



**Comments on the
Draft Black River Protected Landscape Management Plan (2017 – 2022)**

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For
National Environment and Planning Agency
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This document contains the professional opinion of the Jamaica Environment Trust (JET). In arriving at our opinion, we made every reasonable attempt to ensure that our resource persons are informed and reliable and experts in the area in which their comment and analysis is sought. JET encourages readers to apply their own critical analysis to the information provided in this document and by others, particularly where JET's opinion differs from those others.

With technical assistance from the Environmental Law Alliance Worldwide (ELAW) in Eugene, Oregon, the Jamaica Environment Trust (JET) evaluated the Draft Black River Protected Landscape Management Plan (2017 – 2022) prepared by Dr Susan Otuokon for the National Environment and Planning Agency. Below are our general comments, a more detailed review of the plan follows.

The plan represents an important advance in the management of the Black River Protected Landscape, covering both the Black River Upper Morass and the Black River Lower Morass, as well as numerous other surrounding areas including marine, aquatic and terrestrial habitats.¹ The comments included in this review are meant to help strengthen the management plan (Plan), at a time when both natural and anthropogenic threats to natural resources are increasing.

JET is concerned that NEPA is still working with a Draft Black River Protected Landscape Management Plan (2017-2022) given that the last draft of the plan was completed over three years ago. At this stage, the boundary of the Black River Protected Area (BRPA) should have been gazetted and a final draft of the Draft Management Plan should have already been published, all required data gathered, and the necessary decisions made. **Finalizing this plan and gazetted the BRPA should be fast-tracked by NEPA, and updated timelines should be immediately established for putting the necessary protective management strategies in place.**

Details of Management Programmes is lacking

No details of the management programmes referred to in the plan – *Biodiversity Conservation, Cultural Heritage Preservation, Enforcement and Compliance, Recreation and Tourism, Governance and Administration, Monitoring and Evaluation and Public Education and Outreach* – have been included with the document. JET is unable to assess the overall integrity of the management plan without these details.

Access and enforcement issues need a more comprehensive review

The plan should more comprehensively address current access issues to the various areas of the protected landscape, as well as the enforcement of sanctioned activities and individuals allowed within.

The plan states:

“Most of the Morass is Crown Land vested in the Commissioner of Lands through the National Lands Agency. Unfortunately there is almost no land management and squatting has occurred along with conversion of the natural, highly diverse vegetation to plantations of low diversity or mono-crop cultures. In order for this Management Plan to be successful in protecting remaining natural wetlands and restoring

¹ Otuokon, S. June 2016. Draft Black River Protected Landscape Management Plan 2017 – 2022 (Plan) p. 131 p. 1.

degraded areas, addressing the issue of illegal occupation of Crown Lands must be carefully managed. This matter is described in the Enforcement and Compliance Programme.”²

The plan also states:

“6.3.5.1. Identification/Analysis of Enforcement and Compliance Issues

Most of the degradation of the biodiversity and cultural values of the BRPL has resulted from the lack of enforcement of existing legislation, primarily, the illegal occupation and conversion of the Morass to agriculture or housing. If a land owner (government in this case) does not show interest or concern in the fact that his land is being occupied by someone else without permission, then the squatter is going to continue his occupation. Further, since much of the illegal occupation is income generating, it will be difficult to remove the illegal occupant in the absence of a strong local economy and other economic opportunities. In addition, the crop that is being grown in much of the Morass is lucrative and worth defending by the occupant. Apparently much of the enforcement activity has been targeted at the removal and destruction of the illegal plant and has not addressed the illegal occupation of government lands. This means that it will be particularly difficult to restore lands already converted to marijuana cultivation. However, there is an urgent need to secure any remaining areas of natural Morass vegetation and prevent their occupation and conversion to any other vegetation.

Illegal occupation of the Morass also occurs for housing – the wetlands are simply dumped with marl over time and the “dry-land” built on. Within the BRPL, the Local Development Areas identified under the Draft St. Elizabeth Development Order, 2014 are Lacovia, Middle Quarters and Black River however it is clear from observation that the communities in Slipe (including Cataboo, Frenchmans and Punches) Parrottee, Fullerswood and Pondsides are growing in terms of infrastructural development. Further because of the poor condition of the roads and inadequate government vehicles within the Parish Council, the level of monitoring and enforcement is very limited.”³

From this description, it seems likely that squatting, and poaching are bigger threats than the plan details. **A detailed map of areas that have been affected as well as a proper study of the encroachment impacts should be prepared to guide the enforcement and compliance programme.**

Community members should be consulted about management of the areas where they have historical roots

The plan states:

“6.3.2 Cultural Heritage Preservation

The focus for this Management Plan is on the Protected Landscape which does not include the Black River Heritage District but goes around it. However the preservation of the built cultural heritage in Black River and its potential for tourism and therefore employment addresses one of the root causes of the stresses and threats on the natural heritage of the area. With this in mind, whilst the strategies and management actions will not focus directly on the built heritage of the town of Black River opportunities for collaboration on recreation and tourism ventures should be seized.

² Plan, p. 84.

³ Plan, pp. 86-87.

As described earlier, Black River and Middle Quarters in particular are known for pepper shrimps and the shrimp fishers in their dug-out canoes with special shrimp baskets. Roof thatching, basket weaving and the making of mats and other items from plant materials found in the morass are also typical of the area. Therefore, the emphasis for the preservation of cultural heritage will be on the BRPL “Shrimp Country” heritage. Bearing in mind the link between Taino and West African heritage and current practices, efforts should be made to support the conduct of archaeological work and research to better understand and promote the heritage.”⁴

The plan should go considerably further in including community voices and perspectives on management of the protected landscape.

Climate change needs a higher profile

Wetlands like the Black River Upper Morass and the Black River Lower Morass are among the most critical habitats to protect globally in the context of a changing climate. They are areas of high biodiversity and perform multiple ecosystem services, including storing and purifying freshwater, and acting as both a reservoir in times of drought and a buffer against flooding during storms.

The plan mentions climate change at several points, for example this mention of drought from Table 4:⁵

Ponds (freshwater and saline) - located in Conservation Zones	Wallywash Pond (between communities of Pondsides and Hilltop). Salt Pond, Parrottee is close to the coast and hyper-saline – its size changes with rainfall. There are several other ponds throughout the area.	Wallywash Pond is the largest FW body in Jamaica. It appears to be in good condition. Salt Pond appears to be drying up likely due to climate change induced droughts in recent years. A number of local ponds have dried up.	Drying up of Ponds – the blockage of rivers and streams higher up in the Morass is reducing the amount of water reaching the springs that feed the Ponds. Reduction of fish in the Salt Pond maybe due to drought.
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And this mention of fires:

“Fires are not believed to start on their own but the peat, especially when relatively dry due to climate change induced drought and the degradation of the Morass, causes fire to catch and spread easily and rapidly.”⁶

The plan claims to address climate change, identifying it as one of the “main threats and/or stresses (active threats) to the BRPL”⁷ and goes on to promise that “various conservation targets identified within [each of these threats] have been identified and are listed and then described in detail”⁸ However, the detail for the description of climate change is severely lacking:

⁴ Plan, p. 74.

⁵ Plan, p. 58.

⁶ Plan, p. 63.

⁷ Plan, p. 57.

⁸ Plan, p. 57.

“Climate change

Prosperie et al., pending publication indicate that native shrimp biomass is impacted by La Niña, specifically changes in water level which would be affected both by the amount of rainfall and temperature. Climate change with its impact on weather conditions is very likely to affect the BRPL in terms of storm surges, flooding in times of tropical depressions and drying out of the Morass during droughts.”⁹

A single paragraph is not enough to address this critical threat. Indeed, very little is discussed in the plan about all the potential impacts from climate change. **The plan calls for studies on “predicted effects of climate change, particularly sea level rise on fauna and flora”¹⁰ within the context of the Biodiversity Conservation Programme; but there are many other potential impacts from climate change that should also be considered, including:**

- 1) Changes in precipitation (both quantity and annual patterns);**
- 2) Changes in fire regimes;**
- 3) Phenological shifts that result in mismatched cycles between animals and plants, jeopardizing future biodiversity levels;**
- 4) New storm patterns (both small scale thunder and lightning storms and large-scale hurricanes); and**
- 5) The introduction of new diseases as a result of shifts in animal population distributions or changing temperature, pH, humidity, or other abiotic factors.**

The “Biodiversity Conservation Programme” is not included in this plan, which also prevents JET from gaining a fuller understanding of the threats and mitigation measures being considered to address this critical issue. It is now September 2019, more than three years after the plan was submitted; however, the additional information or study data have not been included.

The Zoning System is Unclear

The zoning scheme included with the plan is confusing. Specifically, the differences between the “multiple” and “sustainable” use designations are unclear, which may result in a lack of understanding about which activities are sanctioned where and what the vision is for each area.

The plan reads:

“GOALS

- 1. *Ecosystem Conservation:* To maintain existing and expand areas in natural and healthy condition by stopping further encroachment, regaining control of key areas, restoring and rehabilitating natural ecosystems and reducing use of agricultural chemicals.**
- 2. *Wildlife Conservation:* To protect wildlife in the Morass, coastal and marine areas.**
- 3. *Cultural Heritage Preservation:* To preserve the cultural heritage related to the wild, native shrimp and thatch industry and related activities.**

⁹ Plan, pp. 67-68.

¹⁰ Plan, p. 106.

4. Sustainable Development: To facilitate sustainable livelihood opportunities associated with conserving the distinct character of the Black River community and its natural and cultural values.

6.2 Zoning

Zoning is a management tool – it identifies zones (smaller areas) within a protected area where there are particular objectives and/or opportunities. Whilst different zones may have different objectives, they must work together to aid the achievement of the protected area’s primary objective or goal.

6.2.1 Description of the Zone Types and Applicable Policies

Three zones have been identified for the BRPL: Sustainable Use, Multiple Use and Conservation as briefly described in Table 2 and depicted in Figure 28.

Table 2. Description of the Three BRPL Zones

Zone	Purpose	Applicable Policies and Legislation
Sustainable Use (on private lands, in and around communities – YS Corridor, Upper Morass, Lower Morass, Slupe and its districts, Pondsides, Parottee and Fullerswood)	To ensure environmentally sustainable development and use of privately owned lands for the conservation of local biodiversity and ecosystems. Support primarily for Goal 4.	St. Elizabeth Development Order NRCA Permits and Licences Act Wild Life Protection Act (Game Reserve)
Multiple Use (Black River Harbour and areas immediately adjacent; Main Rivers: Broad, Middle Quarters, Salt Spring and Black; areas immediately adjacent Lower Morass along road which forms BRPL boundary)	To allow for a variety of environmentally sustainable use in government owned lands and waters. Support primarily for Goals 3 and 4.	NRCA Permits and Licences Act
Conservation Wallywash and Parottee Salt Pond, Thatchfield, Galleon Harbour Mangroves, Lower Morass – west and south-east)	To protect and restore biodiversity and ecosystems. Support primarily for Goals 1 and 2.	General Protected Landscape regulations and specific BRPL regulations (being prepared)

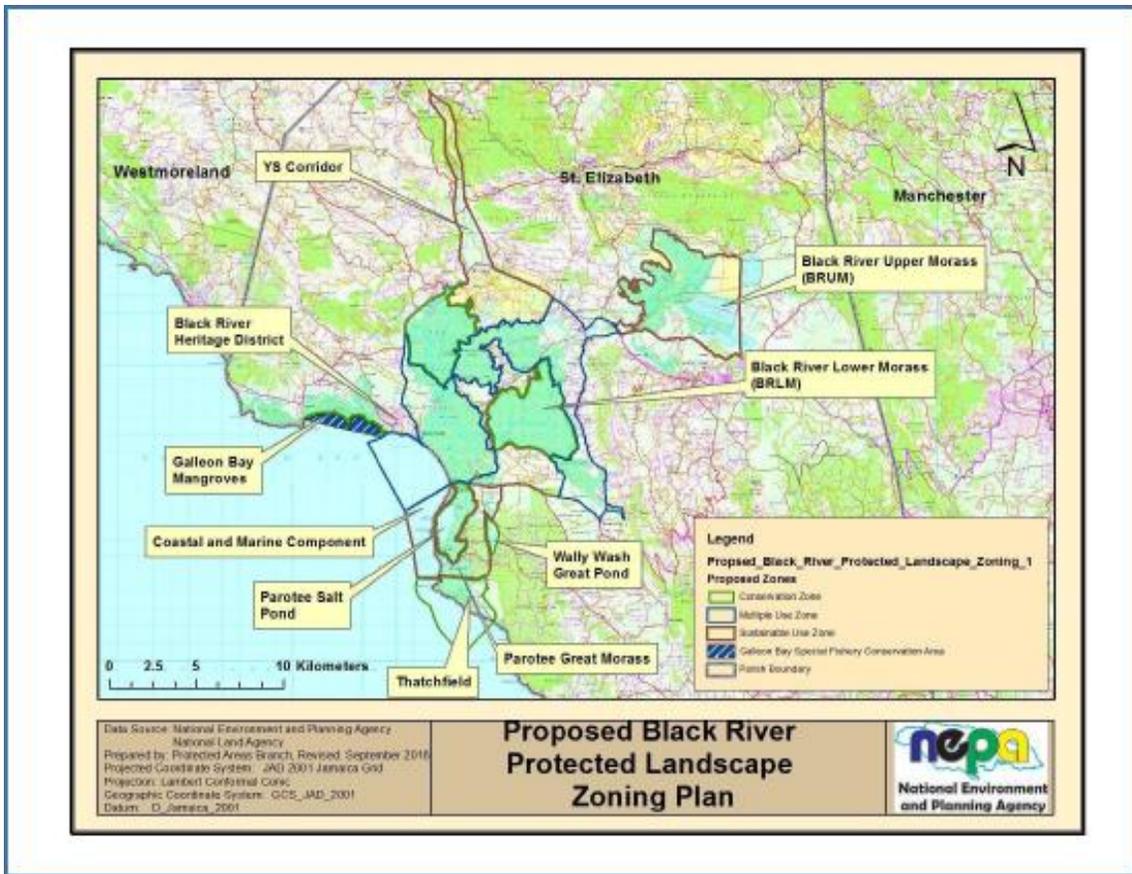


Figure 28. Zoning of the BRPL

The Sustainable Use Zone covers mainly private lands in the YS Corridor, Upper Morass and in the Lower Morass in and around communities e.g. Slipe and Pondsides where the management priority is for the PA manager to promote environmentally sustainable practices. Depending on the geographic location of this Zone and therefore the ecosystems present, the particular focus will vary:-

- Within the Upper Morass, the focus will be on reducing siltation of the rivers and streams and reducing the amount of agricultural chemicals (fertilisers, pesticides and herbicides) used. This will be implemented through activities under the Public Education and Outreach, Conservation and Monitoring and Evaluation Programmes.
- Along the YS River Corridor, the focus will be on maintaining the pristine water conditions limiting development to strictly controlled ecotourism and ecologically sound housing development – no large schemes. There should be no intensive agriculture nor use of fertilisers and chemical pesticides and herbicides. There should be no motorised use of the river.
- Within the Parrottee Beach area, the focus will be on the promotion of development which is both environmentally sustainable and aesthetically in keeping with the environment and a Protected Landscape. This will be implemented through activities under the Conservation, Recreation and Tourism and Public Education and Outreach Programmes.

The Lower Morass is primarily comprised of government-owned lands – this area is zoned as Multiple Use and Conservation except for the existing communities within the Morass and along the coast (Slip and its districts, Pondsides, Parrottee and Fullerswood) and private lands which are zoned as part of the Sustainable Use Zone.

Six Conservation Zones have been identified but further field work will be needed to accurately map them in detail, they are described below. The recommendation for the five year timeline of this Management Plan is to work with the local communities to establish the definitive boundaries of these areas starting with public education and outreach and using detailed cadastral surveys, research (particularly for the ponds) and enforcement for the herbaceous wetlands (Lower Morass). With respect to the latter, the critical activity is to secure any remaining areas that are in natural condition and obtain compliance with respect to stopping any further encroachment and thus securing these zones for restoration and protection.”¹¹

From these descriptions it is not clear what the practical difference will be between sustainable use and multiple use zones, which may end up diluting the definition of what activities and development can be sanctioned as truly “sustainable.” **The zoning categories should be revised to make them stronger and more distinct.**

The complete IUCN Category V designation description includes valuable guidance

The full description of the Category V designation is copied below, so that further consideration can be given to the specific wording from the IUCN, particularly the section about essential characteristics and integrity. The single paragraph blurb included in the plan does not do the concept justice. The complete description of the IUCN Category V protection designation reads as follows (emphases copied from the original source):

“Category V: Protected Landscape/Seascape

A protected area where the interaction of people and nature over time has produced an area of distinct character with significant ecological, biological, cultural and scenic value: and where safeguarding the integrity of this interaction is vital to protecting and sustaining the area and its associated nature conservation and other values.

Primary objective

To protect and sustain important landscapes/seascapes and the associated nature conservation and other values created by interactions with humans through traditional management practices.

Other objectives

- To maintain a balanced interaction of nature and culture through the protection of landscape and/or seascape and associated traditional management approaches, societies, cultures and spiritual values;*
- To contribute to broad-scale conservation by maintaining species associated with cultural landscapes and/or by providing conservation opportunities in heavily used landscapes;*

¹¹ Plan, pp. 48-51.

- *To provide opportunities for enjoyment, well-being and socio-economic activity through recreation and tourism;*
- *To provide natural products and environmental services;*
- *To provide a framework to underpin active involvement by the community in the management of valued landscapes or seascapes and the natural and cultural heritage that they contain;*
- *To encourage the conservation of agrobiodiversity and aquatic biodiversity;*
- *To act as models of sustainability so that lessons can be learnt for wider application.*

Distinguishing features

Category V protected areas result from biotic, abiotic and human interaction and should have the following essential characteristics:

- *Landscape and/or coastal and island seascape of high and/or distinct scenic quality and with significant associated habitats, flora and fauna and associated cultural features;*
- *A balanced interaction between people and nature that has endured over time and still has integrity, or where there is reasonable hope of restoring that integrity;*
- *Unique or traditional land-use patterns, e.g., as evidenced in sustainable agricultural and forestry systems and human settlements that have evolved in balance with their landscape.*

The following are desirable characteristics:

- *Opportunities for recreation and tourism consistent with life style and economic activities;*
- *Unique or traditional social organizations, as evidenced in local customs, livelihoods and beliefs;*
- *Recognition by artists of all kinds and in cultural traditions (now and in the past);*
- *Potential for ecological and/or landscape restoration.*

Role in the landscape/seascape

Generally, category V protected areas play an important role in conservation at the landscape/seascape scale, particularly as part of a mosaic of management patterns, protected area designations and other conservation mechanisms:

- *Some category V protected areas act as a buffer around a core of one or more strictly protected areas to help to ensure that land and water-use activities do not threaten their integrity;*
- *Category V protected areas may also act as linking habitat between several other protected areas.*

Category V offers unique contributions to conservation of biological diversity. In particular:

- *Species or habitats that have evolved in association with cultural management systems and can only survive if those management systems are maintained;*
- *To provide a framework when conservation objectives need to be met over a large area (e.g., for top predators) in crowded landscapes with a range of ownership patterns, governance models and land use;*
- *In addition, traditional systems of management are often associated with important components of agrobiodiversity or aquatic biodiversity, which can be conserved only by maintaining those systems.*

What makes category V unique?

Category V differs from the other categories in the following ways:

Category Ia Human intervention is expected. Category V does not prioritize research, though it can offer opportunities to study interactions between people and nature.

Category Ib Category V protected areas are not “wilderness” as defined by IUCN. Many will be subject to management intervention inimical to the concept of category Ib.

Category II Category II seeks to minimize human activity in order to allow for “as natural a state as possible”. Category V includes an option of continuous human interaction.

Category III Category III focuses on specific features and single values and emphasises the monumentality, uniqueness and/or rarity of individual features, whereas these are not required for category V protected areas, which encompasses broader landscapes and multiple values.

Category IV Category V aims to protect overall landscapes and seascapes that have value to biodiversity, whereas category IV aims often quite specifically to protect identified target species and habitats. Category V protected areas will often be larger than category IV.

Category VI Category VI emphasises the need to link nature conservation in natural areas whilst supporting sustainable livelihoods: conversely category V emphasises values from long-term interactions of people and nature in modified conditions. In category VI the emphasis is on sustainable use of environmental products and services (typically hunting, grazing, management of natural resources), whereas in category V the emphasis is on more intensive uses (typically agriculture, forestry, tourism). Category VI will usually be more “natural” than category V.

Issues for consideration

- *Being a relatively flexible model, category V may sometimes offer conservation options where more strictly protected areas are not feasible.*
- *Category V protected areas can seek to maintain current practices, restore historical management systems or, perhaps most commonly, maintain key landscape values whilst accommodating contemporary development and change: decisions about this need to be made in management plans.*
- *The emphasis on interactions of people and nature over time raises the conceptual question for any individual category V protected area: at what point on the temporal continuum should management focus? And, in an area established to protect values based on traditional management systems, what happens when traditions change or are lost?*
- *Since social, economic and conservation considerations are all integral to the category V concept, defining measures of performance for all of these values is important in measuring success.*
- *As people are the stewards of the landscape or seascape in category V protected areas, clear guidelines are needed about the extent to which decision making can be left to local inhabitants and how far a wider public interest should prevail when there is conflict between local and national needs.*

- *How is category V distinguished from sustainable management in the wider landscape? As an area with exceptional values? As an example of best practice in management? Category V is perhaps the most quickly developing of any protected area management approaches.*
- *There are still only a few examples of the application of category V in coastal and marine settings where a “protected seascape” approach could be the most appropriate management option and more examples are needed (see e.g., Holdaway undated).¹²*

Jamaica Environment Trust
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¹² <https://www.iucn.org/theme/protected-areas/about/protected-areas-categories/category-v-protected-landscapescape>