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Foreword

Mangroves exist in a unique environment between land and sea, and for this reason, they provide great benefits to both people and nature, including protecting shorelines, dampening storm surge, preventing or slowing erosion, sequestering carbon, and providing habitat and nursery grounds for many species. In so doing, they provide good climate change mitigation, adaptation and resilience benefits.

Mangroves, however, are continually threatened owed to increasing demand for coastal development. They are haphazardly cleared to the waterline and filled in to make way for homes and tourism developments. In so doing, we risk losing the vital goods and services mangroves provide.

Recognizing this problem, the Belize Government undertook a review and updating of its mangrove regulations. The new mangrove regulations went through an arduous process of consultation and validation to place greater emphasis on the management and conservation of mangroves in critical areas along the mainland coast and cayes. The role mangroves play in coastal protection, contribution to our economy, and their aesthetic, ecological and environmental values and functions have been factored within the decision-making process for alteration requests. The Regulations set out the enabling conditions to protect and sustainably manage mangrove ecosystems in country; providing an improved application process for alteration permits, institute a new systematic fee system, and strengthens penalties and fines to deter illegal mangrove alteration.

This summary document aims to inform developers and the Belizean public at large about the key stipulations within Belize's revised national Mangrove Regulations that became law in June 2018. It is NOT meant to replace the official Forests (Protection of Mangroves) Regulations, 2018 but to be used for information purposes only. The official regulations, which can be accessed from the Forest Department within the Ministry of Sustainable Development, should be consulted.





IN THIS DOCUMENT

"Alter" in relation to mangroves, means to cut, remove, defoliate, bury, block, drain, restrict the natural water flow, or otherwise destroy by any means or affect by any means, mechanical or otherwise, but does not include selective trimming, and "alteration" shall be construed accordingly;

"Applicant" means an applicant for a permit;

"Application" means an application for a permit;

"Department" means the Department of the Government for the time being charged with responsibility for mangrove forests:

"Fringe mangrove" means any mangrove in mangrove communities that grow as a relatively thin fringe along the coastline and that are partially flushed by tides:

"Issuing authority" means the head of the Department or other senior officer of the Department authorized in writing by the head:

"Mangrove" means any tree occurring in natural stands of the following species:

- · Black mangrove (Avicennia germinans);
- · Red mangrove (Rhizophora mangle);
- White mangrove (Laguncularia racemosa)

• Any other species of mangrove or concomitant tree, which the Minister may by Order publish in the Gazette;

"Mangrove community" means a naturally occurring stand of mangroves and all concomitant plants associated with mangroves;

"Overwash mangrove" means any mangrove in mangrove communities situated on islands that are typically wholly inundated or subject to complete inundation by the tide;

"Permit" means a permit granted under these Regulations;

"Priority mangrove area" includes any area listed in Schedule 1;

"Protected area" has the same meaning as in the National Protected Areas System Act;

"Review panel" means a review panel established under Regulation 15;

"Selective trimming" means removal of less than a quarter of all limbs and branches from any one tree, or removal of tips only of some limbs and branches from any one tree for the purpose of achieving a reduction in vertical or horizontal extent of trees, and which does not involve any trees being killed or roots being cut;

"World Heritage Site" means the Belize Barrier Reef Reserve System, inscribed as a UNESCO World Heritage Site in 1996.

Introduction

Excerpt from the Forest (Protection of Mangroves) Regulations, 2018

These regulations were made by the Minister responsible for forests in exercise of the powers conferred upon him by section 5 of the Forests Act, Chapter 213 of the Substantive Laws of Belize, Revised Edition 2011, and all other powers thereunto him enabling.

Mangroves border much of the coastline and cayes of Belize and form an important and cherished component of the natural vegetation of the country, and among other things, provide habitat, and have aesthetic, ecological and environmentally protective functions;

It is desirable in the national interest to make regulations to protect mangroves for the benefit of the coastal and marine ecosystems and further for the benefit of the people of Belize;

These regulations were made based on the abovementioned.

The following presents a SUMMARY of the contents of such regulations.

PROTECTION OF MANGROVES FROM ALTERATION OR SELECTIVE TRIMMING UNLESS BY PERMIT



APPLICATION FEES

	Mainland	From the mainland to the reef	Beyond the reef
Residential	\$50.00	\$100.00	\$200.00
Commercial	\$500.00	\$1,000.00	\$2,000.00

PERMIT FEES

	Mainland	From the mainland to the reef	Beyond the reef
Residential	\$50.00	\$100.00	\$200.00
Commercial	\$500.00	\$1,000.00	\$2,000.00



For applications received to alter an area exceeding one acre, the Forest Department must publish a notice in the Gazette no later than 10 days of the date of receipt of the application.

All applications received for alterations greater than 10 acres should be reviewed by a Panel nominated by the Minister. The review panel will make its recommendations to the Forest Department on whether to allow or object to the application.

The Forest Department will make its decision to approve or refuse an application for alteration no later than sixty days after the receipt date and will notify the applicant in writing.

If a permit is granted, the permit holder should install at the location where the mangrove alteration or selective trimming will occur, a prominently displayed sign with a waterproof copy of the permit affixed, and the sign shall remain in place for the duration of the alteration or selective trimming.

The dimensions of the sign shall be 4x4 feet and contain the words "Mangrove Alteration in Progress" or "Mangrove Selective Trimming in Progress".

Did you know?

Where it receives an application for the alteration of mangroves of an area exceeding one acre, the Department shall publish a notice to that effect in the Gazette not later than ten days from the date of its receipt of the application.



The Department shall consider and balance the following factors when reviewing applications for mangrove alterations:

- The distance of the proposed alteration away from a designated park or other type of protected area, including the World Heritage Site;
- Impact on nearby coastal and reef areas known to be of outstandingly high ecological value, including those within the National Integrated Coastal Zone Management Plan;
- Potential for direct and indirect economic benefits from the development;
- The impact on existing projects or projects already under construction, or other applications under consideration that may affect the lands under the proposed development;
- Alignment of the development with existing or proposed national, regional and local land-use plans;
- Whether the impacts of the alteration will be of a temporary or permanent nature;
- · Presence of overwash mangroves;
- Carbon storage and sequestration potential of the mangroves;
- The current condition of the mangroves and relative value of the functions being performed by or in the areas to be affected by the alteration.



Depending on the case, the Department shall impose measures that shall be accepted and undertaken by the applicant to mitigate or remedy any adverse effects identified, focused on the following:

 Actions that would avoid or prevent mangrove alteration, such as buffer zones:

Did you know?

The Department shall not grant a permit for alteration unless the followina are considered

- Water quality of rivers, streams, lagoons, the sea or any other body of water that flows from or surrounds the immediate vicinity of the location of the proposed alteration will not be significantly lowered or changed as a result of the proposed alteration;
- The proposed alteration is not contrary to the public interest,
- Public health, safety, welfare or property of others will not be adversely affected;
- Fish nursery, nesting sites, endangered or threatened species, other wildlife or their habitats will not be adversely affected;
- Navigation or the flow of water will not be adversely affected and that the alteration will not cause harmful erosion, siltation, deposition or shoaling;
- Fishing, recreation values or marine productivity in the vicinity of the proposed alteration, or more generally along the coast (where applicable), will not be adversely affected;
- Tourism value of the area will not be significantly reduced;
- Historical or archaeological resources will not be adversely affected; and
- •Storm surge protection function of the area will not be significantly reduced;
- Overwash mangroves will not be altered or adversely affected.



- Alternative site placement, facility design, work methods or equipment that would eliminate impacts to mangrove;
- Offsetting through restoration or planting of new mangrove communities in adjacent degraded areas or other areas:
- The restoration and reforestation of two times the amount of mangrove that was cleared: and
- A bond sufficient to ensure the successful completion of restoration activities with eighty percent survival rate after a minimum one year since planting.

Did you know?

If the application does not meet the criteria set out in the Mangroves Regulations, the Department shall refuse the application and refuse to grant the permit.





As a condition of granting a permit, the Forest Department may impose on the applicant a surety bond in the sum of ten thousand dollars per acre of the land where the alteration is to be made. Such should be issued to the benefit of the Government, where:

- · Mitigating measures are required (according to the Mangroves Regulations).
- The permit is for within a priority mangrove area.

Depending on the case, the Forest Department may impose other conditions to comply with the Mangroves Regulations.



TRIMMING OF MANGROVES

A person shall not selectively trim, allow or cause to be selectively trimmed any mangrove, unless the trimming is carried out under a permit received from the Forest Department. Applications should be submitted as per it is set out in **FORM A** (see page 15), accompanied by a non-refundable application fee, as prescribed below. A permit for selective trimming shall be in the form set out as **FORM B** (see page 15) and has no fee payable.

APPLICATION FEES

	Mainland	From the mainland to the reef	Beyond the reef
Residential	\$50.00	\$100.00	\$200.00
Commercial	\$500.00	\$1,000.00	\$2,000.00

The permit holder shall carry out selective trimming of mangroves mechanically, and in a manner that.

- Avoids damage to the bark on the remaining trunk, limbs or other branches;
- Does not involve the use of defoliants, herbicides, pruning paint or other chemicals;
- Ensures that plant material removed during selective trimming is disposed of in an orderly and inconspicuous manner; accordingly, small trunks and limbs (less than one inch in diameter) may be left in the mangrove habitat, but larger trunks and limbs (greater than one inch in diameter) shall be disposed of in an upland location so as not to impede or restrict water movement or create a hazard to navigation.

Did you know?

A person granted a permit for selective trimming shall not selectively trim more than 50% of mangroves along the waterfront where that person's land has water frontage.



Did you know?

A permit holder shall install at the location where the mangrove alteration or selective trimming, as applicable, will occur, a prominently displayed sign with a waterproof copy of the permit affixed, and the sign shall remain in place for the duration of the alteration or selective trimming.

The dimensions of the sign under sub-regulation (1) shall be 4 feet by 4 feet and contain the words "Mangrove Alteration in Progress" or "Mangrove Selective Trimming in Progress".



CANCELING OR DENYING A PERMIT

The Forest Department, as per powers granted under the Mangroves Regulations, can cancel a permit if the permit holder has breached a condition of the permit, or did not comply with any requirements under the Mangroves Regulations.

The Forest Department shall notify a permit holder, in writing, of the proposal to cancel a permit and give reasons to support this decision.



A permit holder who has received such notice may respond to the notice in writing, within twenty days of service explaining and demonstrating why the permit should not be suspended or cancelled.

If the Forest Department cancels a permit, it shall notify the permit holder, in writing, of the cancellation and of the right of review.

The Forest Department shall not issue a permit for alteration or selective trimming of mangroves by means of chemical defoliants or herbicides.

Did you know?

The Forest Department shall not issue a permit for the alteration or selective trimming of

- Mangroves in areas known to be an active nesting site or resting or breeding area for a colony or conspicuous concentration of birds, including but not limited to pelicans, spoonbills, herons, storks, boobies, frigate birds, and egrets.
- Overwash mangroves
- Mangroves within existing national parks, nature reserves, wildlife sanctuaries, natural monuments or other protected areas as defined and described in the National Protected Areas System Act



ADMINISTRATION

The Minister of the Ministry under which the Forest Department falls, may appoint a Review Panel comprising the following persons, namely, the:

- · Chief Forest Officer:
- · Fisheries Administrator;
- · Chief Environmental Officer;
- · Commissioner of Lands and Surveys;
- · Inspector of Mines;
- Head of the Coastal Zone Management Authority and Institute;
- Head of an organization appearing to the Minister to be a leading non-government organization working in research or management of the marine or coastal realm;

 An individual appearing to the Minister to be a reputable marine or coastal scientist or technician not affiliated with any of the above stated individuals or organizations.

The Minister shall appoint a Chairperson from among the members of the Review Panel.

The Review Panel may from time to time invite independent experts in World Heritage Sites, marine, coastal or mangrove ecology to its meetings to assist its consideration of permit applications.

The Review Panel shall submit its recommendations on a permit application within thirty days of receipt of the application.

Did you know?

The review panel shall consider and make recommendations to the Forest Department in relation to permit applications in the following circumstances

- more than ten acres of manaroves
- mangroves situated on cayes
- mangroves situated in priority mangrove areas;
- within the World Heritage Site; and
- where it is for a public good or essential



PUBLIC GOOD

Under the considerations of the Mangroves Regulations and upon receipt of an application for alteration of mangroves for a public good, and upon receipt of the required recommendation from the Review Panel, the Department may grant a permit if -

• It is for a public good being an essential service carried out by a duly constituted communication, water, sewer, electrical or other utility entity. However, the alteration is to be limited to those areas necessary for maintenance of existing lines or facilities or for construction of new lines or facilities to provide utility service to the public, and shall be conducted so as to avoid or minimize any unnecessary alteration of mangroves;

- It is for a public good being carried out by a duly licensed land surveyor in the performance of his duties. However, the alteration is to be limited to a swatch for survey sighting three feet or less in width;
- · It is for a public good carried out by a Government agency. However, the alteration is limited to those areas absolutely necessary for the installation or construction of any facility to provide service to the public, and that such alteration is conducted so as to avoid or minimize any unnecessary alteration of mangroves.

The Review Panel shall submit its recommendations on a permit application for public good as soon as practicable but no later than fifteen days from receipt of the application.

The Forest Department shall issue its decision as soon as practicable but no later than thirty days from receipt of the application.



OFFENCES AND PENALTIES

- No person shall use pruning paint in the alteration or selective trimming of mangroves.
- No person shall alter or selectively trim mangroves by the means of chemical defoliants or herbicides.
- The court may also order the cancellation of any permit granted under the provisions of the Mangrove Regulations and the confiscation of any vehicle, vessel or other means of transport or equipment used in the commission of the offence.
- All objects confiscated shall, with the approval of the Minister, be disposed of by the Forest Department in such manner as the Minister may prescribe.
- When a person is convicted of an offence, the court may, in addition to any other penalty provided under the Mangroves Regulations, assess the amount of any damage which may have been caused by the offender and cause the same to be recovered in such manner as if it were a civil penalty.

In the case of unauthorized structures or clearance, the court may order the removal of the same within such period as it may specify, and the restoration of each location of the damaged area as nearly as possible to its previous condition.





OTHER MATTERS

• The court may also order the cancellation of any permit granted under the provisions of the Mangrove Regulations and the confiscation of any vehicle, vessel or other means of transport or equipment used in the commission of the offence.

A person who is aggrieved by a decision of the issuing authority or the Review Panel to grant or refuse to grant a permit or to cancel a permit may, within twenty-one days of the decision, apply to a Judge in Chambers of the Supreme Court for review of the decision.

An application for review shall not result in the suspension of the decision in relation to which the application is made.

Upon hearing an application, the Supreme Court may:

- · dismiss the application; or
- remit the matter back to the Forest Department or the Review Panel, as the case may be, for further consideration with such directions as it considers fit.

PRIORITY MANGROVE AREAS

- 1. Pelican Cayes & Twin Cayes, SWCMR (unique, unparalleled marine biodiversity)
- 2. Turneffe Islands and Lighthouse Reef (supports marine biodiversity, reef connectivity and fisheries values)
- 3. Ryders, North Drowned and Drowned Cayes (critical storm protection and fisheries values for Bz City)
- 4. Haulover Creek, Belize City (unique ecosystem tourist potential for city)
- 5. Sibun Bight (unique black mangrove forests
- largest examples; ecotourism potential)
- 6. Sittee Ri ver Mouth (north and south of mouth), (best examples of old growth forest type red and black)
- 7. Rio Hondo Estuary

- 8. New River Estuary
- 9. Senis River mouth and cayes
- 10. Shipstern Lagoon and cayes to sea
- 11. Sapodilla lagoon
- 12. Ambergris Caye, Cangrejo
- 13. Caye Caulker
- 14. Price Bank
- 15. Belize River mouth and cayes
- 16. Burdon Canal
- 17. Placencia Lagoon
- 18. Golden Stream (protected)
- 19. Sartstoon Temash (protected)
- 20. All other cayes (inside barrier and atolls)
- 21. Four Mile Lagoon
- 22. Little Rocky Point to Vista Del Mar



FORMS

Form A Application for Permit to Alter or Selectively Trim Mangrove

- 1. Name of the Applicant
- 2. Description of the land on which mangroves are to be altered or selectively trimmed
- 3. Copy of property documents including title, land tax receipts, authenticated copy of survey, location plan, etc.
- 4. Description of the mangroves
- 5. Proposing to □ alter □ selectively trim
- 6. Nature of proposed alteration or selective trimming
- 7. Whether the land belongs to the applicant or to another person
- 8. The manner in which alteration is to be effected
- 9. Means of alteration or selective trimming.

10.Prescribed fee of \$	has been deposited in the Treasury	vide Receipt No	dated
1	, owner/occupier of		
do hereby declare that the par	ticulars furnished hereinbefore are t	rue to the best of my knowled	ige and belief.
Date			

Curety band amounts
Surety bond amount:
Comments:
Form B
Permit to Alter or Selectively trim Mangrove
Ref. No
Permit #
Name
Address
Permission is hereby granted to the above-named to alter or selectively trim mangroves at
, , ,
(Description of property location)
comprising of acres of land situated at
(size) (address)
(,
and is subject to the following conditions:
1. The permit is
(a) Valid for , only;
and (Permit Holder)
(b) Valid until
(Duration)
2. This permit is valid for the removal of
(Size and type of mangrove)
3. Failure to complete the alteration or selective trimming in the period specified by this permit will require a new assess-
ment and another permit. No fire or chemical defoliants are to be used in the alteration process granted by this permit.
Only fill material from upland quarries and material extracted during dredging operations process under an official
dredging operator permit granted by the Department responsible for mining will be allowed as filling to minimize pollution
to surrounding water.
5. The permit holder must immediately report the commencement and completion of alteration to the Department at lea
one week ahead of schedule and after completion in order for proper monitoring of the process.
6. Precaution to avoid spillage of excavated materials to other surrounding mangroves and water outside the specified
altered site must be strictly adhered to during the dredging process, thereby preventing the killing off and siltation of
mangroves and surrounding marine ecosystem, respectively.
7. This permit holder will be held responsible for any unnecessary alteration of siltation damage due to negligence on the
part of the operator conducting alteration on his behalf.
8. All other necessary permits must be adhered to. This permit does not relinquish the need to obtain all the other neces-
sary permits specified under the Laws of Belize.
9. If required, environmental clearance must be obtained from the Department of Environment prior to the start of the
mangrove clearance.
10. This permit may be cancelled at any time at the discretion of the Minister responsible for Mangroves.
Issuing Authority

