

# BERMUDA'S EXCLUSIVE ECONOMIC ZONE AND IT'S FUTURE

September 2013

## A CONSULTATION DOCUMENT

This information is also available at: [www.sdbermuda.bm](http://www.sdbermuda.bm)



GOVERNMENT OF BERMUDA  
Ministry of Environment and Planning

**Sustainable Development Department**

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## FOREWORD

The health of the sea around Bermuda – the Sargasso Sea – is enormously important for our island. It supports our tourism, our fisheries and our way of life. It has afforded us tremendous opportunities in our past and it is hoped it may do so in the future. So it is natural that every one of us should be interested in how this can best be maintained.

Bermuda has reason to celebrate its record of implementing marine conservation measures. We have a long history of managing and protecting the marine environment including a number of measures in place to manage the marine resources of the Exclusive Economic Zone (EEZ). The Bermuda Government has considered its options for using the EEZ, essentially a circle with a 200 nautical mile radius, as part of a process of raising Bermuda's profile internationally. Government has already assessed and confirmed the potential for the growth of offshore fishing. An opportunity, of a different but complimentary kind, presents in the domain of marine conservation with the creation of a world scale marine reserve, the equivalent of a world scale National Park, on the outer margins of our EEZ.

By designating a marine reserve to protect an area of the Sargasso Sea which is under our control, Bermuda signals to the wider international community our proactive approach to protecting this ecosystem and commitment to a larger conservation initiative within the greater Sargasso Sea. This is a remarkable opportunity for Bermuda to contribute to the global coverage of the world's oceans benefitting from such protection.

The purpose of this consultation is to help the residents of Bermuda assess whether a marine reserve is the right option for Bermuda and, if so, the extent and location of coverage. This document explains the issue on which we would like your views, some of the benefits and costs, and the ways in which you can respond. I strongly encourage everyone to participate in this consultation.

The Hon. Sylvan D. Richards, JP, MP  
Minister of Environment and Planning

<b>Body responsible for consultation:</b>	Sustainable Development Department.
<b>Who should read this document?</b>	Every resident of Bermuda.
<b>What is in this document?</b>	<p>A summary of how the consultation process works.</p> <p>Background information on the Sargasso Sea and Bermuda's offshore waters.</p> <p>Why the Bermuda Government is considering an offshore marine reserve.</p> <p>A description of three potential marine reserve designs.</p> <p>A response form for you to provide feedback.</p>

## THE CONSULTATION PROCESS

### Scope

This consultation seeks your views on the possibility of creating a large marine reserve in the offshore waters around Bermuda. To help us make an informed decision, the benefits and costs of establishing a marine reserve were evaluated by experts in economics, science and Bermuda's cultural history and their findings are summarised here. The full reports are available at the office of the Sustainable Development Department, 31 Reid Street – 2nd Floor, Hamilton, and online at [www.sdbermuda.bm](http://www.sdbermuda.bm). If you think a reserve should be established, three design options are suggested, or you may submit your own design. Although the results of this public consultation are not binding, the Bermuda Government wants input from stakeholders and the general public to help shape their decision.

### How to make your views heard

The multi-faceted consultation period will begin in September and run until October 2013. Copies of this consultation document can be found at [www.sdbermuda.bm](http://www.sdbermuda.bm).

There will be a series of opportunities for the public to be informed and to contribute. This will include a short public service announcement, print and broadcast adverts, household mail-out, direct stakeholder consultations, on-line survey and public meetings. All views expressed will be recorded.

A response form is included at the back of this document and you may submit this by hand, post or e-mail by 31 October 2013, so if you intend to respond by post, please ensure that your response will reach us by the deadline.

a. Mail or hand deliver your written submission to:

Sustainable Development Department, 31 Reid Street - 2nd Floor, Hamilton HM12, Bermuda

b. Electronic forms are available at [www.sdbermuda.bm](http://www.sdbermuda.bm) and can be e-mailed to: [sdd@gov.bm](mailto:sdd@gov.bm)

Please state whether you are responding as an individual or representing an organisation. If you are responding on behalf of an organisation, please state its name, your role within it and how the views of members were assembled. As you offer your input and suggestions, please include as much detail as possible. Please contact the Sustainable Development Department, at the above address or e-mail, with any questions.

We have made every effort to make all residents of Bermuda aware of this consultation, and this document has been widely distributed electronically, via the local media and directly to those with a known interest in our marine environment. However, if you have suggestions for increasing awareness of and participation in this consultation, please let us know.

### What will happen next?

The Sustainable Development Department (SDD) will compile the input from the consultation into a report for the Minister responsible for this matter, the Hon. Sylvan Richards, JP, MP, Minister of Environment and Planning. A summary report on the outcome of the consultation will be published when Government announces its decision on whether to establish a marine reserve.

### Confidentiality

The information you submit may be shared within the Bermuda Government and with the UK's Foreign and Commonwealth Office to analyse responses to this consultation. We will assume your consent for this (overriding any confidentiality disclaimer generated by your organisation's e-mail system) unless you specifically include a statement to the contrary in your submission. Confidential responses



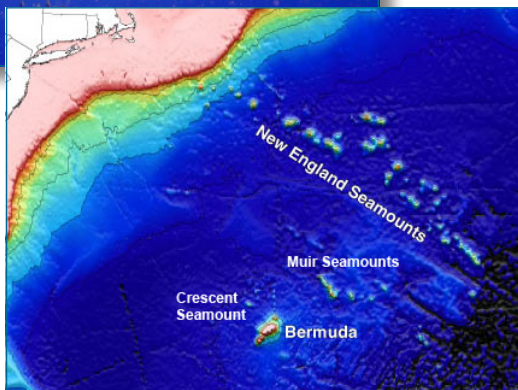
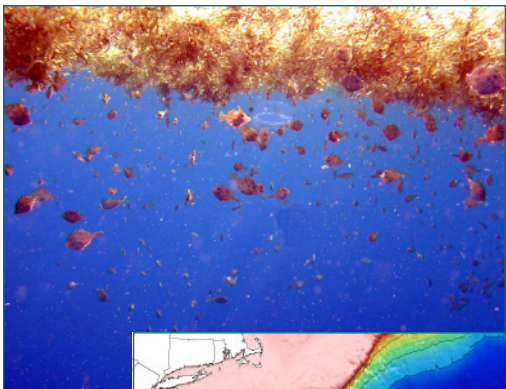
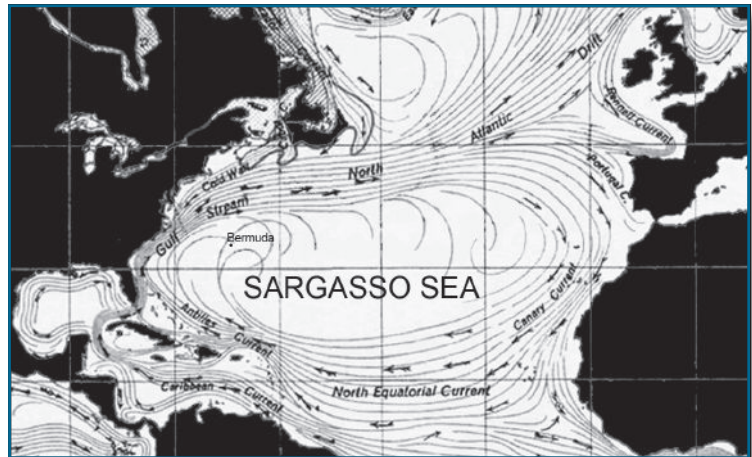
will be included in statistical summaries of the number and type of comments received. If you want your name and address to be kept confidential, please mark this clearly at the top of your response. Responses may be subject as appropriate to Bermuda's Public Access to Information legislation.

## BACKGROUND

### The Sargasso Sea

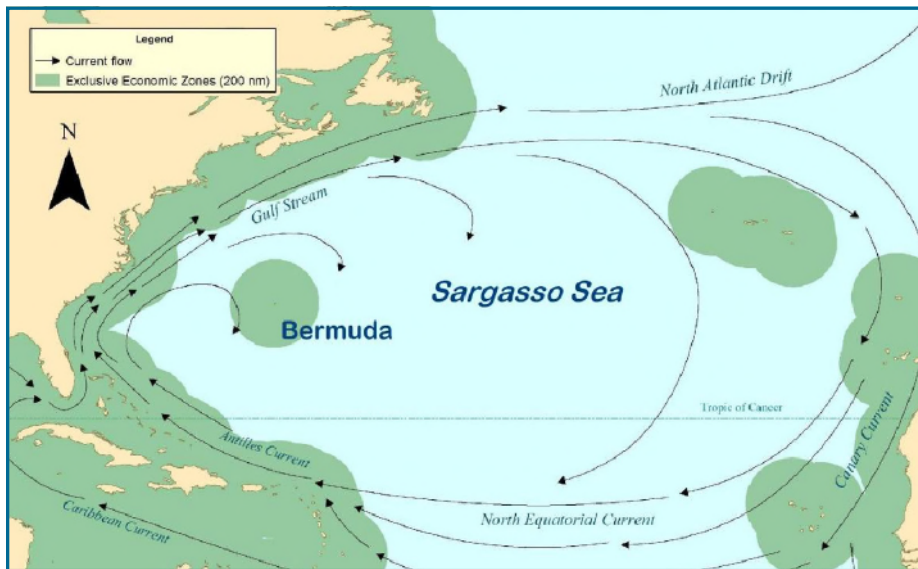
The Sargasso Sea covers an area about half the size of the United States. It is the only sea in the world surrounded and defined by currents, rather than land, and Bermuda is the only island within it. The Sargassum seaweed forms floating mats on the waters' surface, providing a unique habitat for a varied and complex community of marine life. Because of these extensive mats, the Sargasso Sea is called the golden floating rainforest of the Atlantic Ocean.

The *Sargassum* habitat is home to more than 100 species of fish and 145 types of invertebrates such as crabs, shrimp and sea slugs. There are 10 endemic species which only occur in this habitat. Flying fish lay their eggs on the *Sargassum* seaweed, American and European eels and marlin come to the Sargasso Sea to spawn, and porbeagle and tiger sharks migrate to the area to give birth. Juvenile fish, including jacks, tuna, swordfish, wahoo and dolphinfish, as well as baby sea turtles, spend their early years camouflaged in the seaweed as they grow to a size where they are less vulnerable to predators. Humpback whales migrate through the Sargasso Sea, which is why we see them every year on their journeys. There are also several seamount chains on the seabed below the Sargasso Sea, and these are home to a variety of deep sea fishes, corals and other invertebrates.

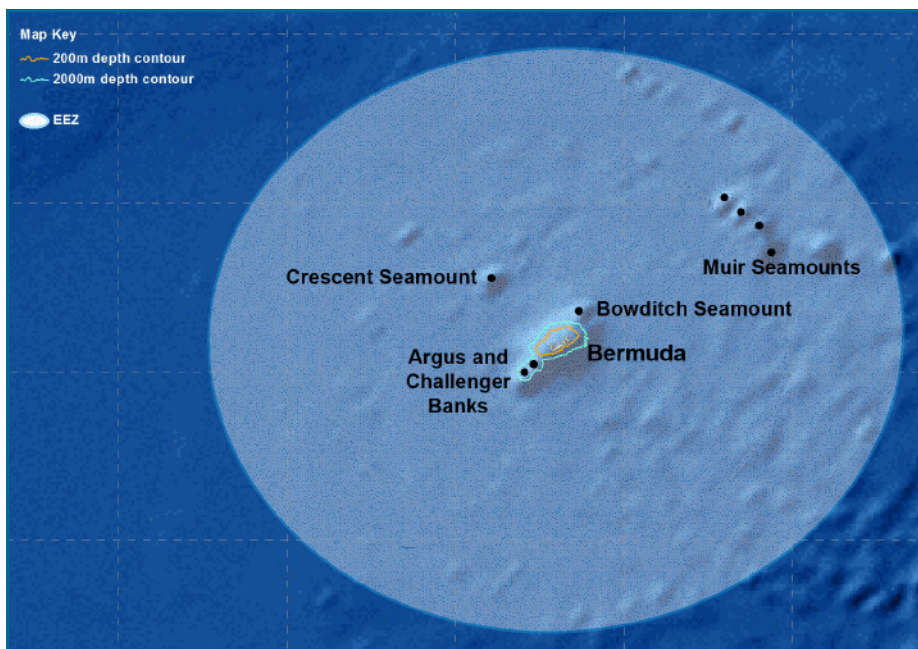


## The Waters of Bermuda's Exclusive Economic Zone (EEZ)

While most of the Sargasso Sea is in international waters, part of it lies within Bermuda's Exclusive Economic Zone (EEZ), the area of ocean within 200 nautical miles of our island. Under the United Nations Convention on the Law of the Sea, Bermuda has special rights over the exploration and use of the natural resources within this zone, including managing and conserving those resources. Given the small size of Bermuda, our EEZ is essentially a circle with a 200 nautical mile radius that covers approximately 464,940 km<sup>2</sup> of ocean.



Map of the northern Atlantic Ocean and the Sargasso Sea, showing the Exclusive Economic Zones of Bermuda and surrounding nations in green.



Bermuda's Exclusive Economic Zone (EEZ), showing the Islands, the 200 nm limit and some details of the seabed.

Beyond the Bermuda rise, which includes the islands of Bermuda, Argus and Challenger Banks to our southwest and Bowditch seamount to our northeast, the seabed of our EEZ is nearly 5,000 metres deep. Exceptions to this are Crescent seamount to our northwest and the Muir seamount chain on the outskirts of the EEZ to the northeast. Offshore fishing and shipping are the main activities that occur in these deeper waters. Although the Law of the Sea gives Bermuda rights over all natural resources within the EEZ, it also permits passage by vessels of any nation subject to local regulations and the laying of pipes and cables by foreign entities.



# The Importance of the Sargasso Sea to Bermuda

## Cultural Importance

The sea has always played a key role in Bermuda's rich heritage, being essential for food, transportation, trade and recreation. Fish has always been an important part of the Bermudian diet, and fishing a traditional occupation and leisure activity. From the early 1600s to the 1800s economic activity concentrated on the sea, and shipbuilding was a main occupation. The shift toward tourism in the early 1900s created another focus on the sea. The Sargasso Sea even contributes to local farming when *Sargassum* seaweed that has washed up on our beaches is used as a natural fertiliser.

Bermudians also have a strong history of environmental stewardship, passing laws to safeguard Bermuda's natural environment. Growing recognition of the importance of the Sargasso Sea provides us with an opportunity to extend this culture of conservation to offshore waters.

## Economic Importance

The direct economic value of the Sargasso Sea comes from fisheries, and offshore fishes such as wahoo and yellowfin tuna make up half of Bermuda's yearly catch, worth around \$1.5 million. Sport fishing for marlin is also an important economic activity for Bermuda and, in addition to local charter boats, visiting sportfishing vessels bring approximately \$3 million in critical foreign exchange to the island each year. The large marlin that attract them are highly dependent on the Sargasso Sea. Local ecotourism opportunities feature some of the iconic and threatened species of the Sargasso Sea, such as trips to watch humpback whales during their annual migration past Bermuda. In addition, the health of Bermuda's coral reefs depends on the condition of the surrounding ocean and a recent report estimated the total economic value of the local reef system at \$722 million.

## Ecological Importance

The Sargasso Sea supports complex and diverse habitats from the sea surface to the seabed. The essential *Sargassum* habitat provides breeding, nursery and feeding environments that nurture a wide diversity of species, many of which are endangered or threatened. The Sargasso Sea is the only breeding location for the endangered European and American eels.

## Global Scientific Importance

The Sargasso Sea plays a critical role in regulating global climate. As human activities have increased the amount of carbon dioxide in the atmosphere, more carbon dioxide is absorbed by ocean waters, and this makes the ocean more acidic. Abundant plant life in the Sargasso Sea — the *Sargassum* weed itself and microscopic phytoplankton — takes carbon dioxide from the atmosphere and the water, acting to balance effects on climate and ocean acidity. The world's longest series of ocean monitoring measurements, started in Sargasso Sea waters off Bermuda in 1954, helps scientists at the Bermuda Institute of Ocean Sciences understand the ocean's role in global change.

## International Importance

Being located in the middle of this unique ecosystem gives Bermuda an opportunity to showcase our environmental principles to the world. The Sargasso Sea Alliance, a partnership between the Government of Bermuda, scientists, marine conservation groups and private donors, aims to protect the Sargasso Sea and produce a model for other Marine Protected Areas in international waters. These goals are in line with the United Nations' 'Oceans Compact' – "Healthy Oceans for Prosperity".

# Threats to the Sargasso Sea

## Impacts of fishing and over-fishing

Populations of tunas and related species from the international waters of the Sargasso Sea are showing evidence of decline as a result of fishing. In addition to impacts on fish populations, certain fishing methods can impact other species. In the Sargasso Sea, fishing nets are a threat to migrating marine mammals and young turtles. Depending on the type of hooks used, poorly regulated longline fishing can threaten the sharks that depend on the Sargasso Sea. Bottom netting (trawling) on the Corner Rise seamounts destroyed the delicate seabed communities, and many seamounts have now been closed to fishing. However, in Bermuda waters, fishing nets are not permitted offshore or for bottom fishing, and longline fishing is highly regulated.

## Shipping and shipping related impacts

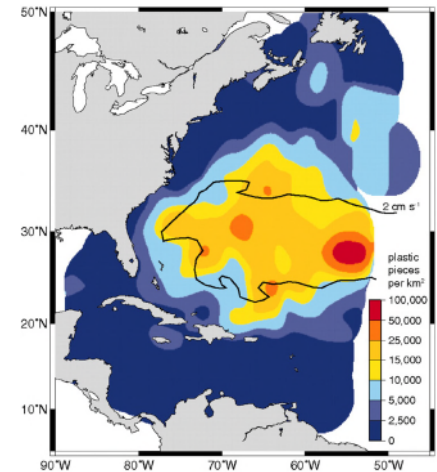
The Sargasso Sea is crossed by a large number of ships each year, but there has been little research on the effects of ship traffic. Concerns include the possible introduction of “foreign” organisms via ballast water, the impact of ship noise, and the risk of collision with whales, dolphins and turtles. Ships may also break up the *Sargassum* mats, impacting their floating community.

## Pollution, including plastics and discharge from ships

Although the Sargasso Sea ecosystem is relatively healthy, pollution from ships and sources on land is a problem. Floating plastic particles in the Sargasso Sea were reported in 1972, and the problem has worsened over the past 40 years. Plastic in the sea can kill marine animals if they eat it or become tangled in it. Floating tar balls have decreased greatly with regulations on ship discharges. However, oil or chemical pollution from ship spills or other accidents remains a potential threat.

## Innovative uses of Sargassum and the potential for commercial-scale extraction.

*Sargassum* seaweed has been used in commercial fertilisers and cattle feeds, and in the past it was harvested industrially by vessels operating off the east coast of the United States. The potential still exists for commercial-scale harvest of *Sargassum* from the high seas by vessels from other countries. A number of innovative uses for *Sargassum* have been suggested, including biofuel and medicines, so commercial harvest of *Sargassum* remains as a potential threat to the wider Sargasso Sea ecosystem. However, this activity is not a concern in Bermuda waters.



## TransAtlantic Seabed Cabling.

Numerous submarine communications cables cross the seabed below the Sargasso Sea. Their effects on deepwater and bottom communities are unknown but, given the importance of technology in today's world, this is likely to be ongoing.

## WHY CONSIDER A LARGE MARINE RESERVE IN BERMUDA'S EEZ?

The sea around Bermuda – the Sargasso Sea – is enormously important for our island. It supports our tourism, our fisheries and our way of life.

Throughout our history, Bermudians have primarily fished close to the island, taking advantage of fishing opportunities around the shoreline, on the reef platform and the banks, or on the drop-off, generally within 50 nautical miles of the coast. Most other activity in Bermuda's marine environment, including swimming, diving, snorkelling, boating and other tourist activities, takes place fairly close to shore. Most future economic activities in the marine environment, such as ocean energy generation or aquaculture, are also likely to occur within this area. Thinking of our EEZ as a circle, a “donut hole” around the island would represent the area in which most economic and recreational marine activities take place. However, there is some fishing activity that occurs outside of this limited area. Creating a marine reserve in the outer waters of Bermuda's EEZ would not affect most of these activities since the options suggested place the proposed marine reserve in waters beyond the area of concentrated activity.

Bermuda has a long history of managing its marine resources. To date, this has focused primarily on the waters close to the island that are most heavily used. Management measures in these waters include areas that are closed to fishing, either permanently or seasonally, and where life on the seabed must not be harmed. These areas act as a safety net to protect key natural resources.

While regulatory measures are in place for activities in the outer waters of our EEZ, the next significant step forward would be to create a marine reserve, the equivalent of a national park, where harvesting and extraction would not be permitted at all. Establishing a “no-take” marine reserve in Bermuda's offshore waters would extend full protection to the area so designated.

Scientific studies show that habitats function better when their plant and animal communities are intact, and this helps them withstand other threats. It is likely that setting aside an area for a marine reserve, the equivalent of a national park, where nothing would be taken



from the sea will help maintain the health of this important part of the ocean. Depending on the size of the reserve, it could become one of the world's largest marine life sanctuaries. Establishing a large marine reserve in our own waters would also pave the way for Bermuda to lead an international initiative to gain better protection for the international waters of the wider Sargasso Sea, beyond the waters of our EEZ.

To help us make an informed decision, the benefits and costs of designating a marine reserve in Bermuda's offshore waters were evaluated in terms of economics, science and cultural history. The findings are summarised here and the full expert reports are available at the offices of the Sustainable Development Department, 31 Reid Street – 2nd Floor, Hamilton, and online at [www.sdbermuda.bm](http://www.sdbermuda.bm).

## Benefits

A range of cultural, environmental and economic benefits could result from establishing a large marine reserve in Bermuda's offshore waters.

### 1. Cultural benefits

Bermuda has a strong conservation history and establishing a marine reserve in our offshore waters will ensure the marine environment continues its important role in Bermuda's culture. This is also an opportunity for our island community to demonstrate leadership on marine conservation issues.

### 2. Conservation benefits

Scientists have stated the need for large-scale protected areas to conserve the world's oceans, which are being damaged by over-fishing, pollution, climate change and other stresses. A marine reserve in Bermuda's offshore waters would protect a diversity of plants and animals, including some endangered species, in habitats from the surface waters to seamounts. These habitats may even contain undiscovered species. Allowing their plant and animal communities to remain intact will enable these habitats to function properly and withstand other stresses. Healthy offshore waters will also help maintain vital coral reef habitats closer to shore. Further, establishing a large marine reserve within our EEZ will allow Bermuda to effectively promote protective measures for the wider Sargasso Sea, setting a precedent for large scale conservation measures in international waters around the world.

### 3. Climate Change benefits

By absorbing carbon dioxide, the Sargasso Sea ecosystem plays a key role in regulating the global climate. Establishing a large marine reserve where plant and animal communities remain intact would help maintain the health of this part of the ocean and safeguard this critical function.

### 4. Scientific benefits

There is a long history of scientific research in the waters around Bermuda, and setting aside a large area where nothing is taken from the ocean would create a valuable comparison site for ocean studies and bring more international researchers to our local marine science institutions.

### 5. Economic benefits

Creating a large marine reserve in our offshore waters would boost Bermuda's reputation as an environmentally responsible destination with healthy, well-managed seas, and international surveys indicate that this has the potential to increase visitor arrivals to the island. Thus, the economic benefits of creating a large marine reserve could include:

- the net impact of the media attention and consequent increases in visitor arrivals;
- visits by research scientists and students;
- direct and indirect spending at dedicated exhibits and on related ecotourism activities.

Economic modelling based on the international surveys suggests the following economic benefits:

Category	Direct Spending (\$)	Gross Value Added (\$)	Tax Revenues (\$)	Total Jobs
Increased visitor arrivals (estimating 2% increase)	8,793,455	19,521,053	6,704,799	165
Research and high-end tourism	2,800,000	6,203,367	2,130,640	53

Source: T. Iverson 2012, *The Economic Impact of the Proposed Bermuda Blue Halo: An Exploratory Study*.

More directly, prohibiting fishing in a portion of our offshore waters may enhance marine life populations and fisheries catches closer to shore. Reducing fishing (particularly illegal foreign fishing) helps protect species such as whales, turtles and sharks from fishing gear, while allowing marine habitats to function naturally can lead to increases in the number and size of fish.

As the global 'blue economy' develops, it may also be possible to generate revenue via carbon offset payments, based on the ability of plant communities in the marine reserve to absorb carbon dioxide.

## **6. Enforcement**

Creating a large offshore marine reserve could encourage other countries to participate in efforts to detect and intercept illegal foreign fishing vessels in Bermuda's waters.

## **Costs**

In addition to the time taken by existing civil servants to conduct this consultative process and develop appropriate legislation, the costs of declaring a marine reserve in Bermuda's EEZ fall into two main categories: the ongoing costs associated with management and enforcement, and the "opportunity cost" of not using the resources of the reserve area for some type of commercial activity.

### **1. The Cost of Managing and Monitoring an Offshore Marine Reserve**

The development and implementation of a management programme for an offshore marine reserve would incur a significant one-time cost, estimated at approximately \$300,000. Many duties of managing a reserve could be incorporated into existing civil service positions in various departments so, although there would be a one-time cost, ongoing costs for additional staff are likely to be low. Support costs for reserve management activities have been estimated at approximately \$175,000 per year. The remoteness of the area being considered for a marine reserve means monitoring and enforcement activities would be a key expense, and would probably involve the cost of satellite imaging to monitor the area and vessel operations for enforcement. It is anticipated that enforcement of marine reserve regulations could be combined with programmes that monitor other illegal activities such as drug smuggling, adding somewhat to the costs of these programmes. Support from other jurisdictions, e.g. the United Kingdom and the United States, and conservation agencies could be explored. There would be a cost associated with prosecuting any violations of the reserve regulations, but this would be offset by fines in the case of a conviction.

### **2. Fishing Opportunities**

Fishing is the activity that would be impacted most by the establishment of marine reserve, and there is the potential for lost revenues. One local longline fisher currently operates in the distant waters of Bermuda's EEZ under highly regulated conditions. Although fishing activity offshore is limited at present, the Department of Environmental Protection has developed a strategic plan that includes a vision for a small-scale offshore fishery that would allow local commercial fishing operations to become more diversified and improve Bermuda's food security. The shoreside facility that has been proposed to improve processing of fish from the whole commercial fishery would serve to make offshore fishing more practical and allow this sector to develop as envisioned. Depending on the size and position of the marine reserve, current offshore fishing activity and any future development could be curtailed.

### **3. Mineral and Pharmaceutical Exploration Opportunities**

If a marine reserve is created, it would restrict activities such as sea bed mining and the harvest of organisms for pharmaceutical products. There is currently no mineral or fossil fuel exploration in the offshore waters around Bermuda, so the concern is about losing the opportunity to do this in the future. The practicality and profitability of such an enterprise is unknown and it is not possible to estimate potential value. Given the mobility of most open ocean organisms, it seems unlikely that the outer part of the EEZ would offer any pharmaceutical opportunities that are not available closer to shore. The exception to this would be organisms from the seabed communities of the Muir seamount chain. While large scale extraction would be prohibited within a marine reserve, permits could be issued for limited samples to be taken for scientific research.

### **4. Educational and Promotional Costs**

Key resource users would need to be educated about any new regulations affecting them, and the limited activities in the proposed reserve area mean this would not be too costly. Public education and exhibits about a marine reserve could be developed by partner organisations. Considerable overseas promotion would be required to reap the economic benefits of establishing a large marine

reserve, projected to come primarily via an increase in arrivals of higher end tourists attracted to environmentally responsible destinations. As the aim is to reach a distinct group of travellers, this may be an addition to existing tourism advertising costs.

## SUMMARY

The final pages of this document include three design options for a large marine reserve in Bermuda's offshore waters and a consultation response form so that you can submit your opinions and ideas regarding the possibility of establishing such a marine reserve. Below is a summary of the important points to consider when providing feedback.

- There is growing evidence of the significance of the Sargasso Sea as a unique and important marine ecosystem that plays a critical role in global climate regulation.
- A marine reserve in our offshore waters would help protect open ocean and deep sea biodiversity.
- A marine reserve could enhance marine life populations and fisheries catches in waters closer to shore.
- There is value in having a relatively undisturbed site to use as a comparison in scientific studies and for regional conservation management. Further, visiting scientists could bring economic benefits.
- A large, no-take marine reserve in our waters could boost Bermuda's image as a tourist destination that cares about the environment, resulting in economic benefits from increased tourism.
- Establishing a marine reserve in the outer waters of Bermuda's EEZ could help leverage increased enforcement resources to counter illegal foreign fishing activity.
- Establishing a marine reserve would be consistent with Bermuda's history of conservation policies, and Government's current commitment to environmental stewardship and halting biodiversity loss.
- A large marine reserve would demonstrate Bermuda's commitment to protecting the Sargasso Sea to the international community, paving the way for increased marine conservation globally.
- If the decision is taken to go ahead with some form of marine reserve in Bermuda waters, we will need to develop a programme to manage the reserve and this will require funding.
- Establishing a marine reserve is a commitment not to take anything from the protected area and, depending on the design of the reserve, this could curtail current and future offshore fishing activities and other future commercial opportunities such as seabed mining.

As an island community with close ties to the sea, the decision on whether to restrict commercial activity in a large portion of our offshore waters in the hopes of maintaining and improving the health of the surrounding ocean, and reaping the associated economic benefits, is an important one. For further information, please see the online resources listed below.



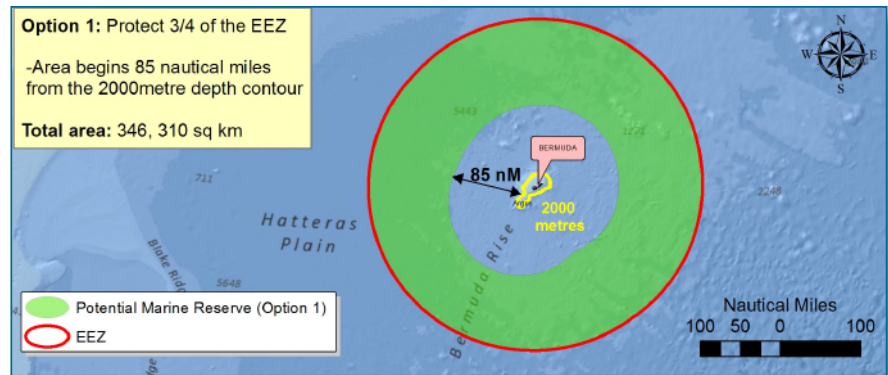
## POTENTIAL MARINE RESERVE DESIGNS

There are many different ways that a marine reserve in Bermuda's offshore waters could be designed. Below are three options for your consideration. These options look to protect a sizeable area of sea and at the same time allow some measure of current and potential future marine activity. The three options differ in size of the area protected and their potential impact on offshore activities.

### Option 1: Protect $\frac{3}{4}$ of the EEZ

**Area protected: 346,340 km<sup>2</sup>**

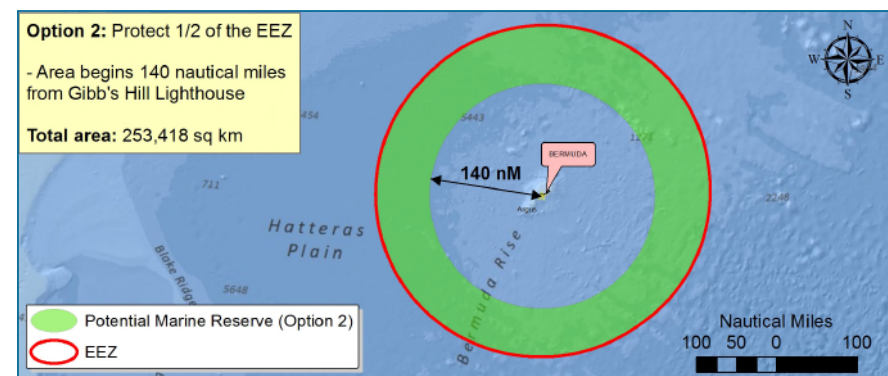
This option would have a minor impact on current offshore fishing and would limit future expansion of fishing and other commercial activities. The reserve would begin 85 nautical miles out from the 2,000 metre depth contour around Bermuda and extend out to the 200 nautical mile limit of Bermuda's EEZ.



### Option 2: Protect $\frac{1}{2}$ of the EEZ

**Area protected: 254,023 km<sup>2</sup>**

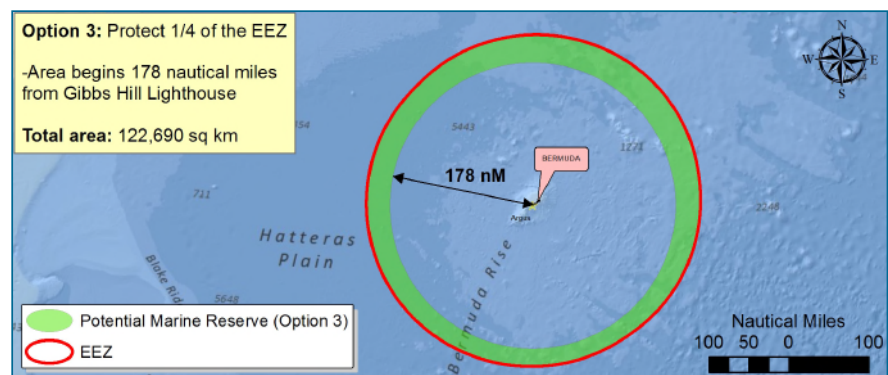
This option would not affect current offshore fishing and would allow for some future expansion. The reserve would begin 140 nautical miles out from Gibb's Hill lighthouse and extend out to the 200 nautical mile limit of Bermuda's EEZ.



### Option 3: Protect $\frac{1}{4}$ of the EEZ

**Area protected: 122,502 km<sup>2</sup>**

This option would not affect current offshore fishing and would provide flexibility for expanding fishing and other future commercial activities offshore. The reserve would begin 178 nautical miles out from Gibb's Hill lighthouse and extend out to the 200 nautical mile limit of Bermuda's EEZ.



### OR: Create your own marine reserve design

The consultation response form also provides the option to submit your own ideas for a potential marine reserve. Proposed reserve designs may be any size or shape as long as there is an easy way for boats to determine whether they are inside or outside the reserve using a GPS unit. (As an example, use measurements from a known point on land or a feature on a navigational chart, or use borders that correspond to lines of latitude and longitude.)

## CONSULTATION RESPONSE FORM

This form provides you with the opportunity to have your opinions included in the decision-making process when the Government of Bermuda considers whether to establish a large, “no-take” marine reserve in the offshore waters of Bermuda’s Exclusive Economic Zone (EEZ). Remember that a “no-take” marine reserve means no fishing, no seabed mining, etc. If we agree to protect a portion of the EEZ at this time, we can always consider extending the protection to a larger area in the future. Please consider the background, benefits and costs outlined in this document as you prepare your response.

Please tick ☒ your preferred option and use the space provided to expand on your choice.  
Additional pages may be added if you need more space for your response.

### Do you think a marine reserve should be established in the offshore waters of Bermuda’s Exclusive Economic Zone?

☐

**Option 1: Yes – Protect  $\frac{3}{4}$  of the EEZ (346,340 km<sup>2</sup>)**

Declare a marine reserve starting 85 nm from the drop-off at 2000 m and extending out to the edge of the EEZ.

☐

**Option 2: Yes – Protect  $\frac{1}{2}$  of the EEZ (254,023 km<sup>2</sup>)**

Declare a marine reserve starting 140 nm from Gibb’s Hill lighthouse and extending out to the edge of the EEZ.

☐

**Option 3: Yes – Protect  $\frac{1}{4}$  of the EEZ (122,502 km<sup>2</sup>)**

Declare a marine reserve starting 330 km from Gibb’s Hill lighthouse and extending out to the edge of the EEZ.

☐

**Option 4: No – We should not create a marine reserve in the waters around Bermuda.**

☐

**Option 5: Yes – Bermuda should create a marine reserve in its Exclusive Economic Zone (EEZ), but I would propose a different design (size, location, shape and protections). (Please attach your design.)**

- Please explain why you chose this option.

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- Please share your thoughts regarding the costs and benefits of a marine reserve.

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Name and address:

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Please keep my name and address confidential (circle one) YES / NO

Please indicate whether you are representing the views of (circle one) an individual / an organisation.

If you are responding as an individual, please indicate:

Nationality: \_\_\_\_\_

Country of Residence: \_\_\_\_\_

Age: \_\_\_\_\_

If you are responding on behalf of an organisation, please indicate:

Name of Organisation: \_\_\_\_\_

Your role: \_\_\_\_\_

How were members views assembled?

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Please submit your response by hand, post or e-mail by 31 October 2013. Responses received after this date cannot be included, so if you intend to respond by post, please ensure that your response will reach us by the deadline.

Mail or hand deliver your written submission to:

Sustainable Development Department  
31 Reid Street, 2nd Floor  
Hamilton HM 12  
Bermuda

***Electronic forms are available for download at [www.sdbermuda.bm](http://www.sdbermuda.bm) and can be e-mailed to: [sdd@gov.bm](mailto:sdd@gov.bm). You may also scan and e-mail this form.***



## NOTES

This image shows a full page of white paper with horizontal blue or grey ruling lines, typical of notebook paper. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.

For more information visit [www.sdbermuda.bm](http://www.sdbermuda.bm) • Email: [sdd@gov.bm](mailto:sdd@gov.bm) • Phone: 294-5893



GOVERNMENT OF BERMUDA  
Ministry of Environment and Planning  
**Sustainable Development Department**

MAKING THE CONNECTION  
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