

## CEPF FINAL PROJECT COMPLETION REPORT

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| <b>Organization Legal Name:</b>              | National Parks, Rivers and Beaches Authority  |
| <b>Project Title:</b>                        | Integrated Watershed Management Planning and Forest Reserve Protection in the Central Mountain Range Conservation Corridor of St. Vincent |
| <b>Date of Report:</b>                       |   |
| <b>Report Author and Contact Information</b> | Rendal Alenn, email: renbi36@hotmail.com  |



**CEPF Region: Caribbean**

**Strategic Direction: Strategic Direction 2 Investment Priority 2.3**

**Grant Amount: \$77623**

**Project Dates: June 2013 to September 2014**

**Implementation Partners for this Project (please explain the level of involvement for each partner):**

**1. Global Parks-** Global Parks works with partners to plan activities that will contribute to the achievement of a wide variety of results for parks and protected areas. Retired professionals provide analysis, advice and assistance in developing, reviewing, and contributing to the implementation of a variety of protected areas plans, strategies and issues, and conducts and participates in workshops and assists with curricula. As part of this IWMP project, Global Parks personnel conducted a rapid biological inventory of the KBA trigger species.

**2. Forestry Department-** An important lead agency with legal responsibility for the management of forests and wildlife. The Department continues to carry out its management functions within the watersheds that facilitate soil, water and biodiversity conservation. In this project, Forestry department played a key role with identifying threats to terrestrial biodiversity, providing data on biodiversity assets and offer technical support towards the development of the Integrated Watershed Management plans (IWMP). Additionally, they would be the key implementer of the interventions recommended by the IWMP and a major contributor to upper watershed management

### **Conservation Impacts**

***Please explain/describe how your project has contributed to the implementation of the CEPF ecosystem profile.***

The project has contributed to the implementation of the CEPF ecosystem profile in the following ways:

1. Preparation of a plan for watershed management that integrates ecosystem services biodiversity conservation. The Cumberland IWMP was designed to achieve the objectives of protecting the quality and quantity of water resources, protection of biological diversity and the protection of human values and services to identify desirable land use suitability and regulate the existing land use to achieve the objectives of the IWMP. Zoning of the project site was of utmost importance to determine the biological and wildlife ecosystem base. The watershed was zoned into two main critical areas:
  - Conservation areas / watershed reserve areas - areas set aside to protect the biological integrity of the forest so as to ensure protection of watersheds, protection of Key Biodiversity Assets, KBA triggers species and other wildlife, as well as the protection of representative samples of all vegetation types within the watershed;

- Production /Harvestable areas- important for sustaining livelihood- areas where some level of forest harvesting can take place as well as agriculture, tourism and recreation.

The process of zoning the Watershed included:

- Establishing and analyzing baseline information and identifying sensitive / critical areas;
- Establishing conservation criteria and production criteria based on the analysis of the baseline information undertaken;
- Identification of critical areas and evaluation of areas of conflict
- Actual zoning of the watershed.

In the ecological assessment, the watershed consultant along with the Forestry Department undertook a 10 day field visit and did an assessment to identify habitat of the key biodiversity assets and other endangered species of plants and animals.

A wildlife assessment was conducted to identify endangered KBA trigger species, key habitats, and problems affecting the development and protection of these species.

The assessments were concluded by the production of an ecological report, a wildlife conservation, and a zoning plan for the Cumberland Watershed.

2. Establishment of a co-management arrangement to support the management of the Cumberland Watershed. NPRBA laid the ground work for a co-management agreement to foster the integrated interagency collaboration for the implementation of the watershed management plan that has been prepared for the Cumberland watershed.

The plan provides for joint stewardship of the relevant government departments and the communities. It provides for building the capacity within the communities to provide services that support and maintain the objectives of the watershed management plan - wildlife conservation programmes, monitoring of streams, ecological research, demarcation and establishment of watershed boundaries and sustainable use and protection of the watershed.

***Please summarize the overall results/impact of your project.***

The Main results of the project are:

1. Increased knowledge among the local population within the Cumberland Watershed of the importance of the area's biodiversity, including of the threatened species that are a trigger for conservation actions. Through the

implementation of a public education strategy, a campaign was designed to sensitize the communities within the Cumberland Watershed. Some of the outputs were the production of a 45-second video and audio jingle on the importance of the St. Vincent Parrot, the Black Snake, the Whistling Warbler, and the Whistling Frog to the biodiversity of the Cumberland Valley; posters displays of the trigger species distributed to school students and public places within the communities that comprise the watershed, and the distribution of stickers and other images highlighting each of the trigger species, the erection of billboards at strategic points (upon entering, within and upon leaving) the Cumberland Valley area, posting messages promoting the importance of maintaining the biodiversity of the Cumberland watershed that is habitat to the endemic species. Numerous community outreach programs were done including: two community consultations, and visits to five area schools (three primary and two secondary schools); presentations were done on the importance of watershed management and biodiversity conservation including the key trigger species.

The acquisition of baseline findings from the KAP surveys can be used for future planning and interventions for the Watershed. The Pre and Post KAP survey questions highlight the knowledge, attitude, and practices of residents and resource users with respect to biodiversity and species within the Cumberland valley.

2. Model processes established under the project that will be used to inform future work in SVG. The process for developing the IWMP and the framework established for the management of the Cumberland Watershed that will serve as a model for other watershed management plans in the country. The Forestry department public education outreach unit has adopted the IWMP public education strategy. Based on the recommendations of the Public Education Consultant, the unit is utilizing the content to complement its Public Outreach Programme.

3. Improved understanding of agency roles and responsibilities for the management of the Cumberland Watershed, leading to greater collaboration as codified in a MOU developed under the project and signed by relevant stakeholder agencies.
4. Improving the habitat for KBA trigger and other wildlife species by recommending the expansion of the boundary of the forest reserve to include representative samples of forest - types-semi deciduous/dry evergreen and dry scrub woodland so as to provide greater protection of the ecology of the forest and other wildlife.

**Planned Long-term Impacts - 3+ years (as stated in the approved proposal):**

1. Land and water use planning in the Central Mountain Range Conservation Corridor are guided by an integrated watershed management approach to promote sustainable development and biodiversity conservation
2. Conservation actions successfully save the IUCN Red Listed Species of *Catharopeza bishop*, *Pristimantis shrevei*, *Amazona guildingii*, and *Chironius vincenti* from extinction

**Actual Progress Toward Long-term Impacts at Completion:**

The co- management approach to implementation of the IWMP is based on the authority/ mandates of the two agencies to undertake the activities outlined in the Plan through their respective enabling statutes and delegated legal authorities. The MOU specifies their roles based on this:

- The formulation of stakeholder committee. The role of the stakeholder committee is to work with the project manager to implement activities on the ground. The project manager would be expected to involve the committee in actual planning and implementation of all project outputs.
- A Wildlife Conservation Strategy was developed, with emphasis on the Key Biodiversity Asset – KBA trigger species and a map of the critical habitat and range of these species was developed.
- The forestry department as a key partner in the IWMP, have embarked on various reforestation programmes to restore the forest cover and plantations in the Cumberland watershed. Based on recommendations from the wildlife

conservation strategy this will be expected to improve habitat quality and biodiversity of the KBA species within this ecosystem.

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**Planned Short-term Impacts - 1 to 3 years (as stated in the approved proposal):**

1. The IWMP/Conservation Plan approved by 10 agencies, covering the entire Cumberland Forest Reserve/KBA totaling 1075.9 hectares of land and water ecosystems from Mt. Garo, Mt. Brisbane and Johnson Ridge down to the Cumberland beach.
2. Multi-stakeholder institutional arrangements for watershed management are formalized and mainstreamed in 10 agencies in St. Vincent & the Grenadines.
3. Knowledge and support for forest conservation are increased by 30% points in five communities (Spring Village, Westwood, Cumberland, Belmont and Rose Hall) and agencies (Forestry Department, Ministry of Agriculture, Fisheries Division, Ministry of Health and Environment/Environmental Management Department (EMD) and Physical Planning Department).

**Actual Progress Toward Short-term Impacts at Completion:**

1. The pre-post survey was to gauge the effectiveness of the intervention activities designed to increase the awareness of residents and resource users in the Cumberland with respect to the environment and biodiversity in the Cumberland Watershed. Eight months is a relatively short period of time for significant behavioural changes to occur. Nevertheless in most cases the post survey results suggest increased awareness among respondents on the critical issues relating to biodiversity and the environment in the Cumberland Valley and Watershed. This observation must be placed in the context of the experience of the major flooding and landslides that occurred in the Cumberland Valley and other areas of St. Vincent on December 24, 2013.
2. Draft IWMP approved by 10 agencies and is awaiting Cabinet's approval
3. Coming out of stakeholders meeting, recommendation for the review of the current Legislation and enforcement laws was shared with the Director of Forestry for onward transmission to the Minister.
4. Mainstreaming of the IWMP/Conservation plan in the annual work programme of stakeholder agencies reflecting their institutional responsibility
5. A draft MOU was developed and shared with the 10 stakeholder agencies. The National Parks, Rivers and Beaches Authority continues to dialog with these agencies to have a final agreement and to have the IWMP approved by Cabinet.
6. The Forestry Department Public education outreach unit has adopted the IWMP public education strategy. Based on the recommendations of the Public Education

Consultant, the unit is utilizing the content to complement its Public Outreach Programme.

**Please provide the following information where relevant:**

**Hectares Protected:** Cumberland Forest Reserve 1157 ha within which is the parrot reserve boundary of 811ha.

**Species Conserved:** The KBA trigger species and other wildlife species within the various forest types.

**Corridors Created:** recommended buffer zone around the forest reserve boundary of 300m (984.3ft) with a total acreage of 735 acres (274.38 ha) or alternatively 100 m (328 ft.) with a proposed total acreage is 226 acres (91.46 ha)

Recommended River Buffer Zones- along the length of the 2 major rivers; 30- 50 feet (9.14 –15.24 metres)- recommended within the mid to upper watershed and modified within the Communities where houses are located on the river banks

Implementation of the zoning plan entails the inclusion, within the forest reserves boundary, of representative samples of forest types- semi-deciduous/dry evergreen and dry scrub woodland - for greater protection of wildlife and improved biodiversity

***Describe the success or challenges of the project toward achieving its short-term and long-term impact objectives.***

The adoption and implementation of the zonation plan is key to a successful IWMP and the associated outputs.

One of the challenges is the lack of information on the land ownership within the watershed especially at the level of the farming community. This will hamper decisions for adoption and implementation of the zoning plan which will entail, among other activities the establishment of the buffer zones and other important components of the plan.

Another challenge is access to financial resources to fully implement the plan.

The Forestry Department has listed the following challenges with respect to the implementation of these recommendations:

- General lack of human, financial and technical resources, particularly in the areas of data collection, monitoring and stock assessment;
- Inadequate scientific information;
- Lack of expertise in species management;

- Weak enforcement of conservation regulations and inadequate support from law enforcement agencies;
- Lack of public education, awareness and understanding of biodiversity issues;
- Limited public support for conservation activities;
- Population pressure resulting in habitat destruction and unsustainable utilization of resources;
- Increase in the pet trade which leads to the fact that there should be stricter monitoring of this activity;
- The need to implement more scientific methods for undertaking population census;

***Were there any unexpected impacts (positive or negative)?***

The disaster of December 24, 2013 that destroyed the hydro riparian environment and temporarily displaced the community. Research on the hydro-riparian environment was limited to the mid and upper watershed.

### **Project Components**

**Project Components:** *Please report on results by project component. Reporting should reference specific products/deliverables from the approved project design and other relevant information.*

**Component 1 Planned: Baseline assessments and rapid valuation of ecosystem services within the KBA**

**Component 1 Actual at Completion:**

1. KAP report was developed and submitted to the PSC and findings from the report was shared with the community
2. Ecological biological diversity report was completed by the Watershed Specialist with the assistance of the Forestry Department. The ecological assessment of the watershed gave an overview of the forest types and ecosystems fauna and flora of the area, identification of the key habitats of the KBA, trigger species, and identified the range of these species, which will serve as a guideline for a more effective conservation strategy. A Wildlife Conservation Strategy for the KBA Trigger Species- provide a framework for the protection of the endangered Key Biodiversity Assets, KBA, trigger species. This will entail identification of the key habitats of the species, evaluation of problems affecting

them and their habitat, and the development and implementation of targeted actions to promote their protection.

3. The Scoping report was completed by the Watershed Specialist and presented to the PSC. Zoning Plan for the Cumberland watershed – Evaluated existing land management regimes within the Cumberland Watershed ; identified desirable land use based on land capability, highlighted geographic spaces within the watershed that require priority attention and recommended mitigation measures for these areas.

4. Training in the fundamentals of Integrated Watershed Management Planning and biological assessment was completed by the Watershed Consultant with 13 stakeholder agencies.

**Component 2 Planned: Outreach conducted to key stakeholder agencies to achieve consensus and support for the IWMP and its institutional arrangements and to target 5 communities (Spring Village, Westwood, Cumberland, Belmont, Rose Hall), within the watershed to improve awareness of and support for biodiversity conservation and watershed management (June-November 2013)**

**Component 2 Actual at Completion:**

1. Targeting sector institutions was achieved; the community meetings and surveys were conducted by the consultant, staff of NPA, and the forestry department. The conservation and protection of the four IUCN endemic species were promoted in numerous visibility and promotional paraphernalia (Billboard, posters, bookmarks, bumper stickers, stickers)

2. More than five meetings with agencies and community was held during the project (December 2013 to September 2014) to address roles and institutional responsibilities, as well as to raise awareness and support for the project

3. As part of the public education strategy, the 45 second audio jingle was aired on the local SVG Broadcasting Corp. television station, as well as shared on numerous social media sites. Posters and stickers featuring the endemic species were distributed in schools, throughout the communities within the Cumberland Watershed and erected in numerous public spaces with the assistance of students from the Community college on technical internship at the Forestry department.

4. Post KAP survey was completed in September, 2014 and a comparative analysis was done to the KAP survey completed in December, 2013. The final report was submitted to the PSC.

**Component 3 Planned: Integrated Watershed Management Plan for the Cumberland Watershed, prepared and submitted to the Project Steering Committee for approval**

**Component 3 Actual at Completion:**

1. Personnel from Global Parks completed and submitted Rapid Biological Inventory in November, 2013.

2. The Watershed consultant with support of the GIS specialist from the Forestry Dept. zoned the watershed by forest type and critical habitat for the KBA trigger species.

3. The IWMP was accepted by the PSC in September, 2014. The Watershed Consultant prepared a MOU agreement that was shared with the stakeholder agencies for review and signing.

### Visibility Items:

#### *Banner & Billboard*

The banner and billboard features a background image of a lush green forest with a person's hands holding a large red hibiscus flower in the foreground. In the top left corner is the logo of the National Parks, Rivers and Beaches Authority, which includes a globe and a bird. To the right of the logo is the text "CRITICAL ECOSYSTEM PARTNERSHIP FUND". The main title is "Integrated Watershed Management Planning & Forest Reserve Protection in the Central Mountain Range Corridor of St. Vincent." in large, bold, blue and black fonts. At the bottom right, there is a small copyright notice: "© Vincent & the Grenadines National Parks, Rivers and Beaches Authority".



**Poster, Stickers, & Book Marks**



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|  <p><b>The St. Vincent and the Grenadines Parrot</b><br/><b>Amazona Guittingii</b></p> <p>Endangered Species<br/>Only in Yincy<br/>Protected for all to see</p>  |  <p><b>The Whistling Wabbler</b><br/><b>Chattaropeza Bishopi</b></p> <p>Endangered Species<br/>Only in Yincy<br/>Protected for all to see</p>  |  <p><b>The Black Snake</b><br/><b>Chironius Vincenti</b></p> <p>Endangered Species<br/>Only in Yincy<br/>Protected for all to see</p>  |  <p><b>The Whistling Frog</b><br/><b>Pristimantis shrevei</b></p> <p>Endangered Species<br/>Only in Yincy<br/>Protected for all to see</p>  |
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**Public Education**



## Community Consultation



## Stakeholder Meetings





***Were any components unrealized? If so, how has this affected the overall impact of the project?***

No.

***Please describe and submit (electronically if possible) any tools, products, or methodologies that resulted from this project or contributed to the results.***

## **Lessons Learned**

***Describe any lessons learned during the design and implementation of the project, as well as any related to organizational development and capacity building. Consider lessons that would inform projects designed or implemented by your organization or others, as well as lessons that might be considered by the global conservation community.***

Identifying all major stakeholders within the watershed and including them in project design so as to encourage input in project implementation. This may have been the case with respect to the Ministry of Agriculture whose participation in the project was minimal. Agricultural production is a major land use component of the watershed.

***Project Design Process: (aspects of the project design that contributed to its success/shortcomings)***

The putting together of the project was very tedious, detailed and very comprehensive. This process will be difficult for someone who is not at a upper management level and the need to hire the services of a professional consultant to put together the project proposal may be a plausible solution. In spite of the laborious application process, this made for ease when it came to implementing the project. The reporting template allowed for efficient management of resources and the tracking of activities.

***Project Implementation: (aspects of the project execution that contributed to its success/shortcomings)***

The step by step format laid out in the project proposal allowed the project team to execute all activities in an efficient manner. The template was easy to follow and it

allowed the project team to be able to follow and implement all components in a synchronized flow. The reporting template was user friendly, and allowed ease of reporting. The support from the CEPF staff was exceptional, and they were readily available to answer questions and give guidance where necessary.

***Other lessons learned relevant to conservation community:***

- Incorporating and using local knowledge to shape and guide project focus and deliverables
- Flexibility in project design and time frame to account for unforeseen factors such as natural disasters and biophysical resource changes that can occur during the implementation period of the project.
- Follow-up and continuity where the project can have as an outcome donor ready projects to request further funding or initiatives for incorporation in local agencies annual work programs to facilitate implementation of project outputs and activities that are required for long term project success.
- Lack of important baseline information about endemic trigger species and habitat can be challenging in such short term projects where funding and limited time frames are constraining factors that limits getting such information through studies and assessments to better inform management solutions and programs as an output from the project.
- Follow-up funding to assist with interventions required , especially for riparian and upper watershed forest and key trigger species conservation work in keeping with the watershed management plan

## Additional Funding

*Provide details of any additional funding that supported this project and any funding secured for the project, organization, or the region, as a result of the CEPF investment in this project.*

| Donor | Type of Funding* | Amount | Notes |
|-------|------------------|--------|-------|
| N/A   |                  |        |       |
|       |                  |        |       |
|       |                  |        |       |
|       |                  |        |       |

*\*Additional funding should be reported using the following categories:*

- A Project co-financing (Other donors or your organization contribute to the direct costs of this project)*
- B Grantee and Partner leveraging (Other donors contribute to your organization or a partner organization as a direct result of successes with this CEPF funded project.)*
- C Regional/Portfolio leveraging (Other donors make large investments in a region because of CEPF investment or successes related to this project.)*

## Sustainability/Replicability

*Summarize the success or challenge in achieving planned sustainability or replicability of project components or results.*

*Summarize any unplanned sustainability or replicability achieved.*

## Safeguard Policy Assessment

*Provide a summary of the implementation of any required action toward the environmental and social safeguard policies within the project.*

As part of the Cumberland IWMP, the Watershed consultant proposed the establishment of buffer zones. Buffer Zone- External to the conservations zone where only designated activities can occur based on the land management regime and the outlined functions of the buffer. Buffer zones of 300 m (984.3ft) or alternatively 100 m (328 ft.) are being recommended around the forest reserve.

Some communities are located on river banks. As such the size of the buffer would be restricted. However communities would be sensitized with respect to the level a type of activities that are acceptable and could be allowed in this area.

## **Additional Comments/Recommendations**

- The receipt of further funding supports for specific interventions and conservation work as specified by the watershed management plan can be highly beneficial to enable immediate implementation of several activities.
- It will be desirable to have the watershed management plan adopted by Cabinet.
- The watershed management plan produce for the Cumberland watershed will be used as a model for other watersheds in the country, particular other adjacent watersheds that share the central upper forest mountain corridor that provides a habitat for the trigger species and important rainforest habitats.

## Information Sharing and CEPF Policy

CEPF is committed to transparent operations and to helping civil society groups share experiences, lessons learned, and results. Final project completion reports are made available on our Web site, [www.cepf.net](http://www.cepf.net), and publicized in our newsletter and other communications.

**Please include your full contact details below:**

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**\*\*\*If your grant has an end date other than JUNE 30, please complete the tables on the following pages\*\*\***

**Performance Tracking Report Addendum**

**CEPF Global Targets**

**(Enter Grant Term)**

Provide a numerical amount and brief description of the results achieved by your grant.  
Please respond to only those questions that are relevant to your project.

| <b>Project Results</b>  | <b>Is this question relevant?</b> | <b>If yes, provide your numerical response for results achieved during the annual period.</b> | <b>Provide your numerical response for project from inception of CEPF support to date.</b> | <b>Describe the principal results achieved from July 1, 2007 to June 30, 2008. (Attach annexes if necessary)</b>  |
|---|-----------------------------------|---|--|---|
| 1. Did your project strengthen management of a protected area guided by a sustainable management plan? Please indicate number of hectares improved.   | Yes                               |   |  | A watershed management plan was prepared covering all biophysical areas from ridge to reef with all the principal protected areas agencies consulted and involved.  |
| 2. How many hectares of new and/or expanded protected areas did your project help establish through a legal declaration or community agreement?   | None                              |   |  | In the future it is expected that reforestation will be guided by the watershed management plan including recommendations for forest management interventions   |
| 3. Did your project strengthen biodiversity conservation and/or natural resources management inside a key biodiversity area identified in the CEPF ecosystem profile? If so, please indicate how many hectares. | Yes                               | 1075  |  | The production of zoning plans and clear watershed management recommendations contained in the watershed management plan including for the key trigger species and promotion of interagency collaboration on an ongoing basis will strengthen biodiversity conservation. Also the education and public awareness campaign conducted during the project has heighten awareness of the importance and value of biodiversity assets within the watershed |
| 4. Did your project effectively introduce or strengthen biodiversity conservation in management practices outside protected areas? If so, please indicate how many hectares.                                    | No                                |   |  | Not immediately, but the lessons learned and model watershed framework and plans produce d can be adopted for other watersheds in the future  |
| 5. If your project promotes the sustainable use of natural resources, how many local communities accrued tangible socioeconomic benefits? Please complete Table 1 below.  | No                                |   |  | Benefits will accrue as the watershed management plan is implemented to local communities in such areas as farming and tourism in keeping with the zoning plans.  |

**If you answered yes to question 5, please complete the following table**



