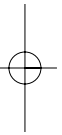
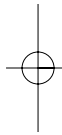




Montserrat Centre Hills Management Plan 2008 - 2010

Enabling the effective conservation and management of natural
resources within Montserrat's Centre Hills



Montserrat Centre Hills

Management Plan: 2008-2010



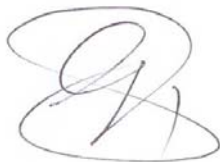
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Foreword

Volcanic eruptions, which started in 1995 and continue to the present, have destroyed almost all the forests of the southern hill ranges. The Centre Hills are therefore the largest intact forest area remaining on Montserrat. They are of global biodiversity importance supporting many endemic and rare species of wildlife such as the critically threatened Montserrat Oriole and Galliwasp, which are found nowhere else on earth. The Centre Hills also provide essential environmental goods and services to the people of Montserrat as they are the main water catchment area on the island, they limit soil erosion, landslides and flooding during severe weather, and protect agriculture, fisheries-based livelihoods and ecotourism.

Recognising their global and national importance, the Department of Environment has collaborated with the Department of Agriculture, Montserrat Tourist Board, Montserrat National Trust, Royal Society for the Protection of Birds, Royal Botanic Gardens Kew and Durrell Wildlife Conservation Trust on a Darwin Initiative funded project to develop a management plan to conserve the Centre Hills. I would like to thank all the people of Montserrat and our international partners for participating in and supporting the process as it has involved extensive biological and socio-economic assessments and outreach. New environmental legislation which will be enacted shortly will provide a more robust framework for the management and sustainable utilization of the Centre Hills and its resources.

However, the preparation of this plan is only the start, and the hard work of implementation has just begun. I look forward to continuous collaboration with partners to take the plan forward so that the benefits of the Centre Hills can be enjoyed for many years to come by all who reside on or who visit the island.



Gerard Gray
Director of Environment
May 2008

Acronyms

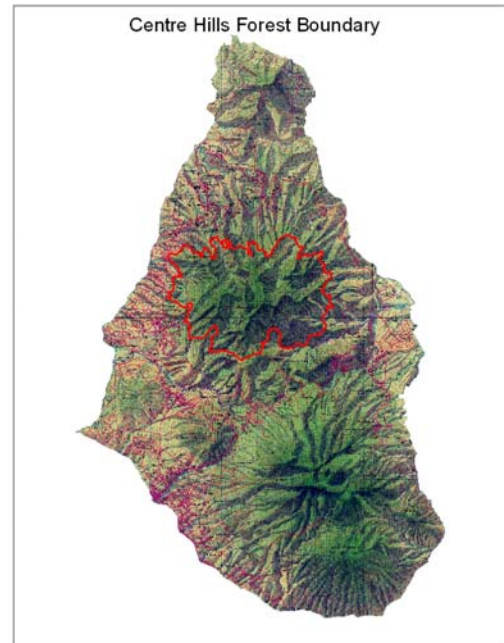
CBO	Community Based Organisation
CEMA	Conservation and Environmental Management Act
CHMC	Centre Hills Management Committee
CHNP	Centre Hills National Park
CHP	Centre Hills Project
DEH	Department of Environmental Health
DFID	Department for International Development (UK Government)
DMCA	Disaster Management Coordinating Authority
DOA	Department of Agriculture
DOE	Department of Environment
GIS	Geographic Information Systems
MALHE	Ministry of Agriculture, Lands, Housing, and Environment
MCC	Montserrat Community College
MDC	Montserrat Development Corporation
MNT	Montserrat National Trust
MTB	Montserrat Tourist Board
MUL	Montserrat Utilities Limited
NDF	National Development Foundation
NEMS	National Environmental Management Strategy
NGO	Non-Governmental Organisation
OTEP	Overseas Territories Environment Programme
PPU	Physical Planning Unit
PSRU	Public Sector Reform Unit
PWD	Public Works Department
SDP	Strategic Development Plan
UWISCS	University of the West Indies School of Continuing Studies

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1 Introduction

Since the volcanic eruptions of 96/97, the Centre Hills are the largest intact forest area remaining on Montserrat. They are of critical ecological concern as they are home to most of Montserrat's endangered wildlife and habitats, including those of global conservation concern such as the critically endangered Montserrat oriole, Montserrat galliwasp, mountain chicken, and two endemic plants. The Centre Hills also provide essential environmental goods and services to the people of Montserrat. Springs found within provide all of Montserrat's water supply, and the hills and forest offer protection from soil erosion, landslides, and flooding during severe weather events. Most of the island's agricultural production takes place in the lower elevations of the Centre Hills. A major part of Montserrat's tourism product lies in the unspoiled natural beauty of the Centre Hills, which are experienced by most visitors to the island.



In 2000, a 2,792-acre section of the Centre Hills forest was given legal protection, approximately two-thirds of which is privately-owned Forest Reserve, and one-third of which is government-owned Protected Forest. With new environmental legislation and a change in the classification system for protected areas in Montserrat pending, it is expected that this area will be redesignated as a National Park with the possibility of having some Strict Nature Reserves (i.e., biodiversity hotspots) designated inside and/or outside of the National Park boundary. The exact title of any redesignated protected area in the Centre Hills has yet to be decided, but for the purposes of this management plan, the area is named Centre Hills National Park (CHNP), recognising that the official name may be different in the future.

Extensive studies have been carried out to identify the main habitat types and assess the abundance and distribution of key species. The wide range of interests and values of Centre Hills stakeholders have been investigated. The findings of these studies are compiled in several reports that have contributed significantly to the development of this plan. Contained in these reports are detailed descriptions of the natural and social resources of and affecting the Centre Hills, including geology, hydrology, soils, climate, ecosystem components and processes, biodiversity and threatened species, politics, infrastructure, legal issues, socioeconomics, and existing/future land use.

In addition to the technical reports and data which fed into the planning process, the development of this plan has been done through extensive consultations with stakeholders via numerous workshops, meetings, and informal discussions. This has included land owners, resource users (e.g., farmers, livestock tenders, scientists, local recreationalists, visitors, and other tourism interests), and resource managers (e.g., technical and managerial staff working with agriculture, environment, water, and disaster management). The objectives and many of the activities for the management plan were conceived through these dialogues between interests in government, civil society, and the private sector.

Sustainable use and management of the Centre Hills aims to consider and integrate the needs and interests of people and wildlife. This management plan spells out the specific use and management activities within the CHNP for a three-year period beginning in January 2008. Some of the activities

in this management plan pertain specifically to the CHNP, and some pertain more broadly to the natural environment in general.

On behalf of the Department of Environment, which has responsibility for the preparation of protected area management plans, this plan was compiled by the Centre Hills Project, a three-year initiative (2005-2008) funded by Darwin aimed at enabling the people of Montserrat to more effectively conserve biodiversity and manage protected areas.

2 Vision

A 20-year vision for the Centre Hills was articulated at a planning workshop in September 2006, and revised through a process of community consultation in subsequent months. The vision is as follows:

“The Centre Hills National Park is the heart of the green island of Montserrat – a biologically rich and diverse forest supporting unique plants and animals – secure for enjoyment, education and study. The government and people of Montserrat share ownership and management of these valuable resources to support sustainable populations of species, environmental services, and local livelihoods for the benefit of present and future generations.”

3 Goal and objectives

The overall goal of the plan is to conserve the ecological integrity and promote the sustainable use of the Centre Hills for the benefit of present and future generations.

The specific objectives are to:

- 1 Promote sustainable livelihoods of resource users in and around the Centre Hills
- 2 Conserve biodiversity, habitats, and ecosystem services of the Centre Hills
- 3 Provide recreational and educational opportunities in the Centre Hills for the people in Montserrat and visitors
- 4 Enable effective legislative, institutional, and fiscal structures to support sustainable management and stewardship of the Centre Hills

4 Legislative and policy rationale

Under the existing Forestry, Wildlife, and Protected Areas Act, Cap 12:03 (enacted 1996), responsibility for protected areas in Montserrat falls under the jurisdiction of the DOE within MALHE. New environmental legislation in the form of the draft Conservation and Environment Management Act (CEMA) is being developed to improve the legal framework for environmental management. The development of this Plan fulfils a legal obligation of the Government of Montserrat since the current and proposed environmental legislation mandate that management plans for protected areas be developed and implemented.

The development of this Plan is also in line with Strategy 2 of the National Environment Management Strategy (NEMS), which relates to the revision and development of a national protected areas system. Implementation of the activities found within this Plan will go a long way towards meeting all of the strategic objectives of the NEMS.

The Plan's development also overlapped with the drafting of the new national Sustainable Development Plan (SDP) for 2008-2010. As a result, there is strong synergy between the objectives and activities. The four objectives of this Plan coincide with the four primary objectives in the new SDP (economic development, environment protection, social development, and good governance).

There are ongoing efforts to ensure activities in the plan have been synchronised with government department business plans.

5 Implementation

Although the proposed CEMA allows for the DOE to designate other bodies to manage particular protected areas, DOE will be the management body responsible for the CHNP during the life of this three-year plan. One of the activities of this plan is to develop regulations to accompany the CEMA which will spell out in greater detail the regulatory and enforcement responsibilities.

Although DOE has a mandate over protected areas, there are numerous other agencies with key responsibilities for implementing the majority of this management plan. These include DOA, MTB, MUL, MNT, DEH, and others. There are even more which have a supporting and participating role to play.

The CHMC is a group of key stakeholders in Montserrat representing government, civil society, and the private sector. Following a planning workshop in September 2006 and related consultations, stakeholders agreed that mechanisms needed to be developed to facilitate stakeholder communication and collaboration for effective coordinated and participatory management of the Centre Hills. The CHMC was thus developed as one mechanism to facilitate this. The first meeting was held in November 2006 and a Terms of Reference for Committee Members was developed to spell out the roles and responsibilities of members. It is anticipated that the CHMC may evolve to become part of the legally constituted Conservation and Environmental Management Board proposed under the CEMA.

The purpose of the CHMC is to facilitate the input of and collaboration among key stakeholders for coordinated participatory planning and management of the Centre Hills. Its main objectives are to advise on policy and management decisions pertaining to the Centre Hills, monitor the implementation of this management plan and make recommendations for adaptive management, and facilitate greater collaboration and public participation in environmental decision-making. The Committee is comprised of 18 members representing stakeholders from government, civil society, and the private sector. By early 2008, the Secretariat function will be carried out by the DOE and the Chair rests with the Permanent Secretary of MALHE.

6 Human capacity

In terms of human resource capacity, Montserrat is challenged, in its small size, with not having enough expertise in many technical areas, and this includes environmental fields. The Government of Montserrat established the DOE in late 2006, and this department, when fully functioning, will play a major role in the implementation of this plan. However, as of August 2007, there are still 5 out of 19 staff positions within the Department which have not been approved as yet. Neither have the Department's offices been opened or fully equipped. The implementation costing analysis for the Plan will help to illustrate where capacity shortfalls exist. A summary of this analysis appears as Appendix 1.

It is therefore desirable that the Government will assert its commitment to effective environmental management by enabling the swift staffing and equipment of the Department through vigorous recruitment and retention efforts.

The Public Sector Reform Unit (PSRU) and Training Department are charged with assessing the training and capacity-building needs of the public sector. However there is already some sense of the needs in the environment sector. During the development of this plan, the following areas were identified as priority training needs to enable the Plan's effective implementation:

- Biodiversity and conservation
- Socioeconomic assessment, including economic valuation
- Sustainable agriculture
- Nature and/or ecotourism
- Tour guiding
- Environmental education
- Marketing
- Project management and development
- Organisational development for CBOs and NGOs

The activities through which training can be achieved include workshops, on-the-job field experience, certificate programmes, and university courses. Potential beneficiary organisations include DOE, DOA, MNT, MTB, MCC, UWISCS, farmers, livestock tenders, tourism interests, land owners, and community groups. To name a few, potential training partners include the Caribbean Natural Resources Institute, University of the West Indies, OECS Environment and Sustainable Development Unit, Joint Nature Conservation Committee, scientific partners (e.g., Royal Society for the Protection of Birds, Royal Botanic Gardens Kew, Durrell Wildlife Conservation Trust, etc.).

This is a priority concern and every effort will need to be made to fill the gaps in human capacity needed to implement this Plan, and for general environmental management in Montserrat.

7 Financing

Currently, there are not enough dedicated funds in Montserrat or coming in from other sources to implement the plan. An analysis of the costs of implementing this plan was carried out in September 2007 and a summary of this exercise appears as Appendix 1. It is hoped that the shortfall illustrated in the analysis may provide rationale for relevant implementing agencies to petition for additional funds and to solicit grants.

The CEMA provides for the creation of an Environment Fund which would finance non-recurring costs of environmental management in Montserrat, including management of the CHNP. At the time of the writing of the Plan, the draft CEMA provides for the following:

- The Fund would be governed by a Board of Trustees, appointed by Governor and comprised of representatives from government, civil society, and the private sector. The Board would meet quarterly.
- The resources of the Fund could potentially include parliament appropriations, taxes, charges, fees (e.g. user fees), donations, grants, and investment earnings.
- The uses of the Fund would include expenses of the Board as well as towards implementing environmental management activities, which would be formally defined in a Schedule to the Act
- The Fund and the Board would be exempt from local taxes, and accounts would be audited annually.
- Annual reports would be laid in Legislative Council.

A fund of this nature would be attractive to international and private donors who often prefer to work outside of the bureaucratic confines of a government treasury.

International assistance will still be sought for certain implementation activities. Some of the activities have already received a pledge of funding for activities in the first year (e.g., Species Action Planning, Environmental Education). Some potential target funders include the Darwin Initiative, DFID, OTEP, US Fish & Wildlife Service, European Union, Royal Society for the Protection of Birds, Durrell Wildlife Conservation Trust, Royal Botanic Gardens Kew, Montana State University, South Dakota State University, Joint Nature Conservation Committee, private foundations, and individuals.

8 Public Participation

Prior to the drafting of this Plan, a detailed stakeholder analysis was completed, which identified the key persons and groups who need to be a part of the process. Efforts were made to contact and engage all key stakeholders, many of whom responded with interest and have participated in the process. Activities to involve the public in the planning process have included formal surveys, informal discussions, focused sectoral meetings, and workshops. There has also been frequent use of the media to apprise persons of the process and to solicit involvement. The extent to which the public and stakeholders have been afforded the opportunity to participate has been formally documented. It is expected that the implementation of this plan will be carried out in a manner conducive to continued involvement of stakeholders and the general public.

This Plan has been developed through a process of public engagement, including input from a diverse group of stakeholders representing government, civil society, and the private sector. It is recognised that this engagement is critical to achieving ownership of the Plan and sustainability in its implementation. To this end, one of the activities of this Plan (Activity 4.5) is to develop a Public Participation Policy that will identify where public engagement should be formally worked into the environmental planning and management process. This would include mention of the legal obligations for fostering public participation in decision-making that are mandated in the CEMA. Stakeholder membership on the Centre Hills Management Committee, as well as the proposed Conservation and Environmental Management Board and Environment Trust Fund Board of Trustees, will ensure that there is representation in decision-making from outside of government.

9 Monitoring

For each activity of the plan, key agencies/organisations for implementation have been agreed and performance indicators and a timeframe have been determined. The CHMC has a primary role in monitoring the implementation of the plan, as is articulated in its Terms of Reference. A progress review will be conducted annually and adaptations, if required, will be incorporated based on recommendations. The management plan should be revised at the end of 3 years.

10 The Plan (1st January 2008 – 31st December 2010)

The activities, outcomes, timing, key implementing organisations, indicators and means of verification for each of the Plan's four objectives are listed in the table below.

<i>Action</i>	<i>Outcomes</i>	<i>Year</i>	<i>Human resources (lead in bold)</i>	<i>Performance indicators</i>	<i>Means of Verification</i>
1. Promote sustainable livelihoods of resource users in and around the Centre Hills					
1.1 Conduct regular assessments on the needs of farmers	Farmers needs are understood and appreciated	1, 2, 3	DOA/Extension, farmers	<ul style="list-style-type: none"> – Assessment report completed annually for crop farmers – Assessment report completed every 2 years for livestock farmers (Y1 and Y3) – Symposium held every 2 years with 30 farmers attending (Y1 and Y3) 	<ul style="list-style-type: none"> – Report – Report – Register of attendance
1.2 Develop and implement annual calendar of agricultural meetings and host meeting	Regular communication with farmers and livestock tenders maintained	1, 2, 3	DOA/Extension, farmers, livestock tenders	<ul style="list-style-type: none"> – 200 calendars disseminated annually by March of each year – 80% of activities in calendar carried out as planned 	<ul style="list-style-type: none"> – Calendar circulation list – Report
1.3 Establish and enforce management agreements for certain types of approved farming within the CHNP	All farming within CHNP is approved and monitored	1, 2, 3	DOE, DOA, farmers, land owners	<ul style="list-style-type: none"> – Agreements established with 80% or more of known farmers – At least 80% compliance with agreements 	<ul style="list-style-type: none"> – Agreement documents – Site visit reports

1.4	Identify and assess land capability for agriculture outside of the CHNP (crops and livestock)	Proposed allocations of land for crops and livestock production are expanded	2 (Dec)	DOA, PPU/GIS, farmers, livestock tenders, land owners	– Assessment report with recommendations given to GOM by end of Y2	– Report
1.5	Conduct training for technicians and farmers on soil and water conservation	Soil and water are better conserved	1, 2	DOA, DOE, farmers, livestock tenders	– Training event held with 25 attendees by end of Y2 – Increase observations of improved conservation techniques by 25%	– Training report – Site visit reports
1.6	Conduct training and demonstration projects for livestock	Fodder quantity and quality improved	1, 2, 3	DOA/Livestock, livestock tenders, nursery	– 2 demonstrations per year for at least 25 livestock tenders	– Training reports
1.7	Conduct training and demonstration projects for crop farmers	Crop production improved	1, 2, 3	DOA/Extension, DOE, farmers, nursery	– 2 demonstrations per year for at least 25 farmers	– Training reports
1.8	Improve and maintain two primary agricultural access roads	Access to farmland improved	1, 2, 3	DOA/Extension, PWD, farmers	– Annual maintenance of 2 main roads (Duck Pond, Dick Hill)	– Department reports
1.9	Develop and implement small grants scheme for environmentally-sensitive businesses	Sustainable livelihoods enhanced	TBD	DOE, DOA, Ministry of Finance, NDF, DFID, funders, MDC	– At least 10 persons receiving funding assistance by end of Y3	– Small grant documents
1.10	Produce Agricultural Development Plan	Sustainable agriculture promoted	2	DOA, farmers, livestock tenders	– Plan completed by end of Y2	– Plan document

2. Conserve biodiversity, habitats, and ecosystem services of the Centre Hills						
2.1	Place a moratorium on hunting listed species until further research can advise regulation	Hunting is ceased until further information is available to guide management	1 (ongoing)	DOE	– No hunting of listed species	– Incident reports – Regulation
2.2	Develop and implement long-term Biodiversity Monitoring Protocol	Status of key biodiversity is known	1, 2, 3	DOE, PPU/GIS, MNT, scientific partners	– Protocol developed by end of Y1 – Data included in State of Environment report annually beginning in Y2	– Protocol document – State of Environment reports
2.3	Develop and implement a protocol for management of invasive species	Threats of invasive species are known and mitigated	2, 3	DOE, DOA, PPU/GIS, DEH, MNT, scientific partners, Customs	– Protocol developed by end of Y2 – 2 management interventions implemented annually from Y3	– Protocol document – Activity reports
2.4	Develop and implement Species Action Plans and Habitat Action Plans	Status of key species and habitats are known and conserved	1, 2, 3	DOE, PPU/GIS, MNT, scientific partners	– 5 plans developed by end of Y2 for the galliwasp, mountain chicken, two endemic plants, and the yellow-shouldered volcano bat – Key habitats to be targeted for Action Planning by end of Y2 – At least 1 conservation intervention per plan implemented by end of Y3	– Species Action Plans – Habitat Action Plans – DOE activity reports

2.5	Update database regularly	Up-to-date data is accessible electronically	1, 2, 3	DOE , PPU/GIS, Statistics Department, MUL, DEH	<ul style="list-style-type: none"> - Data available in database within 1 month of being collected 	<ul style="list-style-type: none"> - Database reports
2.6	Develop and implement protocol to regulate scientific research	Permits issued for all research	1, 2, 3	DOE , scientific partners	<ul style="list-style-type: none"> - All scientific study requests processed by DOE by end of Y1 	<ul style="list-style-type: none"> - Permit documents
2.7	Develop and implement climate change adaptation and mitigation plan	Climate change threats mitigated	1, 2, 3	DOE , DMCA, MUL, DOA, PPU/GIS	<ul style="list-style-type: none"> - Develop plan by end of Y1 - Recommendations integrated into at least 2 workplans and policies by end of Y2 	<ul style="list-style-type: none"> - Plan document - Agriculture, environment, water workplans - Physical Plan
2.8	Develop and implement an extractive use monitoring protocol	Status of extractive uses is known	1, 2, 3	DOE , DOA, PPU/GIS MNT, MTB, DMCA, MUL	<ul style="list-style-type: none"> - Protocol developed by end of Y1 - Annual survey conducted from Y2 	<ul style="list-style-type: none"> - Protocol document - Survey report
2.9	Develop key watershed catchment areas management plans	Water resources are protected	1, 2, 3	DOE , MUL, DOA, PPU/GIS, DMCA, MVO	<ul style="list-style-type: none"> - Plan(s) produced by end of Y2 	<ul style="list-style-type: none"> - Plan documents
2.10	Monitor hydrological conditions within the Centre Hills	Hydrological conditions in the Centre Hills are better understood	1, 2, 3	MUL , DOE , DOA, PPU/GIS, DMCA, MVO	<ul style="list-style-type: none"> - Data collected and reported upon at least monthly for rainfall (8 sites), spring production and water quality (6 sites), and evapotranspiration (2 sites) 	<ul style="list-style-type: none"> - Hydrology reports

2.11	Establish research laboratory	Laboratory and storage facility functioning	3	MALHE, PWD, DEH, MCC (science)	– Functioning lab by end of Y3	– Laboratory is operational
2.12	Create Environmental Library	Central source of environmental information established	3	DOE, PPU/GIS, MNT, DOA, scientific partners, Statistics Department, library	– Functioning library by end of Y3	– Environmental library is operational
2.13	Create an herbarium	Plants of Montserrat are documented	3	DOE, MNT, scientific partners	– Appropriate herbarium storage facility established by end of Y3	– Herbarium operational
3. Provide recreational and educational opportunities in the Centre Hills for the people of Montserrat and visitors						
3.1	Implement trail upgrade and maintenance programme	Nine trails are regularly maintained	1, 2, 3	MTB, DOE, MNT, tour guides	– 9 trails are maintained 4 times per year	– Trails are clear
3.2	Provide training and certification for tour guides	Tour guides are knowledgeable about biodiversity, conservation, and public safety	1, 2, 3	MTB, DOE, MNT, tour guides	– 10 guides certified or recertified per year	– Training report
3.3	Develop and promote marketing materials highlighting Montserrat as nature tourism destination and featuring the CHNP	CHNP is featured in promotional materials about Montserrat	1, 2, 3	MTB, MNT, DOE, PPU/GIS, Hospitality Association, Tours & Taxi Association, tour guides, media outlets, artists	– CHNP featured in at least 50% of marketing materials – 20% increase in visitors who report Centre Hills-related activities as a primary reason for coming	– Leaflets, promotional brochures – Tourism surveys

3.4	Improve amenities in and around the CHNP	Visitor experience is enhanced	1, 2, 3	MTB, DOE, land owners, MNT, DEH, tour guides	<ul style="list-style-type: none"> - 7 trails fully sign-posted by end of Y1 - 2 viewing platforms and 2 picnic areas constructed by end of Y3 	<ul style="list-style-type: none"> - Sign posts - Platforms are operational
3.5	Host forum to discuss relevance and feasibility of nature tourism in Montserrat	Nature tourism is better understood and promoted	2, 3	MTB, DOE, PPU, MNT, Hospitality Association, Tours & Taxi Association, tour guides	<ul style="list-style-type: none"> - Forum attended by 30 people by end of Y2 - Nature tourism strategy produced by end of Y3 	<ul style="list-style-type: none"> - Forum report - Strategy document
3.6	Conduct survey of general public and CHNP visitors to assess knowledge, perceptions, and behaviours	Knowledge, perceptions, and behaviour of general public and tourists are understood and used to advise management	3	MTB, DOE, Statistics Department, Development Unit	<ul style="list-style-type: none"> - 10% of visitors complete survey by end of Y3 - Results reported on by end of Y3 	<ul style="list-style-type: none"> - Survey questionnaires - Survey report
3.7	Design and implement formal environmental education activities	General public is informed and environmentally responsible	1, 2, 3	DOE, Dept. of Education, schools, MNT, tour guides, DEH	<ul style="list-style-type: none"> - 10 field trips p.a. - 10 classroom visits p.a. - 5 teachers trained p.a. - 1 curricular resources p.a. 	<ul style="list-style-type: none"> - Field trip reports - School reports - Training reports - Curriculum materials
3.8	Design and implement non-formal environmental education activities	General public is informed and environmentally responsible	1, 2, 3	DOE, MNT, MTB, media outlets	<ul style="list-style-type: none"> - 10 radio interviews p.a. - 5 PSAs p.a. - 10 newspaper articles p.a. - 4 hikes p.a. - 2 leaflets p.a. 	<ul style="list-style-type: none"> - Radio broadcasts - PSA broadcasts - Newspaper articles - DOE activity reports - Leaflets

3.9	Create Education Centre(s)	Central point of information is established, visitor experience is enhanced	3	MTB, MNT, DOE, Hospitality Association, Tours & Taxi Association, tour guides	– 1 functioning centre by end of Y3	– Educational Centre is operational
4. Enable effective legislative, institutional, and fiscal structures and systems to support sustainable management and stewardship of the Centre Hills						
4.1	Equip and staff DOE	DOE is functioning effectively	1	DOE, MALHE	– 7 staff in place by end of Y1 – Offices fully functioning and equipped by end of Y1	– Office is operational
4.2	Finalise Conservation and Environmental Management Act	Legislation is enacted and enforced	1	MALHE, DOE, MNT, AG's Chambers	– Bill sent to ExCo by start of Y1	– EXCO minutes
4.3	Complete regulations to accompany Conservation and Environmental Management Act	Regulations enacted and enforced	1	MALHE, DOE, MNT, AG's Chambers	– Regulations created by end of Y1	– Regulation documents
4.4	Redesignate and demarcate existing protected areas under new legislation	Boundaries marked on the ground, legal designations updated	2	DOE, PPU/GIS	– Existing protected areas redesignated and demarcated by end of Y2	– Government gazette – Physical boundary
4.5	Develop and implement public participation policy	Stakeholders have a voice in management of the Centre Hills	1	DOE, CHMC	– Policy produced by end of Y1	– Policy report

4.6	DOE assumes responsibility for CHMC Secretariat	Centre Hills management activities are advised by a wide range of stakeholders	1	DOE, CHMC	– New Secretariat in place by March of Y1	– Minutes of meetings
4.7	Implement sensitivity and customer-care activities at MALHE	Public/stakeholder inquiries handled in a timely and professional manner	2	Minister, PS, DOE, DOA	– 80% of MALHE staff participate in training by end of Y2 – Customer information brochure produced by end of Y2	– Training report – Brochure
4.8	Provide written communications to land owners within the CHNP annually	Land owners informed on a regular basis about all government-sanctioned activity on their lands	1, 2, 3	DOE/PS	– Annual letter to land owners within CHNP sent by March of each year	– Letter
4.9	Offer student internships and participate at “career days”	Environmental careers promoted to fill labour needs locally	1 year	DOE, MNT, DOA, Dept. of Education, MCC, UWISCS	– Participation at 1 career day per year – 3 student interns in environmentally-related positions per year	– DOE activity report – Student reports
4.10	Training workshop on organisational development and other topics for CBOs/NGOs	Civil society involvement in decision-making strengthened	2	MALHE, MNT, CHMC	– 20 participants in a workshop by the end of Y2	– Workshop report
4.11	Develop a sustainable financial management strategy for CHNP	CHNP has funds to operate	2	DOE, CHMC	– Strategy developed by end of Y2	– Strategy documents

4.12	Create Environment Fund	Environmental funding separate from GOM fund exists	2, 3	DOE, Legal Department, Ministry of Finance, MNT, MTB, DFID, potential funders	<ul style="list-style-type: none"> - Fund up and running by end of Y3 	<ul style="list-style-type: none"> - Fund applications
4.13	Monitor implementation of CHMP	Status of implementation of the Plan will be known and used to advise adaptive management	1, 2, 3	DOE, DOA, MTB, MUL, MNT, Department of Education	<ul style="list-style-type: none"> - CHMP synchronised with Department business plans in January of each year - Annual implementation report presented to CHMC by March of each year 	<ul style="list-style-type: none"> - Protocol document - Department plans - Report
4.14	Revise and update CHMP	A revised plan to guide management from 2011 - 14	3		<ul style="list-style-type: none"> - CHMP for 2011-14 developed by end of Y3 	<ul style="list-style-type: none"> - CHMP document

11 About the Centre Hills Project

Local and overseas partners joined together in 2005 to launch the three-year Centre Hills Project (CHP). The primary goal of the CHP is to enable the people of Montserrat to effectively manage the Centre Hills and associated resources.

A number of outputs were produced by the Project, including a biodiversity assessment report, socioeconomic assessment report, draft environmental legislation, numerous maps, educational materials, and documentation pertaining to stakeholder analysis and the participatory approach utilised throughout. Dozens of persons in Montserrat have benefited from training and other capacity-building opportunities through the project as well. The culminating output of the CHP is this Plan.

Project partners include the Ministry of Agriculture, Lands, Housing, and Environment; Montserrat National Trust; Montserrat Tourist Board; Royal Society for the Protection of Birds; Royal Botanic Gardens Kew; and the Durrell Wildlife Conservation Trust. Significant support has also been provided by the government's GIS Centre, Legal Department, Governor's Office, Caribbean Natural Resources Institute, and numerous stakeholders in Montserrat.

Major funding for the project is provided by the UK government via the Darwin Initiative and the Overseas Territories Environment Programme. Additional funding and in-kind support is provided by local and international project partners

12 References

The following are technical and policy documents which provide substantive background to the Centre Hills and environmental management in Montserrat. All are available through the DOE.

- Conservation and Environmental Management Act (draft in 2008)
- National Environmental Management Strategy (2006)
- Montserrat Environment Charter (signed 2001)
- Montserrat Sustainable Development Plan for 2008-2010
- Centre Hills Biodiversity Assessment Report (June 2008)
- Centre Hills Socioeconomic Assessment Report (November 2006)
- Centre Hills Economic Valuation Study Report (June 2008)
- Centre Hills Economic Valuation Policy Communications Strategy (June 2008)
- Centre Hills Project Participation Strategy (October 2006)
- Report from Centre Hills Project September Planning Workshop (September 2006)
- Montserrat Oriole Species Action Plan (2005)
- Maps of the Centre Hills (trails, land ownership, biodiversity hotspots, vegetation communities, etc.)

Appendix 1: Centre Hills Management Plan Costing Analysis

Total cost of implementing the CHMP for 2008 (Year 1)

	EC \$	£ Sterling
Staff costs	\$1,017,181	£203,436
Non-staff costs	\$ 816,650	£163,330
Non-essential costs*	\$2,312,800	£462,560
TOTAL Year 1	\$4,146,631	£829,326
TOTAL Year 1 (minus non-essential costs)	\$1,833,831	£366,766

* Non-essential costs include external contracts, 'wish list' items and the improvement of infrastructure for farmers

Non-staff costs

- All costs in EC\$
- Includes contractor/consultant costs, but not department staff costs
- Does not include departmental recurring costs

By agency for 2008 – 2010

Agency	2008	2009	2010	TOTAL
DOE	1,087,950	1,793,150	642,900	3,524,000
DOA	49,600	131,300	49,600	230,500
MTB	881,500	901,500	884,000	2,667,000
PWD	600,000	10,000	10,000	620,000
MWA	10,400	10,400	10,400	31,200
Unknown*	500,000	500,000	2,500,000	3,500,000
TOTAL	3,129,450	3,346,350	4,096,900	10,572,700

*Includes the creation of a small grants scheme for environmentally-friendly businesses and costly "wish list" items (environmental library, interpretation centre, herbarium, and research laboratory)

By category for 2008 – 2010

Category	2008	2009	2010	TOTAL
Travel and subsistence	145,600	162,800	88,100	396,500
Printing	411,100	428,350	411,600	1,251,050
Workshops and training	156,700	176,200	152,200	485,100
Capital/equipment	941,750	538,000	116,000	1,386,250
Contracts	962,800	1,529,500	819,500	3,311,800
Other*	511,500	511,500	2,509,500	3,532,500
TOTAL	3,129,450	3,346,350	4,096,900	10,572,700

*Includes the creation of a small grants scheme for environmentally-friendly businesses, web maintenance and advertising, and costly "wish list" items (environmental library, interpretation centre, and research laboratory)

Staff costs for 2008 (Year 1 only)

- Only factors in time of key implementing agencies
- All costs in EC \$
- Does not include Ministerial and PS time
- Does not include clerical/administrative staff
- Does not include PWD staff time (road works)

Position	Department	Salary scale	Weeks p.a.	Salary cost
Director	Environment	75,000	36.0	51,923
Senior Environment Officer*	Environment	65,000	25.5	31,875
Chief Forestry Officer	Environment	65,000	40.0	50,000
Statistician*	Environment	65,000	52.0	65,000
Environment Officer	Environment	60,000	16.5	19,038
Climate Change/Energy Officer*	Environment	60,000	34.0	39,231
Data Manager*	Environment	50,000	52.0	50,000
Environment Technician	Environment	50,000	52.0	50,000
Forest Technician	Environment	50,000	28.0	26,923
Forest Ranger (1)	Environment	40,000	63.0	48,462
Forest Ranger (2)	Environment	40,000	63.0	48,462
Forest Ranger (3)	Environment	40,000	63.0	48,462
Forest Worker	Environment	35,000	7.0	4,712
GIS Manager	Physical Planning	60,000	25.0	28,846
Director	Agriculture	75,000	17.5	25,240
Veterinarian	Agriculture	70,000	27.0	36,346
Agriculture Development Officer	Agriculture	60,000	39.5	45,577
Senior Veterinary Assistant	Agriculture	60,000	37.0	42,692
Extension Officer (1)	Agriculture	60,000	67.0	77,308
Extension Officer (2)	Agriculture	50,000	43.0	41,346
Veterinary/Livestock Technician	Agriculture	50,000	37.0	35,577
Director	Tourist Board	80,000	20.5	31,538
Marketing Manager	Tourist Board	70,000	52.0	70,000
Project Officer	Tourist Board	65,000	33.5	41,875
Water Technician	Water Authority	35,000	5.5	4,784
Pump Operator	Water Authority	45,000	3.0	1,964
TOTAL			956.5	1,017,181

* position does not exist yet



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- GIS Centre, Physical Planning Unit, Montserrat
- Statistics Unit, Montserrat
- Governor's Office, Montserrat
- Montana State University
- South Dakota State University

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Front cover: Pelican Ghaut, Centre Hills (Carrie Hume, RSPB)

Back cover: Management Plan Workshop Participants (Martin Hamilton, RBG Kew)

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