



BERMUDA GOVERNMENT
MINISTRY OF THE ENVIRONMENT

PATI Information Statement

Name of Public Authority: Department of Environment and Natural Services

Introduction:

Every public authority covered by the Public Access to Information (Bermuda) Act 2010 has a legal duty to maintain a publication scheme.

The purpose of this publication schemes if to make information readily available to the public without the need for specific written requests. This scheme is intended to encourage authorities to proactively publish information to develop a culture of openness and participation.

This publication scheme commits the Department of Environment and Natural Resources to making information available to the public as part of its normal business activities.

The Department of Environment and Natural Resources will:

- Specify all publicly available information held by the authority;
- Proactively publish or otherwise make routinely available information which is held by the authority;
- Describe the methods by which specific information is made available, so that it can be easily identified and accessed by members of the public;

The Department will generally not publish

- Information in draft form;
- Information that is not held by the Department of Environment and Natural Resources unless it is directly relevant to the workings of the Department but will endeavor to provide links to that information on its website;
- Information which is exempt by law or otherwise protected from disclosure for example personal information, commercially or historically sensitive information.
- Information that has a copyright.

Information format

The Department will supply any digital information in pdf format and in the language that the information is stored – generally English only. Not translation service is available.

Methods of access to information

On line

The Department of Environment and Natural Resources will endeavor to hold all current information digitally in pdf format on its website www.environment.bm.

To access the digital catalogue of holdings in the Bermuda Natural History Museum and Library visit [www.environment.bm /natural-history-library/](http://www.environment.bm/natural-history-library/)

Email

If information is listed in our information statement but is not published on the website, we may be able to send it to you by email. You can email us at environment@gov.bm

Please provide an email and contact phone number so that we can call to clarify details if necessary.

Phone and/or Post

For historic information not held digitally, to make a personal inquiry and/or to make an appointment to visit the Department contact:

Mr. Drew Pettit
Department Headquarters
Botanical Gardens
#169 South Road
Paget DV04
Tel (441) 236-4201

Fees and charges

The purpose of this scheme is to make the maximum amount of information available at minimum effort and cost to the public. The Department of Environment and Natural Resources strives to ensure that fees and charges are clearly explained and kept to a minimum.

Information which is published online, downloaded through the website or sent via email will be provided free of charge.

Fees may be charged for providing information in paper copy or on computer discs.

There are some educational publications that are offered for sale. These publications are charged at the cover price, plus postage costs. For a full list of publications please visit the Bermuda Zoological Society's web page (formal charity to the Department) www.bzs.org.

Additionally you can visit the Charities gift shop where most of these publications are available for sale.

Reproduction costs

Where fees apply, photocopied information will be charged at a standard rate of \$1.00 per page (black and white: any size) and \$1.50 per page (colour; any size).

Postage costs

The Department will pass onto the requester the actual costs of postage or courier delivery.

Complaints or Comments

If you experience any difficulties or have a complaint please contact the Director of Conservation Services:

Mr. Drew Pettit (Director)
Department Headquarters
Botanical Gardens
#169 South Road
Paget DV04
Tel (441) 236-4201
Email: apettit@gov.bm
Hours: Monday to Friday: 8:45 -5:00pm (by appointment)

Section A: Structure, Organization and Legislation [s5(1)a]

Insert structure of Authority (organizational chart preferable – text if deemed necessary):

Name of authority

Department of Environment and Natural Resources

Ministry

The Environment

Ministry Head

Ms Marva O'Brien, Permanent Secretary

Name and Title of Head

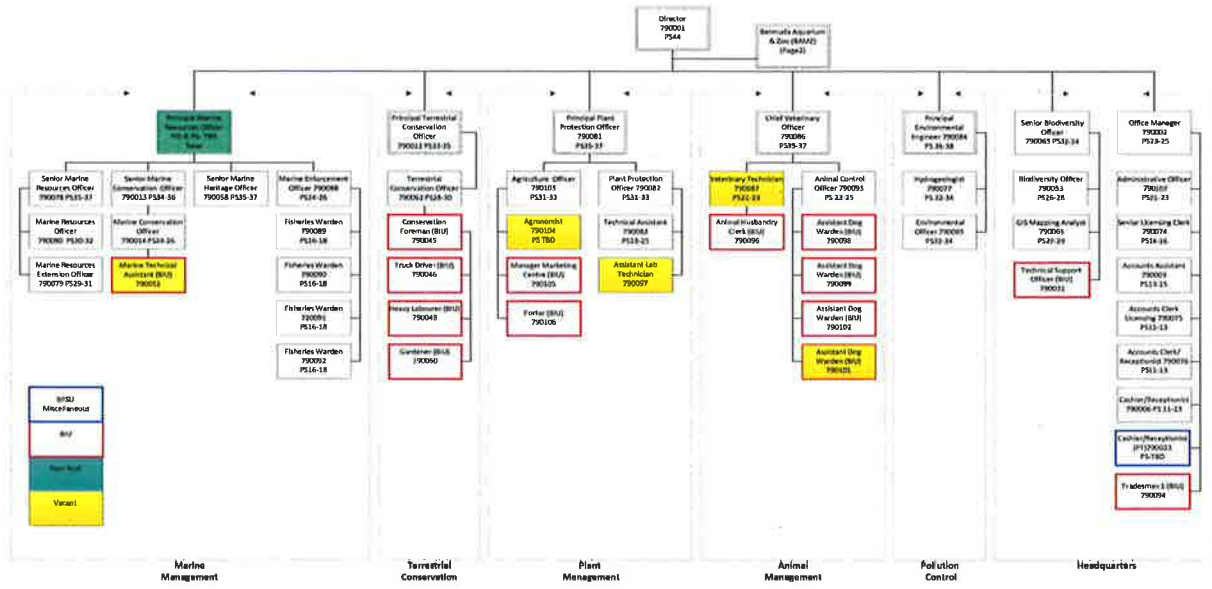
Mr. Drew Pettit, Director, Department Headquarters
Botanical Gardens, #169 South Road, Paget DV04, Tel (441) 236-4201

PATI Contact

As above

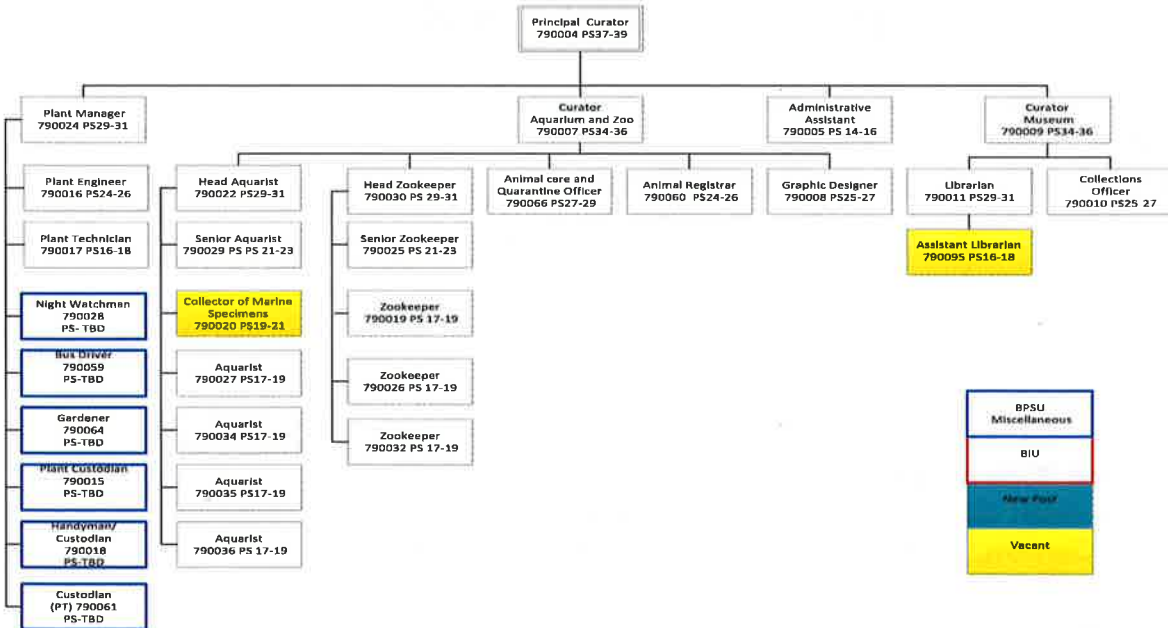
Telephone contact (441) 236-4201

**Organizational Structure
Department of Environment and Natural Resources (Head 79)**



3/4/2016

Bermuda Aquarium and Zoo (BAMZ)



Legislation

1. The Department provides oversight and enforcement of the following legislation
2. Agriculture Act 1930, Aquarium and Museum Regulations 1997
3. Importation of Fruits, Vegetables, Flowers Act 1961
4. Care and Protection of Animals Act 1975, Care and Protection of Animals (Commercial Horse Stables) (Licensing) Regulations 2005, Control of Animal Diseases Regulations 1947
5. Veterinary Practitioners Act 2008
6. Pesticide Safety Act 2009
7. Endangered Plants and Animals Act 1976
8. Protected Species Act 2003, Protected Species Order 2012
9. Protection of Birds Act 1974
10. Dogs Act 1978
11. Clean Air Act 1991, Clean Air Regulations 1993, Motor Car (Emissions Standards) Order 2004, Auxiliary Bicycles (Emission Standards) Order 2004
12. Water Resources Act 1975
13. Fisheries Act 1972, Fisheries Regulations 2010, Fisheries (Anti-fouling Paints Prohibition) Regulations 1989, Fisheries Order 1978
14. Historic Wrecks Act 2001
15. Coral Reef Preserves Act 1966
16. Development and Planning Tree Preservation Order Regulations 1975
17. National Parks Act 1986 (2009 not in force yet), National Parks Regulations 1988 (as it relates to nature reserves)

Government Boards

The Department provides environmental and management advice and technical support to the following Government Boards:

1. **Agricultural Board** – Advisory body to the Minister on all matters related to agriculture.
2. **Marine Resources Board** – Advisory body to the Planning Department, Marine & Ports and Estates on all matters related to marine environment e.g. proposed docks and marinas.
3. **Commercial Fisheries Committee**- responsible for the issuing of commercial fishing vessel licences, fixed fishing gear licences, and longline licences in addition to registering fishermen and assessing eligibility for benefits for fishermen. .
4. **Environmental Authority** - considers applications for constructing and operating controlled plants, importing and exporting controlled chemicals and water rights for the abstraction or disposal of water into the island's groundwater.
5. **Veterinary Practitioners Council** - to advise and ensure high standards of professional competence and conduct in the practice of veterinary medicine and surgery in Bermuda.
6. **Scientific Authority (CITES)** - The Authority has the power and duty to monitor local populations of species appearing on the CITES Appendices through scientific research and to advise on measures necessary to maintain such species
7. **National Parks Commission** – Advisory body to the Minister on all matters related

to the National Parks System and Planning consultee on all matters related to the Park System and specifically Nature Reserves.

8. **Historic Wrecks Authority** – Advisory body to the minister on all matters related to marine heritage specifically shipwrecks and marine heritage sites.

Charities

The Department works closely with a number of charities on mutually beneficial educational and environmental projects and programs including:

1. Bermuda Zoological Society & Atlantic Conservation Partnership
2. Bermuda Audubon Society
3. Bermuda National Trust
4. Bermuda National Museum
5. Walsingham Trust

Government Department links

The Department works closely with other Government departments including:

1. Department of Planning – matters relating to terrestrial conservation zones, marine habitats, protected species, woodland management, tree preservation orders, landscape schemes, conservation management plans and marine heritage matters.
2. Department of Parks – matters relating to nature reserves, woodland management, plants, partnerships in related projects.
3. Department of Marine and Ports – moorings and dredging as they related to marine habitats
4. Department of Lands and Surveys – GIS mapping as it relates to conservation related information held by the department

Section B: 1) Functions, powers, duties of the Authority [s5(1)b]

Mission Statement

To protect Bermuda's environment and responsibly manage its natural resources.

Summary

The DENR will (a) Provide strategic direction and management in the formulation and implementation of legislation, policy and standards to protect Bermuda's environment; (b) Monitor and provide guidance for the prevention and control of pollution in the natural environment; (c) Manage marine activities so that they are carried out in a sustainable and responsible way; (d) Support Bermuda's agriculture and fisheries sectors through services and partnerships that help increase industry profitability and sustainability, while safeguarding the island's natural resources; (e) Research, conserve and promote awareness of Bermuda's terrestrial and marine biodiversity, protected species, threatened habitats and marine cultural heritage; (f) Conduct environmental education on Bermuda and other islands for visitors, locals and schools through engaging and entertaining exhibits at the Bermuda Aquarium,

Museum and Zoo (BAMZ).

The department is unique within Government. It works in a dynamic collaboration using Government, charitable and volunteer resources. Specialists from the conservation unit and BAMZ carry out research and ecological assessment; develop recovery programs, education publications and environmental policy/legislation. The Natural History Museum and Library act as a repository for specimens and research publications, while the Aquarium and Zoo operates as its very successful environmental education & visitor outreach vehicle. The Bermuda Zoological Society (BZS) and Atlantic Conservation Partnership (ACP), as the formal charities for the Department, provide vital volunteer support, capital fund raising, delivery of the environmental education programmes and direct support for local and visiting scientist and graduate students.

Employees

75 full time staff

Department Annual Budget

\$8.04 Million (2016-17)

Programs:

The Department comprises 7 programs:

1. Department Headquarters
2. Marine Management
3. Plant Management
4. Pollution Control
5. Animal Management
6. Terrestrial Conservation
7. Bermuda Aquarium, Museum and Zoo (BAMZ)

DEPARTMENT HEADQUARTERS

Functions and Powers

- All department related legislation

Duties

- Overall administration, budget control, human resources, compliance with PATI, Health & Safety and management of the Department of Environment
- Oversight of Bermuda's Biodiversity Strategy and Action Plan, protected species and conservation related legislation, species recovery plans, maintenance of the Environment and Natural Resources website.
- Representation for all Boards on conservation related matters and liaison with all charities.

MARINE MANAGEMENT

Functions and Powers

Under the Fisheries Act 1972, Fisheries Regulations 2010 and Associated Orders

- Receives applications for commercial fishing vessel licences

- Receives applications for entry into the commercial fishermen's register
- Provides advice to the Commercial Fisheries Council (CFC), which is responsible for:
 - Issuing commercial fishing vessel licences
 - Maintaining a register of commercial fishermen
 - Assessing eligibility for benefits for fishermen in respect of fishing vessels, fishing equipment and related matters
- Issues licences for recreational lobster diving and spearfishing
- Keeps a record of fisheries statistics
- Regulates the take, export and import of marine resources for the purposes of scientific research through a permit system
- Provides technical advice for the responsible development of fisheries (e.g. offshore fishing, aquaculture)
- Provides advice to the Marine Resources Board, which is responsible for:
 - Advising the Minister on matters relating to the Fisheries Act, the protection and use of marine resources, and the marine environment in which these marine resources grow

Under the Marine and Ports legislation

- Inspects fishing vessels for compliance with safety regulations

Under the Customs Duty (Special Remission) Act 1951

- Administers the fuel rebate system for commercial fishermen

Duties

Responsible for:

- Managing local fishery stocks through legislation & policy
- Formulating fisheries and marine resource management programmes
- Regulating fishing activity (commercial & recreational)
- Conducting relevant applied monitoring for stock management and research on a range of marine species of local and international importance
- Providing extension services to the fishing industry
- Liaising with regional and international agencies to assist in the evaluation of the effectiveness of fishery management plans for highly migratory stocks

PLANT MANAGEMENT

Functions and Powers

Agriculture (Control of Plant Disease and Pest) Regulations 1970

- Manages the importation of plants into Bermuda and enforces established practices to prevent the introduction of plant pests and diseases
- Manages plant pest and disease problems endemic to island and provides technical support for newly introduced pathogens
- Regulates the importation of sand, crushed rock, gravel, peat and synthetic potting media

Pesticide Safety Act 2009

- Maintains database of all general use pesticides, restricted use pesticides and prohibited pesticides
- Assesses all pesticides that have applications for entry into Bermuda
- Regulates the importation of general use pesticides and restricted use pesticides
- Enforces handling and disposal of pesticides

Agriculture (Importation and sale of Potatoes) Regulations 1936

- Regulates the importation of seed potatoes
- Provides inspections of all imported seed potatoes
- Oversees the destruction of imported diseased seed potatoes
- Oversees and regulates the sale of seed potatoes

Agriculture (Inspection and Exportation of Nursery Stock) Regulations 1931

- Regulates the exportation of approved and restricted nursery stock, fruits and vegetables
- Provides inspection of all nursery stock that will be exported
- Provides inspection and certification of fields used for the production of nursery stock
- Maintains a database of licensed packers and shippers of nursery stock

Agriculture (Japanese Beetle) Order 1939

- Inspects incoming agricultural shipments along with continuous environmental monitoring to determine the presence of the Japanese beetle

Importation of Fruits, Vegetables and Flowers Act 1961

- Regulates the importation of incoming fresh fruits, vegetables and flowers and determines whether they are suitable for entry and release

Agriculture (Inspection and Exportation of Produce) Regulations 1932

- Inspects produce to ensure it meets excepted quality, quantity and grade standards
- Inspects produce containers and all parts therein, to ensure they are sound & free from imperfections, are authorized materials for use and plainly & neatly marked
- For exports; inspects for unfit produce and containers

Agriculture (Control of Plant Disease and Pest) Amendment 2007

- Regulates the importation of soil into Bermuda

Agriculture (Sale of Vegetable Seeds) 1937

- Assesses and regulates the importation of seeds

POLLUTION CONTROL**Functions**

- To administer legislation governing the emissions of pollutants from Controlled Plants and the quality of the ambient air
- To administer legislation governing the management of the fresh groundwater resources.
- To administer legislation governing pollution sources to the marine environment.
- To monitor the ambient air of Bermuda to ensure it meets the Clean Regulations 1993
- To monitor the volume of freshwater in the four main lenses in Bermuda to ensure they remain above their sustainable target volume.
- To monitor seawater quality around Bermuda and the health of the coral reefs.
- To respond to complaints that relate to pollution sources.
- To ensure that chemical spills are cleaned up, remediated, monitored and reported to the requirements of the Risk Based Corrective Action (RBCA) Guidelines.
- Acts as secretary to the Environmental Authority, organizing meetings, recording proceedings,

preparing submissions for their consideration.

- Actively participates in Bermuda's Marine Pollution Contingency Plan which ensures the Island is prepared for a major marine pollution incident.
- Maintains records of ship-derived wastes disposed of in Bermuda in accordance with International Maritime Organization recommendations.
- Advises on pollution prevention and abatement, including most appropriate disposal options for all manner of wastes.
- Advises the Department of Planning on a range of developments
- Register the locations and details of fuel storage tanks (Above and Under-ground).

Powers

- To recommend to the Environmental Authority which Controlled Plants, as defined in the Clean Air Act 1991, should be licenced (Construction Permits and Operating Licences).
- To recommend to the Environmental Authority which groundwater abstractors and dischargers, as defined in the Water Resources Act 1975, should be licenced (Water Rights).
- To apply set monitoring and reporting conditions for the above licences, permits and Water Rights.
- To proceed through the judicial system to request appropriate penalties for operators of Controlled Plants that pollute.
- To proceed through the judicial system to request appropriate penalties for abstractors of groundwater who exceed their abstraction limit.
- To initially warn and then to proceed through the judicial system to penalise other polluting behavior that is highlighted through complaints of neighbours etc.
- To inspect any suspected polluting behavior on land or at sea.
- Prevent the importation of certain Controlled Chemicals, defined under the Clean Air Regulations 1993.

Duties

- To ensure that the ambient air in Bermuda is safe for people to breathe and for the environment to thrive.
- To ensure that the freshwater lenses do not fall below their sustainable target volumes.
- To ensure that the seawater quality remains at a high standard and can sustain the growth of corals and other marine species.
- To ensure that development progresses in an environmentally sustainable way.
- To ensure that environmental clean-up operations, monitoring and reporting bring the environment back to its initial environmental condition.
- Control the importation of Controlled Chemicals, defined under the Clean Air Regulations 1993.
- To highlight environmental liabilities ahead of pollution events.

ANIMAL MANAGEMENT

Functions

- Administer legislation governing the importation of animals
- Assist with the export of animals as required by regulation in the destination country
- Administer legislation governing the international movement of items included in the

Convention on International Trade of Endangered Species (CITES)

- Promote local agriculture and assist animal farmers with production through sound animal husbandry and farm management practices
- Promote animal welfare of livestock and pets
- Administer legislation governing the importation of fluid cow's milk
- Respond to incidents of animal disease in livestock
- Administer legislation governing the practice of veterinary science
- Administer legislation governing dogs
- Administer legislation governing the welfare of all animals

Powers

- Control the movement of domestic animals (establish quarantine) when warranted
- Seek, obtain and execute warrants in relation to investigations
- Seize and hold animals pending disposition of matters
- Stop, board & search any ship, aircraft or vehicle believed to be containing anything liable to seizure; and stop & search any person and search premises believed to be housing anything liable to seizure, in matters related to importation of animals.
- Stop and examine any animal in a street or public place, where there is a suspicion of cruelty
- Enter premises related to suspicion of contraventions against Care and Protection of Animals Act 1975 or either Dogs Act or the Endangered Animals and Plants Act 2006
- Inspect animals upon arrival at ports of entry

Duties

- Protect animal welfare through enforcement and education
- Protect public health, as pertains to animal control and animal diseases
- Protect ecology of Island, as pertains to animal imports
- Control the importation of animals, both for a disease control standpoint and ecological standpoint through permits and port inspections
- Assist with export of animals as required by destination country
- Ensure suitable housing and health of horses (& ponies) used in commercial purposes
- Ensure suitable housing, security and health of animals with which they come into contact
- Liaise with local veterinarians and overseas counterparts on issues of animal travel
- Regulate the importation of animals and animal products - issue permits & conduct port inspections
- Issue CITES permits under the Endangered Animals & Plants Act 2006
- Communicate with CITES Secretariat as necessary
- Assist with Annual Exhibition

TERRESTRIAL CONSERVATION

Functions and Powers

- Manages manage the Government Nature Reserves and implement terrestrial protected species

Duties

Responsible for:

- terrestrial and bird habitat, development and implementation of management plans for Nature Reserves,
- Development of terrestrial species recovery plans,
- provides ecological assessment and consultation on all proposed development impacting terrestrial conservation areas.
- To promote public awareness and encourage community stewardship of Bermuda's natural areas.

BERMUDA AQUARIUM MUSEUM AND ZOO (BAMZ)

Functions and Powers

Provides administration and management of the Bermuda Aquarium, Museum and Zoo and guidance to the Bermuda Zoological Society, the registered charity for BAMZ under the Bermuda Aquarium Regulations 1997.

Duties

Responsible for:

- maintenance, buildings and vehicles, marketing and advertising. It also provides oversight and principal Government contact for the Bermuda Zoological Society charity in all daily operations including the development, membership, marketing, volunteer, education and resources departments.
- Provides the administration, operating budget and management for the Aquarium and Zoo specifically the maintenance and care of the collection of fish, exotic and indigenous animals as well as exhibits in its care. The budget provides for staff, animal feed, veterinary care and training.
- Provides the administration, operating budget and management for the Natural history museum and natural history library including the Natural history collection of scientific specimens, images, data and publications that document all aspects of Bermuda's natural history including geology, paleontology, biodiversity, bio-geography and conservation. The budget supports the continued development and maintenance of a world class museum exhibit and a public library containing the island's only science library and journals related to Bermuda's natural history. It also provides specific oversight of Bermuda Zoological Society's research and education sections in order to distill environmental research into education curriculum.

Section B: 2) Obligations under PATI Act [s5(1)b]

Same for all public authorities

To provide an **information statement** for the public and promulgate it [s5],

- To provide **other information** to the public so that the public needs only to have minimum resort to the use of the Act to obtain information [s6]. This includes:
 - General information, e.g. activities of the Authority
 - Log of all information requests and their outcome
 - Quarterly expenditure (upon request) [s6(5)]
 - Contracts valued at \$50,000 or more.
- To **respond to information requests** in a timely manner [s12-16]
- To **track information requests**, and provide this data to the Information Commissioner
- To respond to requests from the Information Commissioner [s9]
- To **amend personal information** held by the Authority that it is wrong or misleading following a written request by the person to whom the information relates [s19]
- To conduct an **internal review** if formally requested [part 5]
- To give evidence for **review by the Information Commissioner** [part 6, 47(4)], or for **judicial review** [s49], if required
- To provide an **annual written report** to the Information Commissioner of the status of information requests [s58 (3)].
- **To do anything else as required** under the PATI Act and subsequent Regulations [s59, 60], including:
 - **Fees** for Requests for information
 - Management and maintenance of **records**
 - **Procedures** for administering the Act
- To **train staff and make arrangements** so as to facilitate compliance with the Act [s61]
- To **designate one of its officers** to be the person to whom requests are directed [s62]

Section C: Services and Programmes [s5(1)c]

Insert a summary of services and programmes provided by the authority:

Summary of services provided

Department Headquarters

- License and permit payments
- GIS – Mapping of marine and terrestrial habitats
- GIS – Mapping - protected species
- Feral bird control
- Appeals

Marine Management

Marine Resources

Regional

- Provides statistics on the harvest within Bermuda's Exclusive Economic Zone (EEZ) of highly migratory pelagic species of commercial importance to the regional (north Atlantic) International Commission for the Conservation of Atlantic Tunas (ICCAT).
- Provides statistics on the harvest within Bermuda's Exclusive Economic Zone (EEZ) of all species for reporting to the Food and Agriculture Organization of the United Nations (FAO).
- Manages quotas issued for catches of pelagic species regulated by ICCAT.
- Participates in annual scientific and management meetings of ICCAT
- Participation in annual technical meetings of the Gulf and Caribbean Fisheries Institute (GCFI) and where possible the Caribbean Regional Fisheries Mechanism (CRFM) and the Western Central Atlantic Fisheries Commission
- Provides technical advice to Government regarding policy and activities of the Sargasso Sea Commission
- Represents Bermuda on the Sargasso Sea Commission

Domestic

- Inspection of fishing vessels for compliance with safety regulations
- Advice to Commercial Fisheries Council on licensing matters
- Administration of the fuel rebate system for commercial fishermen
- Extension services to the commercial fishing industry Maintenance of catch and effort statistics databases collected from commercial fishing vessels, lobster divers and spearfishers
- Technical support for the responsible development of fisheries, such as aquaculture and offshore fishing
- Advice to the Marine Resources Board on matters pertaining to the protection and use of marine resources

Marine Resources Strategic Programme

The focus of the Marine Resources Section is based on a policy known as the 'Strategy for the Sustainable Use of Bermuda's Living Marine Resources', a document released in 2010 combines all of the aspects of the Marine Resources programme into a coherent plan. Ongoing initiatives of the Section are:

- Management of Fish Stocks
- Age, growth and reproduction studies of targeted fish species
- Research and monitoring of grouper spawning aggregations
- Monitoring of commercial fish landings, including lobsters and mussels
- Management plans for targeted fish species
- Permits for the take and export of marine resources for the purposes of scientific research
- Management of the Commercial Fishery
- Commercial fishing vessel licences
- Commercial fishermen registration
- Data on activities and fish landings of commercial fishermen to assess trends
- Management of the Non-commercial Sector

- Recreational lobster diver licences
- Recreational spearfishing licences
- Monitoring of non-commercial fishing activities and fish landings
- Spatial Management
- Marine Spatial Planning
- Investigation of New Harvest Opportunities
- Offshore fishing
- Lionfish
- Increasing Local Seafood Production Through Aquaculture
- Post-harvest Handling of Seafood Products
- Shoreside Support Facility
- Outreach
- Pamphlets
- Shoreside signs
- Seminars, lectures, and public town hall meetings
- Media coverage
- Research – Historic wrecks, Ocean Health and Sea Level Rise

Fisheries Enforcement Programme

The Fisheries Enforcement Section is responsible for enforcing the Fisheries legislation, through:

- Patrols at sea
- Shore patrols
- Restaurant checks

Plant Management

- Issues Import Permits for each incoming commercial shipment
- Issues Phytosanitary Certificates for each outgoing shipment
- Issues CITES documents for each shipment comprised of endangered plant species
- Provides Lab Extension Visits
- Conducts Soil Analyses to determine suitability for planting
- Conducts Water Analyses to determine suitability for watering plants
- Conducts Nematode Assays to ensure plant health
- Provide Nursery Nematode Certification Renewals
- Provides Release Forms
- Issues Confiscation Letters as necessary
- Issues Reminder Letters for Seed Potatoes, Christmas Trees, Christmas Greens
- Processes Pesticide Applications
- Conducts Pest and disease diagnostics
- Provides Pest/disease management recommendations
- Conducts Grocery store inspections
- Conducts Pesticide retail inspections
- Produces a compilation of pest interceptions
- Conducts Airport collections
- Provides Treatment for incoming plants with pest problems
- Confiscation/destruction of plants with pest/disease problems

Regulating the importation of Plant Material and Related Articles into Bermuda including:

- Plant Material for Propagation (incl. Nursery Stock), Seeds, Turfgrass and Greensmix, Christmas Trees, Christmas Greens, Plant Material (Floral) - for Commercial Florists, Plant Material (Floral) – for Domestic Importers, Commercial Shipments of Fruits & Vegetables, Non-Commercial Fruits and Vegetables, Peat Moss, Growing Mix and Artificial Growing Media, Wood, Sand and Gravel, Insects for Scientific Use and Fungal Agents for Scientific Use

Managing plant pests & diseases

- Inspections of incoming plant material
- Diagnostic services/ Recommendations

The Provision of Export Documentation and Inspection of Plant Material for Export
Inspection of plant material and plant products for export and provision of documents attesting
Drafting of corresponding documents

Regulating the Importation of Pesticides

- Register of Pesticides (Confidential)
- Pesticide Master Database
- Processing Application Forms
- Assessing Pesticides for Entry
- Import/Export Plant Statistics
- Laboratory Diagnostic Services
- Water - Soluble Salts
- Water – pH
- Soil – Soluble Salts
- Soil – pH
- Soil – Nematode Test
- Soil – Micro and Macronutrients
- Insect Identification and Management Recommendations
- Fungal Pathogen Identification and Management Recommendations
- Plating Out Procedures
- Moist Chamber Procedures
- Pest and Disease Exclusion Measures
- Cruise Ship Inspections
- Dock Inspections
- Airport Freight Shed Inspections
- Incoming Yacht Inspections
- Collection of Plant Material from Incoming Air Passengers
- Charter Flight Inspections
- Collection of Plant Material from Courier Services
- Collection of Plant Material from Post Office
- Grocery Store Inspections
- Potting Mix Retail Outlet Inspections

Extension Services

- Site visits
- Educational Lectures/Presentations/Tours
- Training

Plant Quarantine Research on Emerging Pests and Diseases

- Overseas Inspections of Plant Production Facilities (e.g. Turf, Seed Potato and Christmas Trees)

Services Rendered with no accompanying documents

Treatment/Quarantine Facilities

- Inspection – Lab
 - Inspection of Incoming plants
 - Inspection of plants leaving Bermuda
- Docks – Cruise ships
- Overseas Pre-inspections – Seed Potatoes, Turf grass, Christmas Trees
- Airport – Charter flights

Education/Outreach:

- Seminars
- Pamphlets/leaflets
- Botany Camp
- Media coverage

Pollution Control

- Issues and reissues Water Rights and Well Diggers Licenses, which includes conditions to be met, maintains databases and oversees applications process.
- Issues Construction Permits and reissues Operating Licenses for controlled plants as defined under the Clean Air Act 1991, which includes conditions to be met.
- Investigates air quality complaints and any issues under the Clean Air Act, in addition to ground, surface and, sea water quality complaints under the Water Resources Act 1975
- Register of fuel storage tanks
- Provides advice to the Environmental Authority, Government Departments, and the community on all matters relating to the Clean Air Act 1991
- Provides advice to the Environmental Authority, Government Departments, and the community on all matters relating to the Water Resources Act 1975
- Models various hydrogeological scenarios to advise applicants and Environmental Authority on ground water abstraction and discharge rates and best use of ground water resources
- Oversees and advises on pollution remediation projects to Bermuda's RBCA guidelines
- Promulgates policies and strategies related to sustainable water resource management
- Produces quarterly monitoring reports of the state of the ground water lenses to help safeguard this resource via changes to the abstraction quotas to various commercial abstractors
- Provides advice to clients on the wide range of available water purification and waste water treatment technologies in order to help protect the quality of the groundwater lenses, surface water ponds and near-shore seawater environments from pollution
- Provides advice to clients on the appropriate pollution abatement systems required for Controlled Plants to meet the requirements under the Acts

- Provides information on types and volumes of wastes disposed in Bermuda from ships
- Provides technical advice and direction in the event of oil spills on land and on water
- Provides responses, as a stakeholder, in the Planning process for the following types of developments and processes under the Acts listed above:
 - Proposed docks and foreshore works
 - Removal or installation of above ground or below ground fuel storage tanks
 - Construction of a borehole for the disposal of effluent
 - Construction of a well
 - Disposal of sewage or wastewater from developments:
 - Comprising 6 rental units or more, In Cave Protection Areas, In low lying areas or at the coast and Commercial developments
 - Disposal of sewage at marinas, boating facilities
 - Inspection, modification, upgrade, renovation and operation of Controlled Plant as defined under the Clean Air Act 1991
 - Demolition plans for sites where there are hazardous components (eg air conditioning refrigerants, fluorescent lights, batteries, etc)
- Provides responses, as a stakeholder, in the Ministry of Public Works process for dredging applications
- Provides advice on groundwater quality, salinity and depth of fresh/brackish water for sites being considered for the development of aquaculture or aquaponic businesses
- Provide stakeholder input to other government departments & support to environmental charities
- COSTS are largely covered by the application fee for Licences, Permits and Water Rights.
- Services are completed to a standard consistent with the professionally qualified personnel employed at the Department.
- Output Measures published in the annual Government Revenue and Expenditure reports that include; (i) Exceedances of the Clean Air Regulation 1993, (ii) Numbers of Water Rights, operating Licences and Constructions Permits, (iii) Numbers of Fuel storage tanks.

Pollution Control

Licensing Programmes

- Licensing Programmes include:
 - (i) Applications to licence water abstraction wells or disposal boreholes as defined under the Water Resources Act 1975 and defined in the process flow diagrams of Section E.
 - (ii) Applications to licence Controlled Plants via Construction Permits and Operating Licences as defined under the Clean Air Act 1991 and defined in the process flow diagrams of Section E.
 - (iii) Applications to import Controlled Chemicals under the Clean Air Regulations 1993.

Enforcement Programmes

- Enforcement Programmes include:
 - (i) Site Visits – to investigate complaints or environmental issues detected.
 - (ii) Site Inspections and Monitoring – to determine if the conditions of the associated Water Right, Operating Licence or Construction Permit under the respective Acts are not being adhered to.
 - (iii) Action Notification Letters from the Department, or via the Environmental Authority, to highlight the nature of the environmental issue, the legislative reason why the issue needs to be addressed, the period of time to address the issue and the reporting conditions to keep the Department informed of the remediation activities to address the issue.
 - (iv) And if it is necessary to apply through the judicial system for penalties under the Act for illegal

polluting activities.

Monitoring Programmes

- Air Quality Programme (AQP). Bermuda's ambient air is monitored to US EPA standards for comparison to the limits set in Bermuda's Clean Air Regulations 1993. This programme funded by the Department is completed by BIOS to provide hourly/daily monitoring, monthly and annual reports for a range of monitoring stations over Bermuda. Cost: \$200,000 pa.
- Marine Environmental Programme (MEP). The status and health of Bermuda's coral reefs and seawater quality is monitored to observe the effects of pollution and other stressors. This programme funded by the Department is completed by BIOS to provide spreadsheets, reports and satellite imagery of the water quality and coral cover over Bermuda. Cost: \$150,000 pa.
- Amphibian Research Programme (Ecotoxicology). The amphibian research programme is run by the Bermuda Zoological Society and is part funded by this Department to study the effects of a range of land-derived pollutants on the most critical receptor organisms in Bermuda including a range of species that inhabit ponds. Cost \$43,400 pa.

Animal Management

- Provides blank official forms needed for travel by animals - \$0
- Endorsement of travel documents for export - \$0
- Applies seal to travel containers of animals as needed - \$0
- Artificial insemination of dairy cattle – Cost varies
- Issue CITES documents for pets, animals and scientific samples in preparation of travel - \$0
- Receive and respond to complaints pertaining to animals
- Investigate complaint; develop & prepare criminal case for review by Department of Public Prosecution
- Receive and respond to applications to import any animal
- Inspect animals and related documents arriving without benefit of an import permit
- Artificial insemination of dairy cows
- Support dairy farming
- Assist with export of animals as required by destination country
- Train Customs officers in role of this Department in procedures surrounding animal importation
- Support roles and assist other enforcement agencies relating to animals
- Public education and career development for students
- Licence dogs, breeders, boarders and brokers and persons keeping or training guard dogs
- Approve reclamation/collection of animals
- Inspects private kennels, veterinarian hospitals, and pet shops in respect to boarding, and makes recommendations to upgrade substandard premises
- Captures and delivers animals to Government Kennel Facility, and removes animals from the Facility as needed
- Support roles and assist other enforcement agencies and animal-oriented organizations with issues relating to animals
- Contribute to legislative matters
- Provides technical assistance to Management Authority (under the Endangered Animals & Plants 2006), Veterinary Practitioners Council and Canine Advisory Committee
- Provide information that a public authority holds which relates to:
- Programmes that are offered to the public;

- Programmes and services that are going to be implemented; and
- Any programme that would be of public interest.

Terrestrial Conservation

- Management of Nature Reserves e.g. Nonsuch Island, Cooper's Island, Spittal Pond & Castle Islands.
- Planning consultation – Terrestrial Conservation areas
- Planning consultation – Tree Preservation Order, landscape schemes & conservation management plans
- Permit – Protected Species

Bermuda Aquarium, Museum and Zoo (BAMZ)

- Management of Bermuda Aquarium and Zoo
- Management of Natural History Library
- Management of Natural History Collection

Section D: Records and documents held [s5(1)d]

List and describe the classes of records held by the authority: (Complete an inventory of all records and documents in your programme)

Administration

- Accounting
- General
- Department budget
- Department Business Plan
- Budget Briefs
- Capital Acquisition and Projects
- Capital Expenditure Programme
- Capital Asset Forms
- Output Measures
- Debt Collection
- Boards, Committees, Associations, Clubs and Societies
- Minutes
- Internal Minutes
- Inactive Files
- Apprenticeship Schemes
- Housing Circulars
- Supplies
- General
- Office Equipment
- Staff
- Contracts and Work Permits
- Consultants

- Union Matters
- Accident Reports
- Personal
- Probation, vacation, and training

Business Strategy

- Annual Budget Plan
- Strategic Plans – Departmental, Ministry

Conferences

- Hosted
- Attended

Communications

- Special Publications
- Press Releases

Marine Resources

- Legislative information
- Act
- Regulations
- Orders
- Lists of commercial fishers and contact information - Full-time, Part-time
- Specialty fisheries
- Commercial Fishery Landings data - detailed data available from 1986, more basic data back to 1975
- Finfish landings
- Lobster landings
- Mussel landings
- Fishery management plans for various species / groups
- Research / Collection / Export / Import permits issued
- Lists of recreational lobster divers and spearfishers and contact information
- Data on licences issued to visiting sportsfishing vessels

Policy documents

- Commercial Fisheries Council Policy

Reports

- ICCAT (International Commission for the Conservation of Atlantic Tunas)
- FAO (UN Food and Agriculture Organisation)
- CRFM (Caribbean Regional Fisheries Mechanism)
- WECAFC (Western Central Atlantic Fisheries Commission)

Publications

- Fisheries Newsletters
- Scientific Journal Articles
- Technical Reports

Pollution Control

- Air Quality Programme (AQP) monitoring data for a range of ambient air monitoring sites around Bermuda against the Clean Air Regulations 1993 for ambient air in Bermuda
- Marine Environment Programme (MEP) monitoring data for a range of marine sites around Bermuda
- Survey data of a range of ecotoxicology parameters and toad and fish physiology from a range of Bermuda's surface water ponds
- Surveys of groundwater quality and quantity associated with the four main fresh water lenses in Bermuda
- Environmental Impact Assessments and Statements for a range of sites and proposed developments
- Volumes, weights and types of ship-derived wastes disposed of in Bermuda
- National Geodetic Framework data records of the quality and quantity of water in Bermuda's underground lenses. ArcView GIS layers generated from the quarterly freshwater lens monitoring.
- National maps: Geological Map of Bermuda, H.L. Vacher, M.P. Rowe, P. Garrett (1989)
- Minutes of Environmental Authority Meetings.
- Register of water rights under the Water Resources Act 1975
- Register of controlled plants under the Clean Air Act 1991
- Annual Reports of Licenced Controlled Plants
- Register of fuel storage tanks
- Register of permits issued for import and export of controlled chemicals under the Clean Air Act 1991
- Register of well diggers
- Marine Pollution Contingency Plan
- Site and Controlled Plant - Inspection reports
- Responses to Planning Applications.

Veterinary Services

- Conditions of entry for various species of animals
- Import applications, permits & denial notices
- Export documentation (related to those animals requiring such)
- CITES permits
- Veterinary registration
- License information: Commercial horse stable
- Licence information: dogs, breeders, brokers, guarding
- Reports of inspections
- Case records / investigative records
- Annual bovine milk production by farm

- Insemination of cattle

Plant Protection

- Import Permits for each incoming commercial shipment
 - Phytosanitary Certificates for each outgoing shipment
 - CITES documents for each shipment comprised of endangered plant genera
 - Annual Reports
 - Lab Extension Visits and Analyses reports – homeowners/farmers
 - Lab Diagnoses reports
 - Soil Analyses Reports to determine suitability for planting
 - Water Analyses Reports to determine suitability for watering plants
 - Conducts Nematode Assays to ensure plant health
 - Release Forms to authorize importers to collect shipments from the airport and transport them to the PPL for inspection
 - Confiscation Letters as necessary for incoming plant material that has been seized
 - Correspondence for inspections for Seed Potatoes, Christmas Trees, Christmas Greens, Florists' shipments
 - Pesticide Applications
 - Environmental Research Documents
 - Pest and disease diagnostic reports
 - Pest/disease management recommendations
 - Compilation of pest interceptions
-
- Records of the quality and quantity of water in Bermuda's underground lenses
 - ArcView GIS layers generated from the quarterly freshwater lens monitoring

Annually

PLANT PROTECTION

- Total number of items inspected
- Total infested items intercepted (plant/fruit)
- Infested items as a % of total items inspected
- No. of individual documented services provided (documents issued, diagnostics, pesticide and customs entries and group presentations)

VETERINARY SERVICES

- Number of farm visits
- Disease/Response plans in place
- Contacts/Meetings with Dept. of Health
- Number of artificial inseminations
- Pregnancy rates in A1 cows
- Port inspections & crate sealings
- CITES permits issued
- Inspections of Customs interdictions
- Import permit applications received

- E1 setup of customers

MARINE ENFORCEMENT

- Number of vessels searched at sea
- Number of call in fish tips that result in the discovery of fisheries offences
- Number of case files submitted
- Number of illegal fish traps/lobster/guinea chick traps recovered

ANIMAL CONTROL

- Dogs licenced
- Dogs licenced as a % of eligible
- Total incidents and complaints to which wardens responded
- Time taken for the initial response to complaints or incidents (mean)

AGRONOMY

- Number of embargoes implemented and notices sent, respectively
- Value of produce, goods and services provided by or handled by the Marketing Centre
- Value of spoilage and condemned goods (target less than 2% of value noted above)
- Total number of customers served at the Marketing Centre
- Number of formal complaints regarding the embargo system (target set at less than 5)

POLLUTION CONTROL

- St George's Freshwater Lens Volume
(Percentage of Sustainable Target @ 0.15 million cu. metres)
- Major Waste Water Treatment Plants Licenced
- Pollution Remediation Reports Reviewed that meet RBCA requirements
- Number of Exceedances of Clean Air Regulations 1993
- Number of Water Rights for Wells and Boreholes issued (5-year)
- Number of Operating Licences issued (1-year)
- Fuel Storage Tanks - Registered
- % Fuel Storage Tanks Closed (Cumulative total)
- Central Freshwater Lens Volume - Hamilton.
(Percentage of Sustainable Target @ 6.5 million cubic metres)
- Somerset Freshwater Lens Volume
(Percentage of Sustainable Target @ 0.8 million cu. metres)
- Port Royal Freshwater Lens Volume
(Percentage of Sustainable Target @ 0.4 million cu. metres)

BAMZ ADMINISTRATION

- Maintaining accreditation with the Aquarium & Zoo Association.
- Total number of visitors to BAMZ.

- Average cost of operating per visitor.
- Students involved in BAMZ offerings.

BAMZ - AQUARIUM & ZOO

- Number of animals receiving preventative veterinary care.
- Number of collected aquatic and terrestrial specimens.
- Number of animal and bird strandings dealt with.
- Use of BAMZ bus (for student groups).

BAMZ - MUSEUM

- Number of PATI requests received.
- Percentage of PATI requests responded to within 28 days.
- Number of specimens, images, bibliographic data added to NHM databases.
- Access by scientists, students and lay persons to the collections, database and library.
- Number of lectures, seminars and field trips provided.

MARINE CONSERVATION

- Number of marine conservation consultations.
- Marine conservation consultation responses (within 20 working days).
- Marine habitat assessments completed.
- Number of public outreach activities (inclusive of scientific papers, articles and presentations).

MARINE HERITAGE & HUMAN HEALTH

- Marine Heritage consultations & information requests received.
- Marine Heritage consultations completions (within 20 working days).
- Ocean Human Health research projects.
- Percentage of moorings in place at the beginning of the season.

TERRESTRIAL CONSERVATION

- Number of terrestrial conservation consultations.
- Terrestrial conservation consultations (within 20 working days).
- Number of invasive plant species removed.
- Number of native and endemic plants planted.
- Number of nature tours provided.

Reported monthly

- **Minutes of Meetings:** Historic Wrecks Authority, Environmental Authority, Marine Resources Board, Commercial Fisheries Council, Board of Agriculture, Veterinary Practitioner's Council

The classes of information will not generally include:

- Information on restricted wrecks as prevented from public disclosure by the Wrecks

4.2. Administrative manuals

A public authority must list and give a description of all manuals used by employees of the authority in administering or carrying out the programs and the activities of the authority.

- Biodiversity Strategy and Action Plan 2001
- Bermuda Plantfinder
- Wrecks Authority Protocol and Procedures
- Bermuda Plan 2008
- Bermuda Government Financial Instructions
- Bermuda Union Agreement

4.3. Policies, rules and guidelines used for decision-making

The public authority would provide any information to the public on how they make their decisions, these include the following but not limited to:

- **Minutes of Meetings:** Historic Wrecks Authority, Environmental Authority, Marine Resources Board, Commercial Fisheries Council, Board of Agriculture, Veterinary Practitioner's Council

Section E: Administration (all public access) manuals [s5(1)e]

Insert list and description of all administrative manuals/ guidelines used by employees for administering or carrying-out activities: (Records are likely a result of decision making documents in procedures/guidelines etc. If there is no policy and procedures manual, one needs to be created)

Insert list and description of all administrative manuals/ guidelines used by employees for administering or carrying-out activities:

Administration

- Manual for the Preparation of Carbon Emission Statistics
- Enterprise One Training Manual
- Performance Review
- Appraisal and Forward Job Plan
- Budget Preparation
- Business Plan Guide
- Departmental Policy Manual (Electronic - In process / awaiting staffing)

Pollution Control

- Construction Permit and Operating Licence Process Flow Diagrams – This is a process flow diagram for the application processes for both new and re-issue permits and

licences of Controlled Plants as defined under the Clean Air Act 1991. These process flow diagrams show the order of requirements from various stakeholders, timelines, dependencies, etc. that are necessary in considering and processing the above named applications.

- Water Right Process Flow Diagram – This is a process flow diagram for the application process for Water Rights to abstract groundwater from a well and to dispose of wastewater to a borehole. The flow diagram provides the appropriate details of the process highlighted above.
- Septic Tank Design Guidelines - Developed by Environmental Protection and Environmental Health to show how septic tanks shall be designed so as to minimise their impact to the groundwater and the environment.
- Veterinary Services
- Procedures manual for processing import applications

Plant Protection

- Plant Protection Laboratory Policy and Procedure Manual

Marine Resources

- SCUBA Dive Safety Manual – guides the manner in which SCUBA diving operations are conducted
- Boat Guidelines – guides the use of Department boats

Section F: Decision-making documents [s5(1)f]

Insert list and description of all policies and guidelines for decision making in respect to any person:

Administration

- Department Business Plan
- Financial Instructions
- Civil Service Dignity at Work Policy and Complaints Procedure
- Government of Bermuda Conditions of Employment and Code of Conduct
- Government of Bermuda and BPSU Collective Bargaining Agreement
- Surveying Ethics
- National Agriculture Strategy (draft)

Pollution Control

Risk Based Corrective Guidelines (RBCA) for Bermuda – Used to determine the level of remediation and reporting that is required following a chemical spill.. These guidelines highlight the level of remediation required (if necessary), analysis requirements and reporting requirements until the site is considered clean and all environmental liabilities are considered negated.

Environmental Authority Operational Policies

- (i) Granting of Water Rights
- (ii) Wastewater Disposal and Treatment
- (iii) Guidelines for Wastewater Disposal (Table)
- (iv) Abstraction for Irrigation
- (v) Desalination Plants
- (vi) Sale or Transfer of Water Rights for Public Supply
- (vii) Use of Groundwater For Air-Conditioning Systems
- (viii) Petroleum Hydrocarbons in Effluent.

Veterinary Services and Animal Control

- Licence information: dogs, breeders, brokers, guarding
- Animal Control Policy Document

Plant Protection

- Plant Protection Laboratory Policy and Procedure Manual

Marine Management

- Commercial Fisheries Council Policy Document – guides decisions made with regard to licensing matters
- Aquaculture Policy Document – guides decisions made with regard to suitable aquaculture ventures
- Warden's Guidelines
- Warden's Policy Statement 2012

Section F: Decision-making documents [s5(1)f]

Insert list and description of all policies and guidelines for decision making in respect to any person:

(Records are likely a result of decision making documents in procedures/guidelines etc. If don't have decision making documents need to create)

- Policy and procedures for the Wrecks Authority is posted on www.environment.bm/marineheritage.
- Current admission rates to BAMZ on www.environment.bm/bamz and/or www.bzs.org

Section G: The Information officer [s5(1)g]

Contact: PATI Information Officer,
Drew Pettit
Department of Environment and Natural Resources
Re: CITES Scientific Authority

Mail to*: P.O. Box HM-834, Hamilton, Bermuda HM CX

Visit: Department of Environment and Natural Resources
Botanical Gardens, 169 South Road, Paget

E-mail*: apettit@gov.bm

Section H: Any Other Information [s5(1)h]

*Insert any other information that **you think** might be useful for the public to know, so as to decrease requests for information:*

All information related to the Department can be found on

www.environment.bm

Section I: Any Other Information To be Provided? [s5(1)i]

New or revised legislation

- Protected Species Act 2003
- Protected Species Order 2012
- Protection of Birds Amendment Act 2015

A new or revised policy

- Agriculture (Crop) Strategy
- Agriculture (Dairy) Strategy
- Management Control Plan – feral Chicken
- Management Control Plan - Pigeon
- Management Control Plan - Crow

New publications

- Protected Species Booklet
- Indigenous & Invasive Plantfinder

Request for information;

None pending

Change in policy on publication;

To be announced

Organization restructure

To be announced

Job descriptions;

Viewable on - www.environment.bm

Section J: Information Statement: Copies and Updates [s5(2,3,4,5)]

Every public authority shall update its information statement at least once a year, and make it available for inspection by the public at reasonable times by [s5(1-5), PATI Act]:

Date Information Statement was updated: 9th October 2016

Locations of Information Statement:

Confirm copies of Information Statement are available at the following sites:

- Office of the Department of Environment and Natural Resources, Botanical Gardens, 169 South Road, Paget Y/N
- The Bermuda National Library; Y/N
- The Bermuda Archives; Y/N
- Available electronically, Y/N
- Website for public authority (www.environment.bm) Y/N
- Have you published a notice in the Gazette indicating the places where the information statement is available for the public? Y/N
- With the Information Commissioner. Y/N

Sign and Date:



Drew Pettit
Director and Information Officer

9th October 2016