for the storage and de-watering of fill material and quantity and type of materials to be generated, and documentation of any works already carried out.
7. Approximate volumes of dredged materials to be generated as a result of the dredging operations – The Peninsula Channel, Lagoon Basin, and other water bodies.

8. Disposal and placement of dredged materials – Identification of locations for disposal of dredged materials.
9. Source of beach sand; and documentation of any prior sand movement by applicant.
10. Restoration and landscaping plan, including detailed plant and materials lists.
11. Modelling of runoff and drainage from the developed site.
12. **Monitoring** – This section shall describe an environmental monitoring program relevant to the environmental issues identified. Identified specific variables to be monitored, environmental standards, and direction to be used, including but not limited to:
13. **Mitigations** – To include a description of activities that will require mitigation, corrective, compensatory, and other measures to be used to eliminate, minimize, or mitigate adverse/significant impacts and how these measures will be selected. The mitigation measures shall aim to avoid, minimize, remedy, or compensate for the predicted adverse impacts of the project. This section should also include the following:
 - Proposed actions to mitigate against any environmental impact.
 - A storm surge analysis and mitigation plan for sea level rises associated with tropical cyclones and climate change, including measures to minimize potential impacts.
 - A summary of financial and economical values for mitigation methods.
 - Risk prevention mechanisms or activities and a schedule and proposed budget to avoid the occurrence of negative impacts and/or control measures.
 - Involvement of key stakeholders in a public consultation process. Describe the method and information to be discussed.
14. An Environmental Management Plan (EMP) must be prepared with the following minimum components:
 - Summary of the potential impact of the proposal.
 - Description of the recommended mitigation measures.
 - Statement of their compliance with relevant standards.

- Allocation of resources and responsibilities for plan implementation.
- Schedule of the actions to be taken.
- Programme for surveillance, monitoring, and auditing, and
- Contingency plan when impacts are greater than expected.

15. Recommendations and Conclusions – This section will include incorporating information and guidance gleaned from the assessment.

APPENDIX – XLVII

Minutes of the CEIA Team’s meeting with the District Commissioner, South Caicos

MINUTES

Minutes of Sail Rock Comprehensive Environmental Impact Assessment (CEIA) Team meeting with The District Commissioner, South Caicos Turks and Caicos Islands.

Subject: Sail Rock Peninsula Comprehensive Environmental Impact Assessment (CEIA)>

Location of meeting: District Commissioner Office, South Caicos, TCI

Date of Meeting: June 1, 2022

Time: 10:30 am

In Attendance were:

Mrs. Yvette Cox	-	District Commissioner, South Caicos
Ezekiel Hall	-	EnvironmentalAll
Oswald R. Williams Caribbean	-	Environmental Design Associates

The meeting convened at approximately 10:30 am.

The District Commissioner welcomed Hall and Williams to South Caicos and to the DC office.

Oswald Williams opened the discussions by stating that the purpose of the meeting with the District Commission was to get her and through her, the residents of South Caicos’ view on the proposed Sail Rock Peninsula Lagoon Basin development on South Caicos.

Discussions followed as follows:

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

1. The District Commissioner noted that Sail Rock Development Limited has a Legal Agreement with the government of the Turks and Caicos Islands to carry out the development.
2. She followed by saying, but that (Sail Rock Development Limited has an obligation to adhere to the laws of the Turks and Caicos Islands. She elaborated that in the case of the proposed development, they are not adhering to the laws of the country.
3. The District Commission reported that Sail Rock representative on the island, Matthew Bywater showed her some approvals from the Planning Department to carry out the development, but he did not have a Building Permit that actually permits the commencement of the works.
4. The District Commissioner reported that the Department of Planning subsequently put a stop to the dredging operations that were in progress at the Sail Rock Peninsula area. He continued that her office is awaiting further comments from the Planning Department on the present status of the development.
5. The District Commissioner commented that Sail Rock Limited owned approximately 65% of all land on South Caicos and most of the land in the Sail Rock Peninsula area.
6. The District Commissioner informed the meeting that historically the overall dealings with Sail Rock Development Limited have been good, but on some occasions, they do not like to follow procedures.
7. The District Commissioner reported that Sail Rock Development Limited has been much involved in community development in South Caicos, including working with her office on road signature, tree planting, and general clean-up of the islands.
8. The DC reported that Sail Rock Development has concerns with the government, particularly, the government's not abiding by its obligations under the Development Agreement with regards to the government ensuring that Sail Rock Development Limited receives certain licenses and development approvals in a timely manner.
9. The District Commissioned also noted that Sail Rock Development Limited has a restoration program for the restoration of old historical buildings in historical Cockburn Harbour.

10. The District Commissioner shared the concept for the development of a modern marina facility in the Conch Ground Area 4a of South Caicos that would encourage Sail Rock guests to visit the town area.
11. The District Commissioner reported that a few Sail Rock guests visit the town area and patronized local restaurants.
12. The District Commission said that Sail Rock Development Limited makes a significant contribution to the economy of South Caicos and the TCI by providing a few employment opportunities, apprenticeship programs, and scholarship programs.

The meeting ended at approximately 1:00 pm.

APPENDIX – XLVIII

Minutes of the CEIA Team’s meeting with the Director of the Department of Environment and Coastal Resources (DECR)

MINUTES

Minutes of Sail Rock Comprehensive Environmental Impact Assessment (CEIA) Team meeting with the Director of the Department of Environment and Coastal Resources, Providenciales, Turks and Caicos Islands.

Subject: Sail Rock Peninsula Comprehensive Environmental Impact Assessment (CEIA)>

Location of meeting: Department of Environment and Coastal Resources, Providenciales, TCI

Date of Meeting: July 26, 2022

Time: 11:00 am

In Attendance were:

Mrs. Lormeka Williams	-	Director of the Department Environment and Coastal Resources (DECR)
Luc Cleaver	-	Deputy Director of DECR
Oswald R. Williams Caribbean	-	Environmental Design Associates

The meeting convened at approximately 11:00 am.

Oswald R. Williams, CEIA coordinator thanked the Director of Environment and Coastal Resources (DECR) for meeting with him on this matter.

The following discussions followed:

1. Oswald Williams opened the discussions by stating that the purpose of the meeting with the Director of the DECR was to discuss the Terms of Reference (ToR)) for Comprehensive Environmental Impact Assessment for the proposed Sail Rock Peninsula Lagoon Basin development on South Caicos.
2. The opportunity was taken to thank the Director of the DECR and staff for the assistance they provided by providing the team with a copy of the National Standardized Vegetation Classification 2010.
3. A request was made for a copy of the plant species list for South Caicos.
4. The ToR required a 500-meters coastal profile assessment extending in both directions. Clarifications were requested on this matter. It was pointed out that both directions were not applicable in this case.
5. The CEIA coordinator enquired as to the pending status of the legislation for changes to the Bell Sound Nature Reserve that would facilitate the proposed development. The Director of the DECR reports that some progress was made with regard to the proposed changes to the Bell Sound Nature Reserve, but this has not advanced much.
6. The Director of DECR provided an update on the status Bell Sound Area Receptor Sensitivity Assessment being carried out by SAERI Limited. She noted that the assessment is progressing well.
7. The CEIA project coordinated noted that the ToR for the CEIA study speaks to the source of beach sand. Any beach sand required for this phase of the development would be provided from dredged materials.
8. The CEIA study coordinator noted that the Sail Rock Development Agreement details both governments and the Developers' obligations.
9. The DECR asked what the status of the Sail Rock Development on South Caicos considering the status of changes to the Bell Sound Nature Reserve.

10. The CEIA study coordinator pointed out that considering the changes to the design of the Lagoon Basin plan would see the alignment of the southern entrance channel adjusted whereby the basin does not exist/enter directly into the Bell Sound Nature Reserve. This change will cause the lagoon basin not directly to impact the Bell Sound Nature, but any impacts will be indirect.
11. The ToR referenced the lagoon basin, peninsula channel, and boat docks based on the Planning Applications reference numbers SC. 808 and SC. 809. But additionally, the plan speaks to the creation of lots from the dredged materials.
12. The Director of the DECR noted that brackish/fresh water is located in the seasonal pond, the area to be dredged.
13. The DECR points out that there are concerns that movement within the northern channel, (due to currents) provides the potential for the channel to be filled in with sand due to the current. The CEIA study coordinator noted that the coastal profiles modelling studies do not suggest this is a potential problem.


The meeting ended at approximately 1:00 pm.

Prepared by:


Oswald R. Williams
CEIA Coordinator

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

APPENDIX – XLIX Emergency/Temporary Work Permit – David Gregory Braun



EMERGENCY/TEMPORARY WORK PERMIT
(Regulation 53(4))



MINISTRY OF EDUCATION, LABOUR, EMPLOYMENT AND CUSTOMER SERVICES
EMPLOYMENT SERVICES DEPARTMENT

TURKS & CAICOS ISLANDS
PROVIDENCIALES: TEL: 1 649 946 2801
Ext.81501
FAX:946-4164/946-5648/941-7794
GRAND TURK: TEL: 1 649-946-2801 Ext.#
40150/2
FAX: 1 649 946 1763

Your Ref: A22005/13TH APRIL, 2022
Our Reference: EXP: A22005GT/TWP FILE
DATE: 13TH APRIL, 2022

The Manager:
CARIBBEAN ENVIRONMENTAL DESIGN ASSOCIATES

NAME of Company:
CARIBBEAN ENVIRONMENTAL DESIGN ASSOCIATES

REF: A22005 EMERGENCY/ TEMPORARY WORK PERMIT

Permission is hereby granted for the person named below to be gainfully employed as a **TERRESTRIAL BIOLOGIST** with **CARIBBEAN ENVIRONMENTAL DESIGN ASSOCIATES** for a period of Ten Days (10) days.

NAME OF EMPLOYEE: **DAVID GREGORY BRAUN**


DATE OF BIRTH: **25TH SEPTEMBER, 1956**

COUNTRY OF BIRTH: **OHIO, UNITED STATES OF AMERICA**

PASSPORT NUMBER: **546173859**

COMMENCING DATE: **21ST APRIL, 2022**

THIS PERMISSION EXPIRES ON: **30TH APRIL, 2022**

Yours Sincerely,

Edwin Taylor
Commissioner of Labour
Co-Director of Immigration

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

APPENDIX – LI

Emergency/Temporary Work Permit – Predensa Wilhelmina Moore



EMERGENCY/TEMPORARY WORK PERMIT
(Regulation 53(4))



MINISTRY OF EDUCATION, LABOUR, EMPLOYMENT AND CUSTOMER SERVICES
EMPLOYMENT SERVICES DEPARTMENT

TURKS & CAICOS ISLANDS
PROVIDENCIALES: TEL: 1 649 946 2801
Ext.81501
FAX:946-4164/946-5648/941-7794
GRAND TURK: TEL: 1 649-946-2801 Ext.#
40150/2
FAX: 1 649 946 1763

Your Ref: A22004/13TH APRIL, 2022
Our Reference: EXP: A22004GT/TWP FILE
DATE: 13TH APRIL, 2022

The Manager:
CARIBBEAN ENVIRONMENTAL DESIGN ASSOCIATES

NAME of Company:
CARIBBEAN ENVIRONMENTAL DESIGN ASSOCIATES

REF: A22004 EMERGENCY/ TEMPORARY WORK PERMIT

Permission is hereby granted for the person named below to be gainfully employed as a **TERRESTRIAL BIOLOGIST** with **CARIBBEAN ENVIRONMENTAL DESIGN ASSOCIATES** for a period of Ten Days (10) days.

NAME OF EMPLOYEE: **PREDENSA WILHELMINA MOORE**
DATE OF BIRTH: **26TH MARCH, 1953**
COUNTRY OF BIRTH: **BAHAMAS**
PASSPORT NUMBER: **AA129504**
COMMENCING DATE: **21ST APRIL, 2022**
THIS PERMISSION EXPIRES ON: **30TH APRIL, 2022**

Yours Sincerely,

Edwin Taylor
Commissioner of Labour

Cc: Director of Immigration

APPENDIX – LII

Resumes (CVs) of the CEIA Team

Ezekiel E. Hall, MSc. IAH

Ezekiel E. Hall, MSc, IAH

Consulting Hydrogeologist – Environmentalist
#6 Flame Tree Circle
Long Bay Hills, Providenciales
Turks and Caicos Islands, B.W.I.
Tel: 649.246.8263
Email: hallenvironment1@gmail.com

Summary

Ezekiel Hall is a practicing environmentalist with over 25 years experience working in Small Oceanic Islands environments in the Bahamas and Turks and Caicos Islands. Mr. Hall's experience includes consultative services for private utility companies, government agencies, property owners and tourism developers who wish to design, construct and manage operation facilities with a focus on protection of natural resources and compliance with applicable Ordinances, Regulations and environmental best practices.

Education

1991 – 1992: Mr. Hall attended the University of Birmingham, UK and obtained a Master of Science Degree in Hydrogeology, specializing in the Hydrogeology of Small Oceanic Islands.

1981 – 1985: Mr. Hall attended St. Lawrence University, Canton, New York, USA and obtained a Bachelor of Science Degree in Geology.

Employment

December 2012 – Present: Operations Manager, Grand Bahama Utility Company[GBPA]

Mr. Hall holds management responsibility for the daily operations of the Water Company including the direct supervision of 21 members of staff, seven water plants and one sewerage plant.

1

Ezekiel E. Hall, MSc. IAH

April 2012 – August 2012: Deputy Permanent Secretary, Ministry of Border Control & Labour [Turks and Caicos Islands Government]

Mr. Hall held a leadership role and was responsible for establishing Policy, Guidelines and Procedures for Immigration and Labour enforcement. Mr. Hall had daily responsibility for a staff compliment of 68 Immigration Officers including Senior Officers & Line Staff. A list of responsibilities included work task planning, tracking work progress, performance evaluations, customer service management, budget preparation, public awareness program and report writing.

July 1997 – Present: Hydrogeologist-Environmental, EnvironmentALL TCI.

Mr. Hall is the Principal of EnvironmentALL Ltd and provides Environmental and Geotechnical Consulting Services throughout the Bahamas and Turks and Caicos Islands. The scope of services includes Environmental Impact Assessments, Geotechnical Evaluations, Drilling and Well Design, Pump Tests & Injection Well Tests, Groundwater Resources Evaluation, Water & Wastewater Quality Monitoring and Testing, Evaluation of Water & Sewerage Plant Operations, Wellfield Design, Wellfield Construction, Wellfield Management, Sewerage Disposal Well Design/Construction/Management, Stormwater Disposal Well Design/Construction/Management, Terrestrial Assessment, Marine Assessments, Socio-economic & Cultural Assessments, Hydrogeological Assessments, Hydrographic & Bathymetric Surveys, Coastal Processes Evaluation and Building Permit Processing.

1986 - 1997: Assistant Hydrologist, Bahamas Water & Sewerage Corporation, Nassau, New Providence, Bahamas.

Mr. Hall applied his hydrogeological experience and knowledge of the natural environment in support of various freshwater resources evaluations, wellfield designs, Sewerage and Stormwater deep disposal well designs and evaluations, pump tests and water & wastewater quality testing throughout all inhabited islands of the Bahamas.

2

Ezekiel E. Hall, MSc. IAH

CERTIFICATIONS & PROFESSIONAL MEMBERSHIP

PADI Certified SCUBA Diver: Dive Master.

Member of the International Association of Hydrogeologists.

NASTeC Certified Major Appliance Repair Technician [B981174]

GCAP Graduate Technician Certified Appliance Technician [Reg #: TC21727]

PUBLICATION(S)

“Saltwater Intrusion in the Bahamas: A case study of the Grand Lucayan Waterway, Grand Bahama, The Commonwealth of the Bahamas.”
Proceedings of the AWRA Conference (1989), Puerto Rico.

“An appraisal of the Application of Surface and Borehole Geophysical Techniques to Groundwater assessment in Wellfields in The Bahamas.”
Proceedings of the WMO/IDB Conference (1995), Costa Rica.

PROJECTS AND STUDIES

1. Water Quality Monitoring: Providenciales Hospital Project, TCI, 2009.
2. Environmental Impact Assessment: The Shore Club, Providenciales, TCI, 2008-09
3. Environmental Impact Assessment: East Bay Resort and Marina, South Caicos, TCI, 2008-09
4. Environmental Impact Assessment: Terrestrial and Hydrogeological Input into EIA for CMK Developments at South Caicos Islands, TCI 2008 to present.
5. Hydrogeological Assessment: Input into the Environmental Impact Assessment for PPC Limited Bulk Fuel Storage Facility, Providenciales, TCI 2008
6. Seawater Quality Monitoring: Carnival Cruise Lines (Grand Turks Cruise Port), Grand Turks Island, TCI 2008-2009.
7. Environmental Impact Assessment: Leeward Lake; Providenciales, TCI, 2008
8. Environmental Impact Assessment: Leeseide Canals; Providenciales, TCI 2008
9. Seawater Quality Monitoring: Carnival Cruise Lines (Grand Turks Cruise Port), Grand Turks Island, TCI 2007-2008.
10. Seawater Quality Monitoring: Carnival Cruise Lines (Grand Turks Cruise Port), Grand Turks Island, TCI 2006-2007.
11. Feedwater and Disposal Wells design and construction: Beaches Resort – Italian Village, Providenciales, Turks and Caicos Islands, 2008
12. Environmental Impact Assessment: Bone Fish Point, Providenciales, TCI, 2007

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

Ezekiel E. Hall, MSc. IAH

13. Hydrogeological, Terrestrial and Marine Assessments: CMK Tourism Developments, South Caicos Island, Turks and Caicos Islands 2007 – ongoing.
14. Environmental Impact Assessment Update: Ritz-Carlton Hotel, West Caicos Island, TCI, 2006
15. Seawater Quality Monitoring: Carnival Cruise Lines (Grand Turks Cruise Port), Grand Turks Island, TCI 2005-2006.
16. Seawater Quality Monitoring: Leeward Marina (Johnston International Ltd.), Providenciales Island, TCI 2006.
17. Hydrogeological Assessment: EIA for the Albany House Marina [Park Ridge Securities Group], Nassau, Bahamas, 2005
18. Solid Waste Management Project: Project Coordination and Management; Hydrogeological and Legal Assessments, Turks and Caicos Islands Government, Turks and Caicos Islands, 2005.
19. Environment Impact Assessment: Royal Reef Resort, North Caicos Island, TCI, 2005.
20. Marine Assessment (Seagrass Removal for Blue Resort), Blue Hills, TCI, 2005
21. Hydrogeological Evaluation: Mare Bello Tourism Development, East Bay, TCI, 2004.
22. Environmental Impact Assessment: The Tuscany, Providenciales, TCI, 2004
23. Groundwater Resources Evaluation: New Providence Development Co., Nassau, Bahamas, 2004.
24. Environmental Impact Assessment: Ritz-Carlton Hotel, West Caicos, TCI, 2004.
25. Hydrographic Survey: Grand Turk Cruise Ship Facility, Grand Turk, TCI 2004.
26. Bathymetric Survey: Grand Turk Cargo Pier, Grand Turk, TCI, 2004.
27. Environmental Consultant: St James Development, Providenciales, 2003
28. Environmental Consultant [EIA]: Leeward Marina/Condo Development, Providenciales, TCI 2003 – ongoing.
29. Hydrogeological Assessment: Inland Marina Basin for Pericles Maillis' property, Adelaide, New Providence, Bahamas.
30. Environmental Consultant [EIA]: Beach Oasis Development, Providenciales, TCI 2002
31. Environmental Consultant [EIA]: Grand Turk Cruise Port, Grand Turk, TCI, 2002.
32. Environmental Consultant: Sand Mining and Dredging, Sand Pit, Providenciales, TCI 2002.
33. Environmental Consultant: Bahamas Electricity Corporation Cooling Water Wells Project, New Providence, Bahamas, 2002.
34. Consultant for EIA: West Caicos Island-wide Development, West Caicos, TCI, 2001- present.
35. Consultant for EIA: West Caicos Marina, West Caicos, TCI 2000-'01.

4

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

Ezekiel E. Hall, MSc. IAH

36. Consultant for EIA: Hawksbill Marine Basin, Providenciales, TCI, 2001.
37. Consultant for EIA: Somerset Hotel Development, Providenciales, TCI, 2001
38. Consultant for EIA: Leeward Canal Extension, Providenciales, TCI, 2000.
39. Consultant for EIA: Babaloo Beach Resort, Providenciales, TCI, 1999.
40. Consultant for EIA: Cooper Jack Marina, Providenciales, TCI, 1999.
41. Consultant for EIA: Grand View Condominium, Providenciales, TCI, 1999
42. Consultant for EIA: Discovery Beach Club, Providenciales, TCI, 1999
43. Consultant for EIA: Ocean Club West, Providenciales, TCI, 1999.
44. Consultant for EIA: Newport Harbour & Bulk Fuel Storage Facility, Providenciales, TCI, 1998.
45. Implementation of National Parks System: Coastal Resources Management Project/ Chief Park Warden, Providenciales, TCI, 1998-'99.
46. Rehabilitation of Deep Cooling Wells for Power Generation Plant: Bahamas Electricity Corporation, New Providence, Bahamas, 1997.
47. Design, construction and evaluation of feedwater wells for R.O. plant: Half Moon Cay, Bahamas, 1997.
48. Groundwater Resources Exploration for Bahamas Water & Sewerage Corporation: Andros Island Potable Water Supply, 1986-97 Groundwater
49. Resources Exploration for Bahamas Water & Sewerage Corporation: Mayaguana Potable Water Supply, Mayaguana, Bahamas, 1997.
50. Groundwater Resources Exploration for Bahamas Water & Sewerage Corporation: Inagua Potable Water Supply, Inagua, Bahamas, 1996.
51. Groundwater Resources Exploration for Bahamas Water & Sewerage Corporation: Abaco Potable Water Supply Expansion, Abaco Bahamas, 1995.
52. Groundwater Resources Exploration for Bahamas Water & Sewerage Corporation: Exuma Potable Water Supply, Exuma, Bahamas, 1986-'95
53. Groundwater Resources Exploration for Bahamas Water & Sewerage Corporation: Rehabilitation of Old Southwest Wellfield, New Providence, Bahamas, 1993.
54. Groundwater Resources Exploration for Bahamas Water & Sewerage Corporation: Long Island Potable Water Supply, Long Island, Bahamas, 1986 - '97.
55. Groundwater Resources Exploration for Bahamas Water & Sewerage Corporation: Rehabilitation of Windsor Wellfield, New Providence, Bahamas, 1993 - '97.
56. Groundwater Resources Exploration for Bahamas Water & Sewerage Corporation: Rehabilitation of Government Wellfields, Grand Bahama, Bahamas, 1986-'97.
57. Groundwater Resources Exploration for Bahamas Water & Sewerage

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

Ezekiel E. Hall, MSc. IAH

- Corporation: Eleuthera Potable Water Supply, Eleuthera, Bahamas, 1986 - '97.
58. Groundwater Resources Exploration for Bahamas Water & Sewerage Corporation: Ragged Island Potable Water Supply, Ragged Island, Bahamas, 1986 - '97.
 59. Groundwater Resources Exploration for Bahamas Water & Sewerage Corporation: Black Point, Exuma Potable Water Supply, Exuma, Bahamas, 1986 - '97.
 60. Groundwater Resources Exploration for Bahamas Water & Sewerage Corporation: Bimini Water Supply, Bimini, Bahamas, 1986 - '97.
 61. Rehabilitation and expansion of the Bogue Wellfield, North Eleuthera for Bahamas Water and Sewerage Corporation: Eleuthera, Bahamas, 1989.
 62. Evaluation of New Providence Sewerage Treatment facility, Bahamas Water & Sewerage Corporation 1995- 1997
 63. Rehabilitation of Deep Sewerage Disposal Well: Pinewood Gardens, Nassau, Bahamas, 1987-'96.
 64. Rehabilitation of Deep Sewerage Disposal Well: Flamingo Gardens, Nassau, Bahamas, 1993-'96.
 65. Design, Construction and Evaluation of Deep Sewerage Disposal Wells: Yellow Elder Gardens, Nassau, Bahamas, 1990-'92.
 66. Design, Construction and Evaluation of Deep Sewerage Disposal Well: Malcolm's Park, Nassau, Bahamas, 1990-'91.
 67. Saltwater Encroachment: Grand Lucayan Waterway, Grand Bahama, Bahamas, 1987-'91.
 68. Fuel Spill Assessment and Recovery: Bahamas Electricity Corporation, Nassau, Bahamas, 1987-'95.
 69. Fuel Spill Assessment: Burma Oil, East End, Grand Bahama, Bahamas/ Water & Sewerage Corporation 1989.
 70. Fuel Sill Assessment: Carmichael Road/BEC, Nassau, Bahamas/ Water & Sewerage Corporation, 1995.
 71. Fuel Spill Assessment & Recovery: Nassau International Airport, 1988, Water & Sewerage Corporation.
 72. Hydrogeological Maps of The Bahamas for inclusion the Hydrogeological Atlas of the Caribbean; UNESCO, 1986-'87.
 73. Electro Magnetic Ground Conductivity Profiling: Bahamas Water & Sewerage Corporation / Groundwater Exploration Exercises. All inhabited islands of the Bahamas, 1988-'1997.

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

JANEEN MARLO BULLARD

Phone: (242) 357-9262
Jmbullard2109@gmail.com

25 Turnquest Alley
Nassau, Bahamas

With over 15 years of experience in the scientific and environmental field I can bring forth a plethora of skill sets that arrange from multi-tasking, planning and coordination, management of personnel and time as well as confidential handling of sensitive information and resources. I am dedicated and hardworking, with a passion for excellence. I possess skills in project management, educational & public outreach and research & development.

EDUCATION

- | | | |
|-----------|---|------|
| MS | Tuskegee University, Biology (Concentration in Plant and soil Science)
Thesis: The Effects of Superoptimal CO ₂ on the Growth, Yield, Gas Exchange, Stomatal Conductance and Starch of Sweet Potato and Peanut. | 2004 |
| BS | Tuskegee University, Marine Biology | 1999 |

EXPERIENCE

Environmental Specialist (2011 – Present) Principal of JSS Consulting Ltd (On The Bahamas Department of Planning and Protection approved Environmental Consultant List 2019 – present)

Projects

- Disney Lighthouse Point Cruise Port Development, Eleuthera, Bahamas Environmental Management (EM)
- Adelaide Creek Development Project; Nassau, The Bahamas Environmental Impact Assessment (EIA) and Marine Assessment
- Exuma International Airport Infrastructure Project, Exuma, The Bahamas Environmental & Social Baseline Assessment (ESBA) and Environmental & Social Management Plan (ESMP)
- North Eleuthera International Airport Infrastructure Project ESBA & ESMP
- Community Based Conch Management in the Family Islands, Conch Farm Feasibility Study and Environmental Baseline Assessment (EBA)
- Rose Island Development; Rose Island, The Bahamas Marine Assessment for EIA
- Paradise Island, Royal Caribbean, The Bahamas, Marine Assessment for EIA
- Coco Cay Island Development, Coco Cay, The Bahamas Environmental Management (EM), Botanical, Marine and Avian Assessment EIA, EBA), Environmental Management Services (EMS) and EMP
- Ocean Cay, Bimini, The Bahamas; EMS, Coral Relocation Monitoring, Public Outreach, Rapid Ecological Assessment (REA)
- Big Pond National Park Development, EMP & EMS

Janeen Bullard - 1

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

- The Harbor View Marina Project, Nassau, The Bahamas EBA, EMP
- The Staniard Creek Bridge and Causeway Replacement Central Andros, The Bahamas, EMP
- Briland Residence and Marina, Harbour Island, The Bahamas, and Marine Assessment for EIA
- South Andros and Cat Island Water Improvement Project, EMP, EMS
- Barbuda Airport, Antigua and Barbuda, Herpetological Assessments for EIA
- North Windermere Island, Eleuthera, The Bahamas; Marine Assessment for EIA
- The Pointe Marina Development: Nassau, The Bahamas; EMP, EMS
- The Big Pond Park Development Project, New Providence, The Bahamas EMS
- Orchid Bay; Abaco, The Bahamas; Marine Assessment for EIA
- Airport Gateway Project, New Providence, The Bahamas; EMS
- White Bay Cay, Exuma Cays, The Bahamas; Marine Assessment
- Stocking Island, Exuma Cays, The Bahamas; Botanical, Avian and Marine Assessment for EIA
- February Point, Exuma, The Bahamas; Avian and Marine Assessments for EIA
- Deep Water Cay, Grand Bahama, The Bahamas; Wetland Assessment
- Matt Lowe Cay, Abaco Cays, The Bahamas; Avian Assessment for EIA
- Governor's Harbour Army Base, Eleuthera, The Bahamas; Avian for EIA
- Abaco Forestry, Abaco, The Bahamas; Botanical Assessment for EIA
- The Pointe, New Providence, The Bahamas; Marine Assessment for EIA
- Norman's Cay, Exuma Cays, The Bahamas; Botanical and Avian Assessment for EIA
- Ocean Cay, Bimini, The Bahamas, Avian Assessment for EIA & EMS
- LNG Pipeline, New Providence, The Bahamas; Marine Assessment for EIA
- White Bay Cay, Exuma, The Bahamas; Marine Assessment for EIA
- Old Fort Bay Town Center, New Providence, The Bahamas; Avian Assessment, EIA and EMP
- Bimini Bay, Bimini, The Bahamas, Marine Assessment for EIA
- Hurricane Hole Marina, Paradise Island, The Bahamas; Marine and Stakeholder Assessment, EBA, oral relocation and monitoring & EMS
- Sandals, Exuma, The Bahamas, Avian Assessment for EIA
- Finley Cay, New Providence, The Bahamas; Marine Assessment EIA
- Elbow Cay, Abaco, The Bahamas, Marine Assessment for EIA
- Hermitage, Exuma, The Bahamas; Botanical and Avian Assessment for EIA
- Governor's Harbour Army Base, Eleuthera, The Bahamas; Avian Assessment for EIA
- Bahamar Back of House, New Providence, The Bahamas; Botanical Assessment and Protected Trees Survey
- Witches Point, Abaco, The Bahamas, Marine Assessment for EIA
- Buttonwood Reserve, Eleuthera, The Bahamas, Botanical assessment for EIA
- Master Harbor, Exuma, The Bahamas, Botanical Assessment for EIA
- Hog Cay, Exuma, The Bahamas; Botanical and Avian Assessment for EIA
- Exuma Highway, Exuma, The Bahamas; Botanical Assessment for Highway Feasibility Study
- University of the Bahamas, New Providence, The Bahamas, Avian Assessment for EIA and EIA
- Caribbean Global Timber, Abaco and Andros, The Bahamas, EIA

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

Project Coordinator

- Cane Toad Eradication, Lyford Cay, Nassau, The Bahamas
- Cane Toad Eradication, Marsh Harbour, Abaco, The Bahamas

Parks Planner and Community Liaison Officer (2006-2011) Bahamas National Trust, Nassau, Bahamas Duties

- Develop proposals to government for the establishment of new National Parks.
- Grant writing
- Develop General Management Plans for existing National Parks.
- Work with surrounding communities to gain support for the importance of establishing new National Parks.
- Project Management for the establishment of the Leon Levy Native Plant Preserve, Eleuthera, The Bahamas.
- Manage all daily details and education of staff for educational programs.
- Organize all special events for the Education Department.
- Liaise with corporate sponsors to further fund educational programs.
- Develop marine education lesson plans and activities (on and off site) for grade levels K-12 and college students.
- Attendance and professional presentations at events both locally and abroad.
- Development of the National High School Marine Science Curriculum.

Research Assistant (2001-2004) Tuskegee University, Tuskegee, AL

- Developed and maintained research projects in conjunction with Tuskegee University and NASA.
- Aided in the daily maintenance and running of a greenhouse.
- Organized and taught Environmental and General Biology courses.

Marine Mammal Trainer (1999-2001) Dolphin Encounters, Blue Lagoon, Bahamas

- Trained Atlantic Bottlenose Dolphins in educational and interactive programs.
- Assisted in developing marine conservation and educational programs.

AUTHOR

Conch Farming Feasibility Study (present)

The Bahamas Sixth National Report on Biological Biodiversity to The Convention on Biological Diversity (2019)

Co-Author of the “Andros Sustainable Development Masterplan” (2014)

Author of the “Critical Situation Analysis of Invasive Alien Species for The Bahamas” (2013)

PRESENTATIONS AND INVITED LECTURES

Policies, Strategies and Best Practices for Managing Invasive Alien Species (IAS) in the Insular Caribbean March 31st – April 4th, 2014, Trinidad. Port of Spain, Trinidad & Tobago.
The Cane Toad Invasion: Its Origin, Status and The Bahamas’ Response to prevent spread.

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

Policies, Strategies and Best Practices for Managing Invasive Alien Species (IAS) in the Insular Caribbean March 31st – April 4th, 2014, Trinidad. Port of Spain, Trinidad & Tobago. Developing a National IAS Strategy focused on IAS prevention – a case study of the Bahamas' 2003 -2013 experience.

Bahamas Natural History Conference 2016 The Cane Toad Invasion: Its Origin, Status and The Bahamas' Response to prevent spread

Bahamas Natural History Conference 2018 Citizen Science and Community Involvement can help! Invasive Cane Toads (*Rhinella marina*) control in The Bahamas continues.

PROFESSIONAL TRAINING

2019 IDB Principles of the Review of Environmental Impact Assessments

2019 The Perry Institute of Marine Science, AGRRA Benthic Survey Techniques

2018 Georgia Tech Professional Education Center – OSAHA Approved Trainer

2017 Conservation Training Introduction to Resilience for Development

2017 Inter-American Development Bank Project Management Techniques for Development Professionals

2015 IICA, Efficient use of Rainwater and Runoff in Agricultural Activities, Chitre, Panama

2015 IICA, Agro-Eco Tourism Training Workshop

2014 Commercial Training Center of Department of Commerce, Hainan Province, China Climate Change on Tropical Island and Economic Development for Developing Countries

2013 The Nature Conservancy, Coral Reef Restoration

2013 The Nature Conservancy, AGRRA Coral Surveys

2010 The Bahamas National Trust, Business Writing

2010 The Bahamas National Trust, Public Presentation

2009 The Nature Conservancy, Invasive Species Management

2009 College of The Bahamas, Mangrove Forest Ecology, Management and Restoration

2008 International Fund for Animal Welfare, Certificate of Completion for Whale Watch Guide Training

2006 National Association of Interpretation, Certified Interpretive Guide 2006 Tuskegee University, 1st Place Graduate Oral Presentation Sigma Xi 2005 Tuskegee University, Certificate of Effective Leadership

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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

1995 Auburn University, NAUI Scuba Certified

PROFESSIONAL AFFILIATIONS

SEEDS-Ecological Society of America

Sigma Xi Scientific Research Society

Beta Kappa Chi Honor Society

National Association for Interpretation

National Marine Educators Association Name of Organization

REFERENCES

Available upon request

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D. GREG BRAUN, CEP

CERTIFIED ENVIRONMENTAL PROFESSIONAL

Jupiter, FL 33478

mobile: (561)-

758-3417

e-mail: dgregbraun@aol.com

AREAS OF SPECIALIZATION AND EXPERIENCE

Natural Resource Surveys, Coastal Ecology; Habitat Assessments, Estuarine and Avian Ecology, Wetland and Habitat Restoration; Environmental Planning and Permitting

EXPERIENCE HIGHLIGHTS

Ecological Assessments - Beach Enclave Long Bay, and Beach Enclave North Shore, Providenciales, Turks and Caicos - performed site assessments and developed ecological components of Draft and Final Environmental Impact Assessments for proposed enhancements at existing resorts.

Ecological Assessments – Emerald and Pelican Beach Projects, Providenciales, Turks and Caicos - performed site assessments and developed ecological components of Draft and Final Environmental Impact Assessments for proposed beach enhancements to protect existing shorefront development from beach erosion and sea level rise.

Floral Assessment, Grand Turk Cruise Center, Grand Turk, Turks and Caicos – Performed investigation to determine the potential presence of protected plants on areas to be used for management of material dredged from the cruise ship berth. Developed relocation/protection plan when populations of two notable species were identified as being present within the proposed work area.

Ecological Assessments and Expert Witness reporting and testimony, Costco, Stuart Florida and Sherbrooke Estates, Lake Worth, FL – Conducted field investigations and authored reports documenting the presence of populations of threatened and endangered flora and fauna on properties in which the presence of these species had not been identified by the applicant's consultants.

Terrestrial and Ornithological Assessments, proposed Photo-voltaic Power Plants, Turks & Caicos – performed site assessments and developed ecological components of Draft and Final Environmental Impact Assessments for proposed solar power generation sites on Providenciales, North Caicos and South Caicos. Provided the ecological components of Public Consultation meetings.

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Mangrove Assessment, Norman's Cay, Bahamas – Investigated existing mangrove communities, made recommendations for enhancement of hydrologically-impacted wetlands, conducted baseline surveys to guide engineers on environmental aspects of marina design and coordinated the creation of a living shoreline project that included planting over 4,000 mangroves.

Ecological Assessments, Egg Island, Bahamas – Lead ecologist responsible for qualitative and quantitative assessments of terrestrial, marine and tidally influenced natural resources of a small island in the Bahamas that was being considered for resort development. Developed vegetative community maps and an Environmental Impact Assessment for review by the government of the Bahamas.

Ecological Evaluations, Children's Bay Cay, Williams Cay, Lee Stocking Island and Madam Dau's Cay, Bahamas – Lead ecologist conducting investigations of terrestrial and marine habitats on these four small islands in the Exumas. Developed habitat community maps and species lists to assist planners in the design of a resort project and developed Environmental Impact Assessments for review by the Government of the Bahamas.

Mangrove Assessment, Whale Cay, Bahamas – Conducted qualitative and quantitative assessments of tidally influenced and landlocked mangrove communities on Whale Cay as part of an environmental impact assessment for a proposed marina project.

Environmental Impact Assessment, Bock Cay, Exumas, Bahamas – Conducted landside investigations including qualitative and quantitative habitat mapping on a ~500 acre island proposed for resort development. Field work in development of floral and faunal inventories revealed the presence of various species protected by Bahamas laws and international conservation treaties.

Ecological Assessment, Bird Cay, Berry Islands, Bahamas – Conducted a cursory assessment of terrestrial and wetland habitats on this ~260-acre cay to determine if there were any ecological issues that would prevent or affect development on the presently-uninhabited, privately-owned island.

Terrestrial and Coastal Assessment, Palmetto Peninsula, Barbuda – Performed vegetative community mapping and qualitative assessment on a 1,200 acre site following Hurricane Irma's path of devastation across Barbuda. Developed flora and fauna lists of species observed, with particular emphasis on species designated as Endemic, Endangered and Vulnerable.

Terrestrial and Marine Assessment, Turtle Tail Drive, Providenciales, Turks & Caicos – Conducted terrestrial and nearshore marine investigations to map and evaluate conditions prior to installation of a shore-perpendicular groyne and upland development. Landside work included mapping locations of numerous endemic plant species to assist in micro-siting proposed facilities to minimize impact on notable species.

Terrestrial and Marine Due Diligence Surveys, Bahamas – Lead ecologist on a multi-disciplinary team evaluating multiple sites for consideration for development as out-island cruise ship

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destinations. Sites included locations on Andros, the Abacos, the Berry Islands, and Eleuthera. Performed marine investigations and cursory land-side habitat mapping as part of fatal-flaw level analyses.

Terrestrial and Wetland Assessments, Northwest Point, Providenciales, Turks & Caicos – Lead scientist in the mapping of vegetative communities and evaluation of qualitative conditions on three tracts of vacant land in the Northwest Point area of Providenciales.

Ecological Evaluation, Gorda Cay, Bahamas - Conducted an ecological survey of this small island in the northern Bahamas. Project included evaluations of nearshore, beach, tidal and upland communities, compilation of flora and fauna lists and preliminary survey for protected species. Specific habitats investigated included nearshore coral communities, seagrasses, tidal mangrove forests and uplands.

Ecological Investigations and Environmental Impact Assessment, North Creek, Grand Turk. – Lead ecologist during the evaluation of marine, lagoon, shoreline and landside habitats and development of an Environmental Impact Assessment for a proposed marina and multi-phase residential development.

Marine and Landside Assessments, Serenity Bay, Antigua – Lead scientist for the mapping and qualitative assessment of nearshore marine communities and landside vegetative community mapping for a potential resort project in southwest Antigua.

Terrestrial Assessment, Rock House, Providenciales, Turks & Caicos – Conducted terrestrial investigations to map habitats, evaluate conditions and develop an Environmental Impact Assessment and Environmental Management Plan for review by the Turks and Caicos Government. Terrestrial work included mapping locations of numerous endemic plant species to assist project planners in minimizing impact on notable species. Provided the ecological components of the project at a Public Consultation meeting.

Mangrove Restoration and Protected Species Assessment, Barbados - Conducted an intensive assessment of mangroves in the Graeme Hall Swamp to determine the population and habitat preferences of the Barbados sub-species of the Yellow Warbler. Results of this assessment were used in the development of a long-term management plan for the site.

Ecological Evaluation, Pavilions at Unicorn Cay, Eleuthera, Bahamas - Conducted an ecological evaluation of a ~ 1500-acre tract in the eastern Bahamas. Project included evaluations of upland and wetland communities, compilation of flora and fauna lists and preliminary survey for species protected by Bahamian laws and international treaties.

Mangrove Assessment, Ponce, Puerto Rico - Conducted habitat assessment of a wetland community along south shore of Puerto Rico. Mapped forested and herbaceous wetland communities and identified relative habitat values.

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Salt Pond Habitat Assessment, Sonesta Resort, Anguilla, British West Indies - Conducted survey of flora and fauna present in a 12-acre salt pond at a resort on Anguilla. Developed plan for habitat enhancement that would improve water quality and biological productivity, reduce odor and insect problems and improve aesthetic perception by resort visitors.

Scrub Island, British Virgin Islands – Conducted upland and marine habitat investigations to determine, document and map the presence, absence and condition of natural resources on Scrub Island. Developed inventories of flora and fauna and compared present conditions with those documented during surveys conducted \pm 15 years ago.

Ecological Evaluation, Athol Island, Bahamas - Conducted an ecological survey of an undeveloped island on which the Government of the Bahamas was considering entering into a public/private partnership for limited recreational development. Project included evaluations of upland and wetland communities, underwater areas, compilation of species lists and conducting a survey for nesting birds.

Macao Beach Resort, Bavarro, Dominican Republic – Conducted a bird survey and participated in an environmental assessment of a tract of coastal property that is being considered for the construction of a resort. Assisted in the development of an Environmental Impact Statement and was principal author of the environmental management plan for the property, which includes upland and wetland habitats.

Royal Reef Resort, North Caicos, Turks and Caicos Islands – Conducted landside and marine assessments of existing terrestrial, aquatic and marine habitats associated with development of a resort on this oceanfront tract. Assessment included investigations of potential access routes for navigation to/from Providenciales.

Marine Assessment, True East, Grand Bahama – Conducted underwater investigation of nearshore macrobenthic communities adjacent to a ~ 100-acre property near the southwestern Grand Bahama community of Boodle Bay. Assessment involved mapping of macroalgae and coral habitats and investigation of numerous freshwater vents emanating from subsurface pores in the limestone substrate.

Altamer Resort, Anguilla, British West Indies – Conducted ecological assessments as part of an Environmental Impact Assessment for a proposed resort expansion project. A key component of responsibility was the development of a Conservation and Management Plan for a ~ 40-acre salt pond to be preserved and managed as the Country's first designated bird sanctuary.

Environmental Impact Assessment, Sky Beach, Eleuthera, Bahamas – Conducted terrestrial assessments of existing conditions on a ~ 22-acre site in central Eleuthera. Developed inventories of flora and fauna observed and assessed potential ecological impacts of construction and operation of a 35-unit residential development. Conducted follow-up inspections during construction to monitor compliance with environmental components of governmental approvals.

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Ecological Investigations, Holbox, Mexico – Conducted field investigations and analyses of aerial photography to produce a vegetative community map for a \pm 10,000 acre coastal barrier island at the northern tip of the Yucatan Peninsula. Field work included qualitative investigations of upland areas, marine communities, and mangrove assemblages in intertidal and interior island areas.

Marine Assessments, Coco Cay, Bahamas – Lead scientist on the evaluation of a + 215-acre tract of submerged resources adjacent to Coco Cay. Mapped and provided a qualitative assessment of coral reef/hardbottom, seagrasses and coastal rock communities and provided ecological components of an Environmental Impact Assessment for a proposed cruise ship pier for review by the government of the Bahamas.

Marine and Terrestrial Assessments, South Caicos, Turks and Caicos Islands – Conducted marine and landside assessments of existing marine and upland habitats associated with development of resorts on South Caicos. Results of the investigations were included initially in a Strategic Environmental Impact Assessment that was provided to the TCI Government; then conducted follow-up more detailed investigations specifically for the Sailrock project.

Terrestrial and Marine Assessments, Crystal Cay and Long Cay, Bahamas – Assessed upland and marine habitats on these two small islands near New Providence. Developed a report describing baseline conditions for use in subsequent master planning for site improvements.

Terrestrial and Marine Assessments, Great Stirrup Cay, Bahamas – Conducted quantitative and qualitative assessments of terrestrial and underwater communities to assist in minimizing ecological impacts of proposed construction activities associated with improvements by Norwegian Cruise Line.

Savannah Bay, Anguilla, British West Indies – Conducted terrestrial and marine ecological assessments as part of due diligence and Environmental Impact Assessments for a proposed resort development project. Habitats evaluated included nearshore marine, terrestrial, mangrove wetlands and an open-water salt pond.

West End Assessment, West End Resort, Ltd., Freeport, Bahamas - Project Manager responsible for conducting an ecological assessment and developing an Environmental Impact Assessment which described the existing and future conditions at a 150-acre tract that was subsequently renovated into a marina and waterfront resort.

Blowing Point, Anguilla, British West Indies – Conducted terrestrial and marine ecological assessments and developed ecological components of an Environmental Impact Analysis associated with the relocation of a “Dolphin Discovery” facility.

Ecological Assessment, Bonefish Point, Providenciales, Turks and Caicos – Conducted quantitative and qualitative assessments in marine and terrestrial ecosystems on a ~ 250-acre tract near the southwestern tip of Providenciales. Developed a report which identified existing habitats and assessed potential ecological impacts that could result from the construction of a resort.

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Ritz-Carlton, Grace Bay, Providenciales, Turks and Caicos – Conducted landside and marine investigations at a former resort site that is being considered for replacement with a Ritz-Carlton resort and residences complex. Project included meetings with governmental officials and development of an Environmental Impact Statement.

Ecological Evaluation, Little Exuma, Bahamas - Conducted landside and waterside ecological assessments at an undeveloped 230-acre tract that stretched across the island from ocean to bay. The project included evaluations of upland and wetland communities, a cursory evaluation of marine habitats and compilation of lists of flora and fauna.

Ritz-Carlton, Grand Cayman, Cayman Islands, British West Indies – Conducted quantitative and qualitative ecological assessments in marine, estuarine lagoon, tidal mangrove forest and uplands at a previously existing resort on a 140-acre tract along Seven-Mile Beach. Results from the field assessment were used to assist in environmental planning and obtaining governmental approvals for a proposed Ritz-Carlton resort complex. Also developed a shoreline vegetation plan to use native plants to stabilize the shore, filter surface runoff and provide habitat for birds, fish and other wildlife. Conducted follow-up assessments of the mangrove community after the area was impacted by Hurricane Ivan, and worked with coastal engineers to design a mangrove habitat restoration plan.

Ecological Assessment, South Ocean Resort and Golf Course, New Providence, Bahamas – Conducted due diligence level investigation of ecological conditions on an abandoned resort property to identify potential ecological constraints for re-development of the property. Identified and mapped the boundaries of environmentally sensitive resources, including several plant species that are protected by regulations of the Bahamas government. Conducted follow-up Environmental Impact Assessment level analyses for construction of a marina and entrance channel.

Shoreline Improvement Project, Hobe Sound, FL. – Performed an assessment of existing conditions along a tidal shoreline in a residential community adjoining the Indian River Lagoon. Developed a plan for mangrove management and the replacement of non-native vegetation with aesthetically-friendly native species that would filter upland run-off and provide erosion protection.

Mangrove Habitat Restoration, Myers Ln., Palm Beach County, FL – Acquired, planted and completed monitoring a multi-year shoreline mangrove restoration project required by a FL. Dept. of Environmental Protection Consent Order.

Shoreline Assessments, Port Everglades Dredged Material Management Area, Broward County, FL. – Assisted Boston-based Cashman Dredging, Inc. during their dredging work at Port Everglades. Conducted pre-dredging and post-dredging shoreline assessments along the Dania Cut-off Canal and assisted with mangrove management during the course of the 16-month dredging project.

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Floristic Surveys, Martin County, FL. – Completed floristic surveys on 13 County-owned conservation properties by traversing representative vegetative communities on properties ranging in size from under five acres to over 3,500 acres and recording GPS coordinates for the presence of flora and fauna designated by the State of Florida and/or the federal government as endangered or threatened.

Preserve Area Management, The Arbors, Martin County, FL – Performed qualitative assessment of ecological conditions within upland and wetlands preserves and led a multi-agency project to update the Preserve Area Management Plan to incorporate the principles of the Florida Forest Service's Firewise Communities and the Florida Fish and Wildlife Conservation Commission's Scrub Management Guidelines.

Forensic Mangrove Investigation, Loxahatchee River, Jupiter, FL – Performed site evaluation and served as expert witness on behalf of the Town of Jupiter in legal proceedings regarding unauthorized removal of shoreline mangroves.

Mangrove Resource Survey, Port Everglades, FL – Conducted baseline investigation of mangroves along the shoreline adjacent to the Dania Cut-off Canal Dredged Material Management Area in preparation for its use during dredging at Port Everglades.

Submerged Aquatic Vegetation Investigation, Lake Worth Lagoon, Palm Beach County, FL – Lead scientist to conduct qualitative and quantitative benthic resources in the alignment of a proposed communications cable from the mainland to Peanut Island.

Habitat Enhancement Project, Dredged Material Disposal Island MC2, Martin County, FL. - Obtained grant money and then developed a habitat enhancement plan for an island in the Indian River Lagoon that is used for nesting by wood storks and other state and/or federally protected birds. Obtained the necessary state and federal regulatory approvals, and then coordinated implementation of the plan, which involved removal of invasive pest plants and planting of mangroves and other salt-tolerant native species.

Avian Monitoring, Dredged Material Disposal Island MC2, Martin County, FL. – Conducted avian monitoring during the 2011-2012 nesting season to document the nesting activities of wood storks, brown pelicans and other protected species of birds during and after completion of a shoreline protection project.

Mangrove Habitat Restoration, Myers Ln., Palm Beach County, FL – Acquired, planted and completed monitoring a multi-year shoreline mangrove restoration project required by a FL. Dept. of Environmental Protection Consent Order.

Mangrove Restoration, Beach Point Condominium, Palm Beach, FL – Conducted habitat enhancement activities to restore mangrove habitat on privately-owned lands adjacent to Lake Worth Lagoon in central Palm Beach County. Project involved planting and mangrove monitoring over a 5-year period; released by FDEP from further monitoring when success criteria were met

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prior to monitoring deadline. Subsequent work has involved mangrove maintenance trimming for over a decade.

Mangrove Enhancement, Jupiter, FL. – Conducted a site assessment, developed a mangrove enhancement project; then acquired and planted red mangroves, black mangroves and white mangroves in shoreline communities along a tidal extension of the Loxahatchee River.

Mangrove Monitoring, Jones Creek, Jupiter, FL. – Conducted monitoring over a three-year period in implementation of a Consent Order by the Florida Department of Environmental Protection regarding restoration of mangroves along a privately-owned shoreline of Jones Creek.

Ecological Assessments, Singer Island, FL – Conducted ecological surveys for threatened and endangered species and aquatic species biodiversity in barrier island ecosystems and provided correspondence and expert witness testimony in proceedings in an effort to preserve a coastal wetland on Singer Island.

Mangrove Assessment, Sea Ranch Condominium, Boca Raton, FL. – Conducted a qualitative assessment of mangroves along the east side of the Intracoastal Waterway and developed a mangrove restoration plan with recommendations of alternatives to improve mangrove habitats.

Mangrove Trimming, Coastal FL – After earning accreditation as a professional mangrove trimmer, worked with the Florida Dept. of Environmental Protection and Martin County to obtain approvals and then conduct mangrove trimming along public access routes at Pendarvis Cove Park (Martin County), adjacent to South Ocean Boulevard in Palm Beach County and on behalf of numerous property owners in Palm Beach and Martin Counties.

Mangrove Restoration, Cudjoe Key, FL – Conducted an evaluation of mangroves on near-shore islands, developed and subsequently implemented a restoration and maintenance plan that included planting over 500 mangroves to improve ecological and shoreline protection features following mangrove alteration that exceeded State of Florida standards.

Mangrove Assessments, Martin, Palm Beach, Broward and Dade Counties, FL. - Conducted numerous assessments of estuarine communities along the southeast coast of Florida. Projects involved analyses of the extent and quality of red, black and white mangroves and design/permitting of utility projects to minimize impacts to mangroves.

Natural Resources Damage Assessment, Palm City, FL. – Conducted assessments after heavy equipment was used to clear privately-owned wetlands without the approval of the land owner. Mapped boundaries of areas that were illegally cleared and made estimates of the extent of damage to flora and fauna.

Wetland Assessment, City of Riviera Beach, FL – Lead scientist on the identification and qualitative evaluation of over 25 forested and herbaceous wetlands that were within potentially within the drawdown cone-of-influence of a municipal water supply well field. The project

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involved investigation of vegetative components and hydrologic indicators of short-term and long-term conditions in each wetland.

Protected Species Survey, Gulf Coast Landfill, Lee County, FL. - Conducted wildlife surveys and ecological investigations to determine the potential effects of a landfill expansion project on the Florida Panther and other state-listed and/or federally-listed species. Developed a Biological Assessment for the project for review by the U.S. Fish and Wildlife Service.

Ecological Assessments for International Alzheimer's Foundation, FL. – Conducted ecological assessments at sites in St. Lucie and Highlands Counties being considered for construction of residences for Alzheimer's patients. Assessments included mapping of wetland areas and surveys for threatened and endangered species.

Wildlife and Protected Species Surveys, Brevard County, FL. - Conducted Flora and fauna surveys on a 2,000-acre tract in southern Brevard County. The property included herbaceous and forested wetlands, and improved pasture. Protected species documented included numerous species of wading birds, bald eagles and burrowing owls.

Wetland Jurisdictional Determinations and Assessments, FL. - Conducted wetland jurisdictional determinations and protected species surveys at over 150 sites in peninsular Florida. Ecosystems encountered included herbaceous and forested habitats in freshwater, estuarine and marine areas. Clients and project sizes have varied from owners of single family residential lots to large publicly-owned conservation lands.

Ecological Assessment, LaBelle, FL. – Conducted protected species surveys and wetland mapping on a 232-acre tract east of LaBelle in northwestern Hendry County. Mapped the location of over 100 burrows of gopher tortoises, obtained State permit for tortoise relocation and managed the relocation effort. Also conducted a five-day survey for scrub jays in compliance with state and federal protocols.

Ecological Assessment, Santa Lucea Tract, Martin County, FL. - Developed a preliminary inventory of plants on a tract of public lands being considered for acquisition by Martin County for the purposes of environmental protection. The oceanfront tract includes beach/dune, maritime hammock, coastal strand and mangrove communities, and several plants listed as threatened or endangered by the State of Florida.

Ecological Assessment, Twin Rivers Park, Martin County, FL. - Developed a preliminary inventory of flora and fauna on the project site, and delineated the boundary of wetland jurisdiction for state and federal regulatory agencies. Inventory included mapping of threatened and/or endangered plants (e.g., *Halophila johnsonii*) and animals (e.g., *Gopherus polyphemus*) and relocation of several gopher tortoises after issuance of permits required by the State of Florida.

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Acreage Community Park, Palm Beach County, FL. – Conducted site investigations for potential use by threatened and endangered species. Completed surveys for gopher tortoises, research permitted recipient sites, obtained relocation permit from the Florida Fish and Wildlife Conservation Commission, excavated potentially active burrows and transferred captured tortoises to recipient site.

Wetland Delineation, Delaplane Peninsula, Martin County, FL. – Conducted wetland delineations on a 50acre tract of waterfront County-owned conservation lands to assist in preparing for habitat improvement activities.

Ecological Assessment, Bahama Breeze, Ft. Pierce, FL – Conducted flora and fauna surveys on this \pm 20acre site on Hutchinson Island. Landside work involved mapping the distribution of gopher tortoises, and working with owner and state regulators to ensure compliance with gopher tortoise protection requirements. Waterside work involved delineating the wetland jurisdictional boundary and mapping seagrasses, including *Halophila johnsonii*, which is protected by the federal Endangered Species Act as a threatened species.

Barley Barber Swamp, Martin County, FL. - Conducted surveys and developed an inventory of flora and fauna present in a 400-acre cypress preserve and led public tours during tenure as ranger. Subsequently designed and had oversight responsibilities for a habitat and hydrologic restoration program. Responsibilities included development and implementation of a water level monitoring and management program during a five-year restoration period.

Bird Surveys, Boca Raton, FL. – Conducted shorebird monitoring as required by state permits for a beach restoration project in southern Palm Beach County. Project involved daily inspections of a \pm 1-mile stretch of beach, to ensure that beach nourishment, groin construction and jetty improvements would not result in adverse impacts on birds that are protected by state and/or federal wildlife laws.

Bird Surveys, Indian River County, FL. – Conducted shorebird monitoring as required by state permits for two beach renourishment projects in northern Indian River County. Project involved daily inspections of a several mile stretch of beach during the nesting season, to ensure that beach nourishment did not result in adverse impacts on birds that are protected by state and/or federal wildlife laws. Obtained permits for, and coordinated relocation of several state-listed protected pioneer-zone plants that would have otherwise been impacted by the project.

Avian Monitoring, STA 1 East Trash Rake and Rack Replacements, Palm Beach County, FL. – Conducted daily surveys for species protected by the federal Migratory Bird Treaty Act during the ~ 4-month and 7month construction projects at the S-362 and S-319 Pump Stations. Cumulatively, the projects involved over 85,000 documented bird sightings and nesting by 19 MBTA-protected species, including endangered snail kites, ospreys, limpkins and other wetland-dependent species. Close coordination with state and federal agencies ensured that construction was not delayed as protected birds nested – some as close as within 50 ft of the construction activities.

Bird Surveys, Town of Palm Beach, FL. – Conducted bird monitoring as required by state permits for a beach restoration project in central Palm Beach County. Project involved inspections of a ~

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3.7-mile stretch of beach, to monitor the effects of a beach nourishment project on birds that are protected by state and/or federal wildlife laws.

Bald Eagle Nest Monitoring, Okeechobee County, FL. – Conducted intensive monitoring of bald eagle flight paths and pathways, and reaction to various potential disturbances, and worked with regulatory agencies to develop site-specific primary and secondary protection zones.

Bald Eagle Nest Monitoring, Brevard County, FL. – Conducted monitoring of bald eagle flight paths and pathways, and reaction to various potential disturbances, to ensure that work did not result in abandonment of nesting when it became necessary to conduct utility installation activities during the 2011-2012 nesting season.

Bald Eagle Nest Monitoring, Flagler County, FL. – Conducted intensive monitoring of bald eagle flight paths and pathways, and reaction to various potential disturbances, and worked with regulatory agencies to obtain approval of a site-specific bald eagle protection plan for Nest FL - 007 which is located on a tract of land that is proposed for development. Conducted additional monitoring when it became necessary to conduct construction activities during the 2003, 2004, 2005 and 2006 nesting seasons.

Osprey Nest Interactions, Peninsular FL. - Coordinated and/or conducted numerous surveys of osprey nests and success of use of alternate nesting structures throughout southern and eastern Florida. In several cases, coordinated the construction, permitting and installation of osprey nesting platforms.

Bald Eagle Nest Monitoring, Martin County, FL. – Initiated Audubon of Martin County's participation in the statewide (FL) Eaglewatch program in 2004 and subsequently coordinated their annual participation for several years. Responsibilities included organizing and training of volunteers, assigning nests and QA/QC on monitoring reports. Also conducted monitoring of nesting bald eagles for Martin County's Environmentally Sensitive Lands Division at Nest MT – 018 during the 2006-07 nesting season.

Piping Plover Assessments, Volusia County, FL – Conducted surveys within Piping Plover Critical Wintering Habitat Unit # FL-34 to document daily activity patterns and foraging habits and to evaluate plover's responses to various potential human-related and natural disturbances.

Piping Plover Surveys, Martin County, FL – Served as project manager and participated in birds surveys in the vicinity of the St. Lucie Inlet to document the presence, abundance and habitat use by piping plovers and other protected birds; Coordination with Great Lakes shorebird scientists when documentation of banded piping plovers revealed them to be members of the population that nest on state and federal lands on the eastern shore of Lake Michigan.

Piping Plover Surveys, Martin County, FL. - Coordinated the 1991, 1996, 2001, 2006 and 2011 censuses to determine the wintering population and habitat of the piping plover (*Charadrius melodus*) in the Martin County area of southeastern Florida. Project included recruitment and

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training of volunteers, coordination of field surveys and reporting to U.S. Fish and Wildlife Service.

Sandhill Crane Nesting Survey, Okeechobee, FL. - Conducted ecological field surveys on a 2,400-acre site in Okeechobee County, FL. to document wildlife usage, specifically focused on nesting of Florida Sandhill Cranes (*Grus canadensis pratensis*). Surveys involved monthly field investigations conducted on the ground and by helicopter, and resulted in the documentation of successful nesting by cranes and other protected species.

Bird Surveys and Habitat Enhancement Project, Evergrene, Palm Beach County, FL. – Conducted surveys to determine and document avifauna at Evergrene, then developed and implemented a program to enhance habitat for birds through the installation of nest boxes for owls, woodpeckers, ducks, flycatchers and purple martins. Installed 10 nest boxes in 2003-04, conducted monitoring to document their use, expanded the project to over 40 nest boxes through 2021 as it became apparent that nest sites were a limiting factors in bird abundance for cavity-nesting species.

Ornithological Surveys, Martin County, FL. - Coordinated a 5-year Breeding Bird Atlas project to document nesting habits and habitats of all bird species in Martin County. Project included recruitment of a team of volunteers who conducted the surveys, coordination and peer review of their data and liaison with a network of other coordinators through the state.

Assessment of the Status of Red-cockaded Woodpeckers in Martin County, FL. – Chaired a multi-agency committee focused on determining the historic and current distribution of this federally-endangered species, and seeking to establish and/or maintain a sustainable population of this species in Martin County.

Least Tern Conservation, Martin County, FL. – Led multi-group task committee to document and protect least tern nesting areas. Project included beach-nesting and roof-top nesting terns (and black skimmers) and involved U.S. Fish and Wildlife Service, Florida Fish and Wildlife Conservation Commission and conservation non-governmental partners.

Sandhill Crane Conservation, Martin County, FL. – Developed a county-wide conservation project for sandhill cranes in Martin County. Developed and provided educational materials about crane ecology (e.g., life history, habitat, diet, threats, etc.), worked with Martin County to install crane crossing signs at selected locations to simultaneously increase driver safety and protect cranes. Recruited and trained a project manager.

Ecological Monitoring, Kissimmee Prairie Sanctuary, Okeechobee County, FL. – Conducted a three-year monitoring program regarding restoration of nesting habitat for the endangered Grasshopper Sparrow on preserve lands owned and managed by the Audubon Society.

Bird Habitat Improvement Project, Mirasol, Palm Beach County, FL. – Conducted surveys to document bird life at a golf course development in northern Palm Beach County. Installed 10 nest boxes and monitored the boxes to document their use.

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Scrub-jay Conservation, Martin County, FL – Initiated a county-wide Scrub-jay conservation project for Audubon of Martin County. Developed and provided educational materials about Scrub-jay ecology (e.g., life history, habitat, diet, threats, etc.), participated in JayWatch training, recruited, trained a project manager, had oversight responsibilities for updating geographic distribution status summaries and serving on the steering committee of the multi-agency Southeast Florida Scrub Ecosystem Working Group.

Protected Species Surveys, Pal-Mar, Martin County, FL – Conducted ecological surveys to assist Martin County in developing grant applications seeking funding to expand public landholdings of conservation lands. Surveys included documentation of numerous plant and animal species that are protected by state and/or federal laws.

Avian Distribution Analyses, FL – Served as project manager to initially develop (1998) and subsequently update (2011) the “*Checklist of the Birds of Martin County*” and “*Birding Sites in Martin County*”. The projects involved coordination with other noted local bird authorities, querying and analyzing banding databases, developing and circulating draft lists, performing QA/QC on reported sightings, providing presentations to community groups, leading birding outings in search of rare species and finalizing lists for publication. Have also provided peer review on draft bird lists for various conservation land parcels (e.g., Savannas Preserve State Park, Blowing Rocks Preserve).

Scrub-jay Survey, Gables Preserve, Martin County, FL – Conducted surveys in compliance with state and federal standards on an 80-acre tract of conservation lands owned and managed by Martin County.

Communication Tower Siting, Renovations and Environmental Assessments, Southeast FL – Conducted assessments of numerous proposed communication tower sites and up-grade sites and evaluated each for potential impacts to threatened and endangered species, birds and consistency with U.S. Fish and Wildlife Service guidelines. Individual sites have varied from intensely-urbanized areas with no environmental sensitivity to improvements of existing towers located on public lands in areas of high environmental sensitivity, including national parks.

Bird Banding, Reporting and Analyses, FL – Provided assistance to a licensed bander at Ankona Raptor Research in St. Lucie County, FL conducting surveys of migrant raptors to document their use of prevailing East-coast on-shore wind current patterns during their southerly migration. Also involved with Federal (Corps of Engineers), State of Florida (Fish and Wildlife Conservation Commission) and non-governmental organization (Cornell-Audubon e-Bird) processing of on-line reporting of sightings of banded birds.

Avian Invasives Ecology, FL – Analyzed historic data regarding the presence and distribution of nonnative birds in the Treasure Coast (FL) area; developed a display board and educational materials regarding avian invasives for a conference poster-session; analyzed the appearance of a

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new non-native species (Egyptian Geese) and authored a paper in a peer-reviewed journal (Florida Ornithological Society's *Florida Naturalist*) regarding the establishment of this species in eastern Martin County.

Habitat Improvements, Conservation Lands, Martin County, FL – Obtained grant funding from the Florida Department of Agriculture and Consumer Services in the Community and Urban Forests Program, the St. Lucie River Issues Team and the Indian River Lagoon License Plate Trust Fund and served as project manager to hire staff and recruit volunteers to assist in habitat management activities on five properties owned and managed by Audubon of Martin County.

Protected Species Assessments, Red Reef Park, Spanish River Park, South Beach Park and Gumbo Limbo Nature Center, Boca Raton, FL. – Performed protected species surveys to assist in site planning for dune habitat management and visitor access activities. Developed preliminary inventories of flora and fauna on the project sites, and led coordination efforts to ensure protection of the federally-listed beach jacquemontia (*Jacquemontia reclinata*) and other plant species present on ocean-fronting dunes.

Christmas Bird Count, Stuart, FL. – Have had oversight responsibility for the Stuart, FL Christmas Bird Count annually from 1998 through 2011. Responsibilities included recruiting and coordinating a volunteer compiler, recruiting and organizing pre-count orientation sessions, mentoring participants during field surveys, serving as the media liaison and analyzing results to assess short-term and long-term population trends.

ENVIRONMENTAL PLANNING AND PERMITTING

Halpatiokee Regional Park, Martin County, FL. – Developed a Land Management Plan for 500 acres of conservation lands managed by Martin County's Ecosystem Restoration and Management Division. Project involved data collection to develop a Draft Plan, coordination through a public meeting and an Advisory Group of stakeholders and refinement of a Plan that met the requirements of Florida's Division of State lands and the Florida Communities Trust.

Maplewood Nature Sanctuary, Hidden Bay Nature Sanctuary and Four Rivers Nature Sanctuaries, Martin County, FL. – Conducted flora and fauna surveys on several small tracts owned by Audubon of Martin County and subsequently developed Management Plans for environmentally responsible stewardship of the properties. Obtained grant funding to remove invasive pest plants and served as project manager to oversee habitat enhancement projects.

Salt Ponds, Key West FL. – Developed a Strategic Plan for the management of a \pm 600-acre tidal ecosystem in Key West Florida. Project involved extensive coordination with various stakeholders, including several governmental entities and conservation groups. Assisted in the development of a grant application, and served as project manager for a \$50,000 habitat enhancement project in implementation of the Plan.

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Electric Utility Permitting, FL. - Provided environmental assistance in the route selection of numerous electrical construction projects, and obtained State and Federal approvals for over 150 aerial and subaqueous electrical cable installation projects throughout eastern, south-central and south-western Florida. Also obtained approvals for over 20 power plant projects, including plant major expansions in Fort Lauderdale and Martin County, Florida.

Estuarine Restoration, Dade County, FL. - Directed permit condition compliance activities in the Florida Bay area associated with impacts to estuarine and freshwater ecosystems resulting from utility work adjacent to Everglades National Park. Project involved documentation of construction-related impacts to natural areas and monitoring of habitat restoration.

Citrus Blvd Nature Sanctuary, Martin County, FL. – Conducted flora and fauna surveys on a 270-acre nature preserve owned by Audubon of Martin County and subsequently developed a Management Plan for environmentally responsible stewardship of the property. Recruited Eagle Scout candidates and other volunteers to assist with implementation of various components of the Management Plan.

Sonesta-Key Biscayne, Sonesta Beach Resort, Key Biscayne, FL. - Provided assistance to the Sonesta Beach Resort, Key Biscayne by assisting in the design criteria for hotel expansion and obtaining permits from the Florida Department of Environmental Protection - Bureau of Beaches and Coastal Systems.

Hurricane Andrew, Dade County, FL. - Coordinated wetland permit compliance activities for electrical transmission, distribution and power plant restoration activities in the aftermath of the devastating effects of Hurricane Andrew.

Power Plant Canal Dredging, FL. - Obtained state and federal permits and approvals for dredging projects at power plants in Miami, Ft. Lauderdale, Port Everglades, Riviera Beach and Hutchinson Island. Projects involved coordination concerning a variety of protected species issues, primarily regarding protection of sea turtles and manatees and protection of submerged aquatic vegetation.

Utility Easements, throughout peninsular FL. - Obtained numerous land use approvals from the State of Florida for electric utility projects on state lands. Locations included sovereignty submerged lands, Aquatic Preserves, Outstanding Florida Waters and state-owned uplands including parks and recreation areas.

Habitat Improvement Program, Lake Worth, FL. – Conducted field assessments and developed plans for ecologically-sensitive habitat improvements on several tracts of public lands managed by the Lake Worth Community Development Corporation.

ENVIRONMENTAL EDUCATION-TEACHING

Wildlife Training for Landfill Operators, Univ. of FL. – Developed and provided a course to increase the awareness of certified landfill operators about protected species regulations and

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wetland issues. The curriculum was reviewed and approved by the Florida Solid Waste Training Committee, with attendance, publicity and other administrative services performed by the University of Florida's Center for Training, Research and Education for Environmental Occupations. Updated course materials and taught the class when demand for the course resulted in follow-up classes in 1998, 2000, 2003, 2008, 2009 and 2010.

Wetland Resource Training, FL. - Developed and implemented a wetland training program for electric utility employees to improve compliance with state and federal wetland protection and protected species regulations.

Bird Identification Course Instructor, FL. – Developed and provided Introductory and Advanced Bird Identification courses for Audubon of Martin County and other clients in southeast Florida. The courses, which typically include a combination of classroom presentations and field trips has been updated and provided to the general public and/or select audiences in most years from 1997 through 2020.

EDUCATION

B. S. 1978 Biological Oceanography, Florida Institute of Technology

OTHER TRAINING/EDUCATION

Classification of Wetlands and Deepwater Habitats of the United States, U.S. Fish and Wildlife Service, St. Petersburg, FL

Environmental Permitting, FL. Chamber of Commerce

LEADERship Martin County

Leadership for Community-Based Organizations, 1000 Friends of Florida

Designing Natural Resource Monitoring Surveys, U.S. Geological Survey,

2009

EMPLOYMENT HISTORY

1998 – Present: Ecologist/Owner, Sustainable Ecosystems International, Jupiter, FL.

1994 - Present: Sr. Scientist, Applied Technology & Management, Inc., W. Palm Beach, FL.

1984-1993: Environmental Coordinator, Florida Power and Light Co., Juno Beach, FL.

1983-1984: Ranger-Naturalist; Barley Barber Swamp Preserve: Martin County, FL

1979-1982: Environmental Technician; Olin Edwards Company, Indiantown, FL

PUBLICATIONS

The Birds of Evergrene, 2021. Alan Rubin and Greg Braun

Principal author of numerous Environmental Impact Assessments

First Documented Nesting in the Wild of Egyptian Geese (*Alopochen aegyptiacus*) in Florida, Florida Field Naturalist, 32(4):138-143, 2004.

MEMBERSHIPS

COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

National, Florida and Treasure Coast Chapter - Associations of Environmental Professionals
Florida and Martin County Native Plant Societies
Florida Oceanographic Society
The Nature Conservancy
Bahamas National Trust

CERTIFICATIONS & LICENSES

- Certified Environmental Professional - Certification # 03040418; re-certified annually 2003 - present.
- Professional Mangrove Trimmer, 2006-present – as recognized by the Florida Department of Environmental Protection
- Gopher Tortoise Agent – Florida Fish and Wildlife Conservation Commission Permit # GTA-0900102E
- Certified Small Business Enterprise, Palm Beach County, 2011-present
- Certified SCUBA Diver – Professional Association of Diving Instructors

PROFESSIONAL APPOINTMENTS, RECOGNITIONS and CERTIFICATIONS

- Our Florida Reefs, North Working Group, 2013-2016.
- Martin County Chapter, Florida Native Plant Society, Board of Directors, 2011-present, President 2021-present
- Florida Association of Environmental Professionals, Treasure Coast Chapter, Board of Directors, 2013-2016
- Martin County Coastal Working Group, 2008-present.
- Southeast Florida Scrub Ecosystem Working Group, Steering Committee member, 2008-present.
- Board Member, Audubon of Florida (1996-2004) and Executive Director, Audubon of Martin County (1994-2011).
- Member, Martin County Public Land Acquisition Selection Committee (1989-91, 2002-2014; Chairman in 1991 and 2003-2008).
- Distinguished Service Award in May 2001 by the Martin County Conservation Alliance.
- Recognized for leadership of the Martin County Audubon Society when the organization was selected as Chapter of the Year by Audubon of Florida in 1999 and 2002.
- Madison Who's Who in Executives and Professionals, 2013.
- Manatee Recovery Team, Manatee Regulatory Working Group, 2004-2006
- Member, Board of Trustees, Environmental Studies Council, 2003-2005
- Loxahatchee River Management Coordinating Council, 2004-present, Secretary 2007-2009.
- William T. Hornaday Award for Distinguished Service in Conservation, 2007

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- Member, Hobe Sound National Wildlife Refuge Lake Frances Mangrove Swamp Restoration Partnership (2005-2008)

PREDENSA MOORE

P.O. Box N- 9500
Nassau, Bahamas
242-557-1199
predensa@gmail.com

ACADEMIC QUALIFICATIONS

- Bahamas Institute of Bankers Associate: College of The Bahamas-1987

EMPLOYMENT HISTORY

Independent Consultant: 2015-Present

- Conduct over 35 Avian Survey for Environmental Impact Assessments Covering 10 island groups in The Bahamas and 1 Caribbean Island assessment.

Bahamas National Trust: 2006 – 2015

- Bird Identification and Eco-Tour Guide Trainer.
- Project management and field logistics for shorebird (Piping Plover) and seabird (Audubon Shearwater) conservation projects.
- Field Assistant for Avian Biologists from USA/Canada during surveys of shorebird and seabird species in The Bahamas.
- Coordinator of Bahamas Important Bird Areas (IBA) Field Surveys.
- BirdLife World Bird Database – data gathering and input for all important biodiversity sites in The Bahamas.

Hong Kong and Shanghai Banking Corporation Limited: 1979 – 2005

- Treasury and Administration Officer

CAREER HIGHLIGHTS

- Conduct avian assessment for inclusion in Environmental Impact Assessments for thirty-two (32) projects on ten (10) island groups throughout The Bahamas and Caribbean.
- Berry Islands, Surveys of endangered wintering Piping Plover for Conservation
- Cay Sal Bank, Surveys of summer breeding seabirds on all the cays for Conservation

CORE STRENGTHS

- Field Work
- Bird Identification Skills
- Strong Organizational Skills
- Training

AWARDS

- A Disney Conservation Hero 2016

PUBLICATIONS

- BirdLife International Important Bird Areas in The Caribbean: The Bahamas Chapter – Predensa Moore and Lynn Gape (Bahamas National Trust), 2008
- Beautiful Bahama Birds: Common Birds of the Bahama Islands, 2014

PROJECT EXPERIENCE

The Bahamas:

1. Albany Bahamas, New Providence
2. Lee Stocking Island, Exuma
3. White Bay Cay, Exuma
4. Treasure Cay, Abaco
5. The Haven, Cat Island
6. Fairview Close, New Providence
7. Bond's Cay, Berry Islands

8. Little Halls Pond, Exuma Cays
9. Leaf Cay, Exuma Cays
10. Oban Energies, Grand Bahama
11. Hurricane Hole Marina, Paradise Island, New Providence
12. Finley Cay, Eleuthera
13. Briland Residence and Marina, Harbour Island, Eleuthera
14. Port St. George, Long Island
15. Governor's Harbour Naval Base, Eleuthera
16. Lighthouse Point, Eleuthera
17. Rose Island, New Providence
18. Adelaide Creek Ecolodge, New Providence
19. Bahamas Power & Light, Raged Island Solar Microgrid, Ragged Island
20. Ocean Cay, Bimini
21. Grand Lucayan, Grand Bahama
22. Grand Bahama Port, Grand Bahama
23. Half Moon Cay, Eleuthera
24. The Salinas, Long Island
25. Venetian, New Providence
26. Gladstone Road, New Providence
27. Great Stirrup Cay, Berry Islands
28. Discovery Bay, Grand Bahama
29. Deadmon's Cay Airport, Long Island
30. North Eleuthera Airport, Eleuthera
31. Glass Window Bridge, Eleuthera
32. Fox Hill, Kemp Road & Hope Gardens Community Centers, New Providence
33. Athol Island, New Providence
34. Bird Cay, Berry Islands
35. Prospect Ridge, New Providence
36. Hog Cay, Exuma

Caribbean Islands:

1. Barbuda airport

SWIL CVs

Philip S. Warner

Name of firm	Smith Warner International
Project position	Coastal Engineer
Name of person	Philip Warner
Email	philip@smithwarner.com
Profession	Coastal Engineer
Years of professional experience & career summary	Philip is a senior civil engineer with wide experience in coastal engineering design and oceanographic studies. He has design, inspection, and appraisal experience for coastal protection, marine structures and oceanographic studies, in addition to the development and operation of numerous civil, structural, coastal and hydraulic engineering computer programs. He also has field experience in marine structures construction supervision and inspection, hydrographic surveys and the deployment of oceanographic field equipment. His experience includes work done throughout the Caribbean region and internationally.
Date of birth	03 July, 1964
Nationality	Canadian/Jamaican
Education (state from highest achieved and include year of award)	M.Sc. Research thesis in Coastal Engineering, Queen's University at Kingston, Ontario, 1993, Thesis Topic: Measurement and Prediction of Flow Characteristics within the Swash Zone. B.Sc.(Hons) Civil Engineering, First Class Honours, Queen's University at Kingston, Ontario, 1986.
Professional licenses/key qualifications	Professional Engineers Registration Board

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Membership in professional societies	Member Jamaica Institution of Engineers, Member of Professional Engineers of Ontario.				
Skills (including software and engineering codes)	MIKE 21 SW by DHI	MIKE 21 HD by DHI	MIKE 21 ST by DHI	MIKE 21 MT by DHI	MIKE 21 SM by DHI
	MIKE 3 HD by DHI				
Period of employment	1995 to Present				
Company name	Smith Warner International				
Location	Kingston, Jamaica				
Position(s)	Executive Director, Coastal Engineer				
Project description & location	<p>Name of assignment: Regional Disaster Vulnerability Reduction Project: Georgetown Sea Defense Coastal Zone Investigations and Feasibility Studies</p> <p>Year: 2013-2016</p> <p>Location: St Vincent</p> <p>Client: Government of St Vincent and the Grenadines</p> <p>Main Project Features: The shoreline near Georgetown has suffered significant erosion due to recent hurricanes, and severe winter swells and damaging storms exacerbate the problem. The Government of St. Vincent wishes to stabilize the area to mitigate further loss of coastal lands and protect and prepare the area for Commercial zone construction investments.</p> <p>Positions held: Coastal Engineer</p> <p>Activities Performed: Data collection (waves, currents, tides, bathymetry, topography and historical shoreline positions), wave, sediment, and hydrodynamic modeling; identify and evaluate shoreline protection options, erosion</p>				

	<p>control and beach accretion interventions; model and evaluate the performance of the proposed engineering interventions and identify and propose alternatives based on modeled findings and engineering experience; EIA; training of local government engineers in coastal zone analysis and exposure to the technologies and techniques involved; training workshops in coastal zone analysis and data collection, coastal zone modeling, and engineering design and feasibility analysis using modeling tools.</p> <p>Name of assignment or project: Grand Cayman Cruise Berth EIA</p> <p>Year: 2014-2015</p> <p>Location: Grand Cayman</p> <p>Procuring Entity: Port Authority, Government of Cayman Islands</p> <p>Main project features: Full environmental impact assessment of a proposed cruise ship berth. Data collection, detailed assessment of impacts, including coastal, environmental, and socio-economic as well as extensive stakeholder consultation and presentation of findings to community.</p> <p>Positions held: Coastal Engineer, numerical modeling expert</p> <p>Activities performed: Coordinated data collection including several current/wave recorders, seabed probes, bathymetric and topographic surveys. Detailed analysis of shoreline change trends and positions along Seven Mile Beach using GPS-mapped data. Analysis and validation of various numerical models for waves, currents, sediment and dredging and disposal activities to determine and quantify impacts.</p> <p>Name of assignment or project: North Shore Integrated</p>
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	<p>Coastal and Watershed Stabilization Project</p> <p>Year: 2015-2016</p> <p>Location: British Virgin Islands</p> <p>Procuring Entity: Organization of Eastern Caribbean States</p> <p>Main project features: Data collection, coastal and hydrologic modeling of watersheds leading to engineering designs of shoreline protection structures and water quality improvements. Tendering, evaluation, and construction supervision currently underway.</p> <p>Positions held: Coastal Engineer, numerical modeling expert</p> <p>Activities performed: Analysis of results from wave, hydrodynamic and morphological modeling, which was done to investigate the existing and proposed shoreline. The model results helped in determining the critical spots where protection would be required. Technology transfer to government staff through data collection and modeling procedures. Engineering designs, costs, quantities, and drawings were prepared and presented to stakeholders.</p> <p>Name of assignment: Tsunami and Storm Surge Modeling and Mapping – British Virgin Islands</p> <p>Year: 2011</p> <p>Location: BVI</p> <p>Client: UNDP R3I Administered Project for European Commission</p> <p>Main Project Features: As part of a wide-reaching Regional Risk Reduction Initiative SWIL and Deltares undertook the storm surge and tsunami modeling of the four main island of BVI. In conjunction with stakeholders an approach and methodology were developed and executed. Data collection activities were required,</p>
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	<p>procured, commissioned, evaluated and approved. Results were prepared in GIS compatible formats for on-going use by the Office of Disaster Preparedness.</p> <p>Positions held: Storm Surge Modeling Expert</p> <p>Activities Performed: Project management, oceanographic and bathymetric data review; preparation of data collection program, including procurement of LiDAR, single and multi-beam bathymetric surveys and GPS-derived topography; numerical model selection, set-up, validation, interpretation and reporting for storm surge components.</p> <p>Name of assignment or project: Studies for the Preparation of the Barbados Coastal Risk Assessment and Management Program</p> <p>Year: 2011</p> <p>Location: Barbados</p> <p>Procuring Entity: IADB (beneficiary CZMU- Barbados)</p> <p>Main project features: Barbados CZMU was provided with Technical Assistance to prepare for the multi-year CRAMP. Evaluations were completed of institutions, procedures, tools and personnel to determine capabilities and needs. Assessments were done of several investment phase engineering projects. Detailed TOR's written for CRAMP components including Baseline (Coastal Zone LiDAR, Nearshore Waves, Circulation and Water Quality, Sediment Transport Geotechnical Surveys and Shoreline Change) Studies; Integrated Coastal Risk Information Platform. Procurement plans and input for IADB loan documents were also prepared.</p> <p>Positions held: Coastal Engineer</p> <p>Activities performed: Analysis, evaluation and prioritization of engineering designs for Infrastructure Program. Review of data collection monitoring and</p>
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COMPREHENSIVE ENVIRONMENTAL IMPACT ASSESSMENT FOR A BLUE WATER LAGOON BASIN, PENINSULA INLAND CANAL, ENTRANCE CHANNELS AND BOAT DOCKS, SAIL ROCK PENINSULA, SOUTH CAICOS, TURKS AND CAICOS ISLANDS

	modeling activities; assess and prioritize needs for Baseline Surveys, updated Risk Monitoring Programs, Information Management systems and modeling capabilities. Prepare detailed TOR, budgets and schedules for baseline studies, information management system, and waterfront improvements (including eco-system based approaches).
Five main duties/responsibilities	(1) Coastal engineering design, (2) computer modeling of waves, currents, and sediments, (3) oceanographic and nearshore data collection and survey procurement, (4) shoreline change monitoring and analysis, (5) report preparation and project management.

Philip will investigate baseline coastal processes and dynamics including currents, tides, Sediment transport and erosion/accretion. Using available information, a numerical model of the project site and environs will be developed in order to understand the existing tides, currents, wave patterns, and sediment movement. This information will be developed for a range of environmental conditions including baseline day-to-day averages as well as extreme storm/hurricane conditions.

Renée McDonald

1	Name of firm	Smith Warner International Limited
2	Project position	Marine Ecologist
3	Name of person	Renée McDonald
7	Email	renee@smithwarner.com
8	Profession	Environmental Specialist & Geologist
9	Years of professional experience & career summary (max 300 words)	5 Years experience in Earth and Marine Sciences. Career began at the Petroleum Corporation of Jamaica in the Special Projects/Oil & gas department. Continued post- graduate school with environmental consulting firms. Current role as Environmental Specialist and Geologist at SWI
10	Date of birth	11/11/1989
11	Nationality	Jamaican

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12	Education (state from highest achieved and include year of award)	MSc Marine Environment and Resources (2013) BSc Geology (2010)
13	Professional licenses/key qualifications	Post-graduate diploma in Environmental Management (2016) Certificate in Principles of Project Management (2014) PADI Open Water Diver certification (2014)
14	Membership in professional societies	Geological Society of Jamaica, AAPG, SEG, Jamaica Institute of Environmental Professionals
15	Training (software, FIDIC, etc.)	International Seabed Authority At-Sea training programme (2015)
16	Seminars attended	Caribbean Coastal Conference 2016, Barbados SEG Annual Conference 2013, Houston TX, USA (presenter)
17	Skills (including software and engineering codes)	<ul style="list-style-type: none"> • Wordpress website development • ArcGIS
18A	Period of employment	2016-present
18B	Company name	Smith Warner International Limited
18C	Location	Kingston, Jamaica
18D	Position(s)	Environmental Specialist and Geologist
18E	Project description & location	<p>Name of Assignment: Royalton Resorts Beach Development (Jamaica, St. Lucia)</p> <p>Year: 2016-2018</p> <p>Location: Jamaica, St. Lucia</p> <p>Client: Royalton Resorts</p> <p>Main project features: Beach creation and enhancement along rocky and eroding coastal areas</p> <p>Position held: Marine Environmental Specialist</p> <p>Activities Performed: Marine Benthic surveys prior to construction activities. Marine benthic surveys post-construction. Relocation of sensitive organisms (coral &</p>

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		<p>seagrass) from construction impact areas. Monitoring of relocated organisms. Supervision of electrification of artificial reef (Biorock) structures and installation of fish havens.</p> <p>Name of Assignment: Falmouth Cruise Ship Pier Dredging Year:2017 Location: Falmouth, Jamaica Client: Port Authority of Jamaica (PAJ)</p> <p>Main Project Features: SWI was contracted by the Port Authority of Jamaica (PAJ) to perform an impact analysis on the widening of the berth pocket and a section of the entrance channel of the Falmouth Cruise Ship East Berth. Of concern were the impacts on the surrounding benthos and the marine and coastal processes in the area.</p> <p>Position held: Marine Environmental Specialist</p> <p>Activities Performed: Survey of the proposed dredge site. Development of relocation plan for coral and other sensitive organisms.</p> <p>Name of Assignment: Magdalena Grand Beach & Golf Resort Year:2017 Location: Tobago Client: Evolving TecKnologies and Enterprise Development Company Ltd. (eTeck)</p> <p>Main Project Features: Project is intended to develop a comprehensive understanding of the coastal processes leading to the erosion of the Magdalena beachfront, as well as the best mechanism for curbing the erosion.</p> <p>Position held: Marine Environmental Specialist</p> <p>Activities Performed: Conducted benthic survey. Assisted with bathymetric survey.</p>
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		<p>Name of Assignment: Paradise Found Resort Development-Baseline study and preliminary drainage plan.</p> <p>Year: 2016</p> <p>Location: Barbuda</p> <p>Client: Paradise Found Development</p> <p>Main Project Features: Waterfront development on 400acre coastal property. The project involved preliminary environmental assessment to integrate master planning and existing ponds and wetlands, climate change risk with respect to storm surge and long term coastal erosion, inland flooding and storm water management. Scope required working with development team of master planners, architects, archeologists and sustainability consultants.</p> <p>Position Held : Environmental Specialist/Geologist</p> <p>Activities performed: Benthic surveys, Geophysical survey, Water Quality sampling, Soil sampling. Data analysis & report preparation.</p>
18F	Five main duties/responsibilities	<ul style="list-style-type: none"> • Marine benthic surveys; • Ecological surveys within the coastal zone; • Working with associates and subs in areas of environmental assessments and climate resilience; • Participation in integrated coastal environmental engineering within the coastal zone (ridge to reef); • Geophysical surveys and geological interpretation of findings; • Proposal and report preparation and project coordination

Renée will supervise the collection of baseline data from marine environment which includes quantitative and qualitative descriptions of marine ecology, in both areas to be directly impacted by the project, as well as adjacent areas that may be indirectly impacted. The potential impact of the project on the marine environment will be assessed.

CARIBBEAN ENVIRONMENTAL DESIGN ASSOCIATES

OSWALD R. WILLIAMS, BSc. MA. MRTPI

Osborne Road, East Backsalina, Grand Turk, Turks & Caicos Islands, B.W.I

Telephone: (649) 231 0371

Email: Oswaldwilliams51@gmail.com

PROFESSIONAL PROFILE

Oswald R. Williams is an Architect/Planner and was previously Director of Planning, Turks and Caicos Government. Presently he heads his own Architectural and Planning Consultancy, operating under Caribbean Environmental Design Associates. Mr. Williams holds a bachelor's degree in architectural technology and a Master's Degree in Town Planning. He has been involved in many civic organizations and government boards. He has a passion for environmental quality.

A well tested, goal oriented, determined individual who is committed to ongoing professional development and constantly looking for new life challenges and experiences. Excellent interpersonal skills, accompanied by hands on experience at all levels of the planning, architectural and construction management sectors, as well as the business arena. An outstanding team player, efficient independent worker with a sharp eye for details who is committed to meeting organizational objectives and deadlines. Brings to the team an enthusiastic personality, dedication and leadership skills that allow him to confidently communicate at all levels and to get the task accomplished in a timely manner.

OBJECTIVE

Keenly strives to maximize all skills and experiences to serve both public and private sector clients effectively and efficiently in the areas of Architecture, Planning, Environmental Impact Assessment Studies and Property Appraisals.

EDUCATION/QUALIFICATIONS

Masters in Environmental Planning 1987-1989 - University of Nottingham, Nottingham, UK

BSc. Architectural Technology 1980-1983 – New York Institute of Technology, New York, USA – (Which included Construction Technology, Material Take-Off, Cost Estimating and Property Evaluation).

Certificate in Environmental and Sustainable Development 1992 – The Banff Centre for Management, Barbados, BWI.

Certificate in Environmental Assessment and Management 1991 – Centre for Environmental Management and Planning, University of Aberdeen, Scotland. England.

Certificate in Tourism Planning 1979 – Project Planning Center, University of Bradford, England.

Certificate in Regional Tourism Planning 1978 – Caribbean Tourism Research Center, Barbados, BWI

Diploma in Physical Planning 1972-1974 – United Nations Development Programme, Planning Training Center, Castries, St. Lucia, BWI.

EMPLOYMENT HISTORY/PROFESSIONAL EXPERIENCES

- **Coordinator National Physical Sustainable Development Plan for the Turks and Caicos Islands.** Coordinate commence the process of preparation of a 10 year (2009-2019) development plan for the Turks and Caicos Islands.
- **Deputy Chairman, Physical Planning Board 2003 – 2005** – A statutory body of the Turks and Caicos Government with sole responsibility for reviewing and approving development applications, Master Development Plans and Environmental Impact Assessment
- **Architect/ Environmental Consultant 1995 – Present.** Operating under Caribbean Environmental Design Associates, a Turks and Caicos based company specializes in Architecture, Environmental Planning and Physical Planning.
- **1989 – 1995, Director of Planning, Turks and Caicos Government.** Responsible for the overall management and direction of Physical Development in the Turks and Caicos Islands, including the formulation of physical development policies. Advise government on development proposals and appropriate conservation policies and measures to ensure sustainable development.
- Supervised and managed a sixteen – men (16) Physical Planning Department, with headquarters in the capital island of Grand Turk and a branch office on Providenciales. Review physical planning applications and carried out periodical building inspection along with the Department's Building Engineer to ensure

compliance with the Physical Planning Ordinance and Regulations, and with the Turks and Caicos Islands Building Code. Carried out financial appraisals of planning applications to ensure that the appropriate application fees were collected.

- **1983 – 1987, Physical Planner, Turks and Caicos Government.** Prior to being appointed to the post of Director of Planning in July of 1989, I held several junior and senior positions within the Department of planning, including:

1983 - 1985, Secretary Physical Planning Board.

1984 - 1978, Physical Planning Officer.

1974 -1976, Physical Planning Technician.

During these early years a wealth of experience was gained in the wide range of physical planning related areas. This experience has later proven useful during my tenure as Director of Planning.

PROFILE ON CARIBBEAN ENVIRONMENTAL DESIGN ASSOCIATES

Caribbean Environmental Design Associates (**CEDA**) is a consulting firm established in 1995. It offers a wide range of architectural, environmental planning and project appraisal services to the public and private sectors in the Turks and Caicos Islands. The firm is staffed by Oswald R. Williams, the principal employee.

CEDA is owned and operated by a Turks and Caicos Islander. The company engages in work throughout the Turks and Caicos Islands.

PROJECT WORK EXPERIENCE

CEDA has provided architectural design, technical supervision and construction management services on the following recent projects:

Private Sector Projects

- Expansion T & C National Museum, Front Street, Grand Turk
- Two story commercial building, Church Folly, Grand Turk
- Retail stores, car wash and restaurant complex, Lighthouse Road, Grand Turk, under construction.

- Forty-eight (48) room hotel, with central facilities, Cockburn Harbour, South Caicos, under construction.
- Over 50 Dwelling houses – Grand Turk, South Caicos and Providenciales.
- Site Supervision and Management during the construction of Conch World Facility, Materson's Point, Grand Turk.
- Architectural and Construction Management and Supervision Expansion of Conch Farm, Providenciales.
- Special Inspector Leeward Canal Expansion Project - 2015

European Union Micro Projects

- Basketball courts on Grand Turk.
- Basketball court South Caicos
- Basketball Court Providenciales
- Upgrading sports track on North Caicos
- Farmer's assistance Programme North Caicos.

Caribbean Development Bank Basic Needs Trust Fund sub-projects throughout the Turks and Caicos Islands, which included -

- Day Care Center for the Handicapped, Blue Hills, Providenciales.
- Marjorie Basden High School Fencing, South Caicos.
- Repairs and Renovation of Public Library, South Caicos.
- Two-Story Classroom Block Ianthe Pratt Primary School, The Bight, Providenciales.
- Repairs & Renovations Soroptimist Day Care Center, Grand Turk.
- Renovation Disabled Center, South Caicos.
- Five Cays Primary School Fencing, Providenciales.
- Kew Clinic Extension and Renovation, North Caicos.
- Sandy Point Clinic Renovation, North Caicos.
- Multi-Purpose Outdoor Court, Raymond Gardiner High School, Bottle Creek, North Caicos.

- Improvements Christian Academic Primary School, Grand Turk.
 - Improvements New Testament Day Care Center, Grand Turk.
 - Repairs and renovations Day Care Center, Grand Turk.
 - Canteen Building Ona Glington Primary School, Grand Turk,
 - Renovation and Remodeling to Middle Caicos Clinic in Conch Bar, Middle Caicos
 - Consultant Early Childhood Center Ona Glington Primary School, Grand Turk, TCI
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- Consultant or contributing consultant on a number of Environmental Impact Assessment studies for tourism related development projects in the Turks and Caicos Islands.
 - Commercial and residential property appraisals for lending institutions in the Turks and Caicos.
 - Technical inspection reports on commercial and residential projects for lending institutions in the Turks and Caicos Islands.
 - Site Supervision and Management during the construction of Conch World Facility, Materson's Point, Grand Turk.

Sub-projects Settlement Upgrade Grand Turk and Salt Cay

During the period 2003 – 2008 performed the role as project officer to Grand Turk Settlement Upgrade Committee, where I designed, prepared contract documents and supervised and managed some three hundred (300) sub-projects throughout settlements in Grand Turk and Salt Cay.

PLANNING AND ENVIRONMENTAL IMPACT ASSESSMENT PROJECT EXPERIENCES

CEDA has been the lead environmental consultant to government and private sector developers on many major projects throughout the Turks and Caicos Islands and has carried out environmental studies for the following projects:

- Counter Part Physical Planner, National Physical Development Plan, Turks and Caicos Islands, 1985 – 1987.
- Settlement Upgrading Study, Grand Turk, Turks and Caicos Government 1991.

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- Settlement Upgrading Study, South Caicos, Turks and Caicos Government 1996.
- Environmental Impact Assessment, Greenwich Beach Development, Grace Bay, Providenciales, 1995.
- Environmental Impact Assessment, Royal Crown Colony Development, Halfway Creek, Middle Caicos, Contributing Consulting Environmental Planner/Coordinator, 1996.
- Environmental Impact Assessment, Crystal Bay Beach Resort, Northwest Point, Providenciales, 1996, Contributing Consultant Environment Planner.
- Environmental Impact Assessment, Point Grace Development, Grace Bay Providenciales, Contributing Consultant, Economic and Social Impact.
- Environmental Impact Assessment, the Sands, Grace Bay, Providenciales, Economic and Social Impact.
- Environmental Impact Assessment, Babula Beach resort and Villas, Cheshire Hall and Richmond Hill, Providenciales, 1999, Contributing Consultant/Coordinator.
- Environmental Impact Assessment, WACO Resort Development, Turtle Cove Marina, Providenciales, 1999, Contributing Consultant/Coordinator.
- Environmental Impact Assessment, Beaches Jetty, Grace Bay, Providenciales, 1999, Contributing Consultant/Coordinator.
- Environmental Impact Assessment, Leeward Temporary Floating Dock, Leeward Marina, Providenciales, 2000, Contributing Consultant/Coordinator.
- Environmental Impact Assessment, Leeward Canal Residential Development, Leeward Development, Providenciales, HallTech 2000, Contributing Consultant, Economic and Social Impact.
- Environmental Impact Assessment, the Somerset on Grace Bay, Grace Bay, Providenciales, 2001, Contributing Consultant/Coordinator.
- Environmental Impact Assessment, Grand View Hotel, Grace Bay, Providenciales, Contributing Consultant, Economic and Social Impact.
- Environmental Impact Assessment, Walkin Marine Dock Project, Leeward Going Through, Providenciales 2001, Contributing Consultant/Coordinator.

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- Environmental Impact Assessment, West Caicos Development, HallTech 2001, Contributing Consultant, Economic and Social Impact.
- Environmental impact Assessment, Cruise Ship Dock, Grand Turk, HallTech 2003, Contributing Consultant.
- Environmental Impact Assessment, Cruise Ship Dock Grand Turk, Turks and Caicos Islands, Team Coordinator and Contributing Consultant February 2004.
- Environmental Impact Assessment, Leeward Beach Creation Project, Leeward Marina, Providenciales – April 2005 - Coordinator and Contributing Consultant.
- Environmental Impact Assessment, Leeward Havens Canal Project, Providenciales – December 2005 - Coordinator and Contributing Consultant.
- EIA Turtle Cove Marina Land-Infill/Reclamation Project – 2015
- Consultant/Coordinator – EIA Leeward Going-Through Channel Maintenance Dredging 2015
- Consultant/Coordinator – EIA Ritz Carlton Resort & Residence 2017

NATIONAL PHYSICAL DEVELOPMENT PLANS FOR THE TURKS & CAICOS ISLANDS

Mr. Williams, of CEDA was counterpart planner for the outdated 1987-97 National Physical Development Plans prepared by United National Development Planning for the Turk and Caicos Islands government in 1987. More recently he was coordinator for the Village Habitat Team out of Atlanta that was engaged in the process of preparing the 2010 Revised National Physical Development Plans for the Turks and Caicos Islands prior to the suspension of the constitution and imposition of direct rule by the British Government.

CEDA PROPERTY APPRAISALS AND VALUATIONS

CEDA carried out over 1,000 property appraisals throughout the Turks and Caicos Islands since 1995 for Scotia Bank, First Caribbean International Bank, Turks and Caicos Banking and Turks and Caicos Investment Agency (TCInvest), which includes:

- Residential Domestic
- Land Only Domestic
- Residential/Commercial Development
- Land Only/Commercial Development
- Commercial Office
- Commercial Mixed Use

APPENDIX – LIII

Certification/Legal Document from the CEIA Consulting Team.

Certification/legal document from the CEIA group/company that submits the CEIS, that all submitted reports/documents and etc as part of the CEIA report/CEIS were first-hand information and if taken from secondary sources, the authors should be properly acknowledged or compensated.

TO WHOM IT CONCERN

The CEIA consulting team, authors of Sail Rock Comprehensive Environment Impact Assessment Study for the Sail Rock Lagoon Basin, Peninsula Canal, and Boat Dock, hereby certify that to the best of their knowledge, the contents, including text, illustrations, and graphics of the CEIA report for the Sail Rock Lagoon Basin, Peninsula canal and Boat Docks project are for the most part first-hand information and that in cases where secondary sources were quoted or referenced, the authors were properly acknowledged.

This 28th. Day of Mach 2023, Oswald R. Williams for and on behalf of the said CEIA consulting team.

APPENDIX – LIV

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