

BLUE LAGOON HERITAGE CONCEPT PLAN

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Abstract: This paper, documenting current issues facing Blue Lagoon - environmentally, economically and socially, was a collaborative effort spurred by a vision from Ms. Adrienne Joan Duperly. The Concept Plan outlines potential initiatives which could be undertaken to rejuvenate Heritage and maintain the environmental integrity of the Blue Lagoon itself, as well as provide sustainable economic initiatives for the residential population.

Ms. Duperly had a vision to construct a document to generate discussion at Blue Lagoon Summit 2010 encompassing Blue Lagoon area and adjacent communities in Portland.

The Summit themes of Land, Wood, and Water are the focal point for all potential initiatives and addressing them should centre on the preservation of these aspects. All stakeholders will be encouraged to participate in developing a plan to add value to the environment and local community.

An initiative which would see people maximizing earnings but further harming the land, wood, and water surrounding the Blue Lagoon may seem favourable; however other factors must be considered. If an initiative offers a significant financial return, but only offers short term gains before the natural surroundings decline to a level where people stop coming, it cannot be considered sustainable. There must be a mix between enhancing the environmental integrity of the area and the creation of local employment opportunities.

Preserving the Blue Lagoon can be the catalyst for sustainably developing the community as a whole, and that is the goal of the Blue Lagoon Heritage Concept Plan.

An array of research undertakings from personal interviews, online resources, journal articles, and text books were used to develop this paper. A major resource was a San San and adjacent communities report done by Fredrick Zenny.

On July 28, 2010 the Executive Director of Jamaica National Heritage Trust endorsed the Blue Lagoon concept as presented.

Keywords: Blue Lagoon; Jamaica; Preservation of Heritage Sites; Sustainable; Development.

I. INTRODUCTION

THIS paper collaborated the efforts of three Saint Mary's graduate school students; Andrew Blanchard, Andrew Kiley, and Meghna Kararia; along with project initiator Adrienne Joan Duperly, and Dr. Warren Flint. Ms. Duperly had a vision to construct a document that would help generate discussion at the Blue Lagoon Summit of 2010. Through combining skills and competencies, this group is confident that this document will serve a vital purpose during the Summit.

This paper offers the reader an overview of the challenges facing the Blue Lagoon area, and outlines the role sustainable community development (SCD) can have in providing solutions essential to developing appropriate initiatives to increase the quality of life for local inhabitants, and the maintenance of the Blue Lagoon's environmental integrity. Government involvement/support will be critical to the future development of the area, and an outline of the Jamaican Government's influence on SCD is provided within the text. A plan for outlining the immediate and future actions necessary for successful implementation of sustainable community development initiatives is proposed and supported with working documents. Challenges in the development and implementation of sustainable community development initiatives are also identified.

A potential action planning timeline is also presented. This timeline outlines potential initiatives which could be undertaken along with a preliminary assessment of the associated potential revenue streams. One of the major initiatives described is the application process for UNESCO World Heritage Site Designation and the potential benefits it can bring to a community such as the Blue Lagoon area. This designation stresses the preservation of the environmental aspects of the area. UNESCO status can act as a catalyst for sustainable community development initiatives due to the increased exposure the designation provides for the area. The necessary

procedures involved in obtaining World Heritage Site designation are outlined in the paper and the supporting documents provided as appendices. Other potential initiatives include; Blue Lagoon day passes, a modern day spa, a heritage creative center, dock, jetty, and a water sports facility. These initiatives will be described in more detail later in the document.

II. METHODOLOGY

An array of research undertakings, ranging from personal interviews, online resources, journal articles, on site interviews and text books were used to develop this paper. A major resource for the compilation of this document was information provided by Fredrick Zenny who researched the San San area of Portland and the adjacent communities whose expertise and knowledge of the area could prove to be an invaluable resource moving forward. An overview of Fredrick Zenny's report and a copy of his study are provided in Appendices A and B.

Where informed assumptions have been made within the paper they are clearly stated as such. The compilation of relevant information has aided in the creation of this document which will be used to generate discussion for the attendees of the *Blue Lagoon Summit 2010*.

III. PROJECT BACKGROUND

The Blue Lagoon, located in close proximity to Port Antonio is truly one of Jamaica's natural treasures. As the sun shines down, the waters in this tropical paradise change colour with hues of green and blue. The surroundings mirror that of yesteryear, with colourful indigenous animal species and plant life coupling with vibrant locals, offering an experience that can simply be described as authentic. This is a location which warms the hearts of local inhabitants as well as intrigues those who visit. It has the potential to become one of Jamaica's premier eco-tourism destinations [1].

Although the landscape and natural beauty of the area are unparalleled, the continuous degradation of the area is beginning to show adverse effects. Increasing pollution levels and a stagnant local economy are starting to threaten the environmental integrity of what was once a pristine hideaway for some of the world's greatest Hollywood stars [2]. It is not only the Blue Lagoon and surrounding area which has seen consistent decline; Jamaica as a whole has fallen victim to environmental decline through population growth, agricultural expansion, shifting land cultivation and mining, land clearing for housing and the consumption of wood for energy [3].

Recent support from Jamaican Prime Minister, Bruce Golding, for environmental and economic initiatives and his acceptance of the lead role of the country's environmental portfolio shows that now

may be the opportune time for the Blue Lagoon to receive the much needed restoration it deserves.

The stakeholders attending the Blue Lagoon Summit of 2010 are presented with the opportunity to influence the future by becoming part of a revitalization process which can have a sustainable environmental and positive economic impact on an area which deserves to be preserved.

IV. STAKEHOLDER INTRODUCTION

There are five key stakeholders groups affected by the Blue Lagoon. They are as follows:

- Hon. Michael Lee-Chin – Executive Chairman of AIC and a major land owner in the Blue Lagoon area.
- Local Population - The Blue Lagoon and surrounding area's local inhabitants.
- Jamaican Government
- Seasonal Residents/Villa Owners
- Third Party Activists – This group includes concerned citizens from abroad who are offering their support to the Blue Lagoon and surrounding areas. Third party activists include: Adrienne Joan Duperly, Dr. Warren Flint, San San Committee, JET Committee, etc.

The purpose of the Blue Lagoon Summit of 2010 is to bring these stakeholders together and provide a platform for them to share their visions. Having all stakeholders involved in the summit is essential for its success.

V. BLUE LAGOON AND SURROUNDING AREA

A. Port Antonio

Located between the beautiful Blue Mountains and the open sea is the island parish of Portland. Port Antonio is arguably one of the most beautiful towns in the Portland parish and is today's playground for mature free spirits. The old seaside town has long been a favourite resort for the rich and famous who are attracted to the seclusion, sophistication and serenity of the area. As a result, many elegant villas have been built in the surrounding areas. From end-to-end, graceful old buildings with Jamaican gingerbread verandas and elaborate fretwork transoms evoke illusions of grandeur from a time when the banana trade was at its peak, and movie stars mingled effortlessly with the local elite. A map of Jamaica and the Port Antonio Region can be found in Appendix C.

Port Antonio is one of the most accessible towns in Jamaica with few places in the town falling outside of walking or bicycling distance. The main attractions are the Rio Grande Valley, Monkey Valley, Reach Falls, San San Beach and the Blue Lagoon. Despite this accessibility tourist traffic has declined. Cruise line authorities have received negative feedback from

passengers reporting the lack of available activities and an apparent decline of the Port Antonio community and economy [4]. Jamaica's economy depends largely on tourism and for this reason, it is important that initiatives are undertaken to strengthen this sector, especially in the wake of the global financial crisis. Although limited, Port Antonio does generate a revenue stream from accommodations for tourists. Please see Appendix D for an overview of accommodations located in the Port Antonio area.

Jamaica and its neighbouring Caribbean nations are dependent on the tourism industry, which accounts for roughly 45% of its total revenue. With a population of about 15,000, Port Antonio is also largely dependent on tourism as well as agriculture. It is important to note that approximately 16% of the workforce is officially unemployed, while another one-third freelance in what is called the 'informal sector'. Combining actual unemployment with those engaged in questionable activities it can be assumed that Jamaica's actual unemployment rate is much higher [3].

Infrastructure and cultural heritage are present in the area. The Port Antonio region offers some of Jamaica's most intriguing historic sites. Although many visitors to Jamaica frequent Kingston for business reasons, the Port Antonio region relies mainly on tourism to attract visitors. Currently, Port Antonio draws elite travellers who wish to escape the mass package tours, opting for a calm retreat on pristine beaches [3].

B. Blue Lagoon

Seven miles from the main city of Port Antonio is the famous Blue Hole or Blue Lagoon. The Blue Lagoon region is home to an indigenous population of approximately 1,200. The employment rate in the Blue Lagoon area is substantially higher than the national average. Those that are employed work in the nearby villas, restaurant and hotels. In order to provide for the local population more jobs need to be created. However in doing so, a balance should be maintained between overall development and sustainability: of resources, of culture and the environment. As investments in infrastructure increase, developers must be aware of the natural habitat and the importance of maintaining its integrity.

Talking specifically of sustainability in this geographical area; the most prominent organization is The Portland Ecotourism Art Community Endeavour (PEACE), whose mission has been to foster and promote sustainable development of eco-cultural tourism in the Portland area. This organization works with government and environmental organizations to promote local artisan works and natural excursions like boating and bird watching [5]. Ecotourism is

becoming a more and more popular alternative to the tradition "all-inclusive resort" due to the awareness generated around the need for sustainability. There have been local initiatives by key people, such as Reverend Miller, to educate the community about the environment and how they are responsible for it. To help form a basis for acceptable initiatives, programs such as the National Transformation Program [6], which aims to achieve community development through establishing a set of individual core values (virtues like love, trust, unity), have been developed. The Blue Lagoon has the natural beauty and established recognition throughout the world to enhance the amount of sustainable infrastructure and employment opportunities for locals, while maintaining the environmental integrity of the area.

VI. SUSTAINABLE COMMUNITY DEVELOPMENT

A. Sustainable Community Development (SCD) Defined

In its simplest form, sustainability can be described as replacing resources consumed (such as water, oil, species, ecosystem, etc) with additional amounts of the same resource. Development, in the context of sustainable development, is simply the process which populations engage in to enhance the quality of life in certain under developed or misused areas [7]. It can be also summarized as one in which underdeveloped economies, such as Jamaica, are provided assistance to create an acceptable level of living and in turn use the wealth of the nation to elevate the standard of living and well-being of all the people in society. In essence, "Sustainability means working to improve human's quality of life without damaging or undermining society or the environment, now or in the future" [8]. Please see Appendix E for origin and background of SCD.

B. Jamaican Government and Sustainable Community Development

Despite being one of the more developed economies in the Caribbean, Jamaica still suffers from chronic underemployment. In the wake of the current global financial crisis, the Jamaican government has limited capacity to mobilize significant financial resources to confront the crisis of the low per capita GDP. It is burdened by large persistent fiscal deficits (now 5.3 % of GDP) and, as a consequence, has one of the highest levels of debt in the world (approx.140% of GDP). As dire as the current state presents itself, things are looking more promising after Prime Minister Bruce Golding took over the environment portfolio. Many new development programs around the region have begun to take shape because of this newly developed focus

[9]. Although tourism figures plummeted during the last two years, there was an increase in tourism during the last quarter of 2009 which bodes well for an economy which relies heavily upon visitors to spur local employment [3].

C. Why Sustainable Community Development for Blue Lagoon

According to the information provided by one of the stakeholders, the quality of life for local inhabitants and the natural environment in the Blue Lagoon area has been steadily declining as years pass. In the wake of the global economic crisis, the Jamaican government has not made funding community economic development initiatives a priority, instead efforts and funding have been directed toward rectifying the current economic state of the country as a whole. The purpose of the Blue Lagoon Heritage Concept document is to identify viable initiatives that will not only have an immediate positive impact on the lives of the local community and environmental surroundings, but also be a sustainable form of development.

D. Successful Sustainable Community Development Initiatives – Dauphin Island Project

The Dauphin Island Project which was undertaken in Alabama, USA dealt with the rejuvenation of a coastal island which was devastated by hurricanes. Lead by Dr. Warren Flint, an expert in the field of sustainable community development, this project can be used as a benchmark for evaluating potential initiatives in the Blue Lagoon area. The processes undertaken by stakeholders and the government, coupled with the help of Flint's organization "Five E's", paved a pathway for the success of the sustainable community development process. The Dauphin Island Project's outcome is similar to that envisioned for the Blue Lagoon Heritage Concept. Appendix F and G offer an overview of Flint's Five E's group, and a more in depth insight on the Dauphin Project.

E. Social Community Development Business Plan

a) Immediate Actions

A widely used methodology, VMOSA (vision, mission, objectives, strategies and actions), can aid in guiding a community group to develop a blueprint to move from dreams to reality. While communities may have many obstacles which stand in their way of a sustainable vision, they all follow similar analysis techniques to address challenges. SCD in the Blue Lagoon region would need to be a comprehensive approach towards achieving an enhanced quality of life, wherein, the environment, resources and community development go hand-in hand. Quality of life in this respect means human life and the environment being treated as a single system [10].

b) Future Actions

The Blue Lagoon Summit 2010 will serve as a starting point and platform for disseminating and sharing available information and to create a vision for developing and implementing such a strategy and a plan of action. Discussion topics could include:

- Development of community awareness projects to create linkages between social, cultural and environmental concerns
- Training programs to encourage community partners to explore the most effective means of achieving SCD
- Working with governments, private sector and other community groups in seeking common grounds and resolving outstanding issues to foster SCD
- Identification of benchmark programs in SCD and testing ecologically sustainable methods, such as prohibiting the use of motorized water crafts in the Blue Lagoon region.
- Another alternative is the Blue Lagoon site making use of volunteer programs. That is, engage local people who have great knowledge of the region and have them to act as ambassadors and tour guides in monitoring and assisting visitors. The benefits of such a program could be the individual satisfaction of working toward a worthwhile project and that of increased involvement with the community throughout the training and continuous education initiative [11]. While only needing a basic educational background and not a specific set of skills, volunteerism can add much value to a community such as the Blue Lagoon.

F. Challenges to Sustainable Community Development Initiatives

Challenges which may present themselves while attempting to spur SCD initiatives in the Blue Lagoon area may result from the political and social conditions prevalent in the region.

The term SCD has different meaning for many economies around the world [12]. As larger and more developed countries have exploited natural resources in the past to gain economic and social prosperity, many members of smaller developing nations feel as though it is their turn to exploit the land for personal gain. However, the underlying idea of sustainable development stresses the importance of education and shifting away from this traditional mindset for the achievement of sustainability.

There is a necessity to provide a sound educational base on the subject for all individuals concerned to construct any form of SCD initiative in the region [13]. The stakeholders in the neighbouring areas of

Portland/Port Antonio have an opportunity to leverage their natural surroundings to improve their quality of life in all aspects through sustainable community developments; and coexisting and working together to learn is the only way for that to transpire.

VII. POTENTIAL ACTION PLAN “LAND OF WOOD AND WATER”

The driving forces behind the summit are the three themes of Land, Wood, and Water. They provide the framework that outlines potential initiatives that could add sustainable value to the Blue Lagoon and its local inhabitants. This list is simply a compilation of potential initiatives which could be put into action and are offered for consideration. The purpose of identifying potential initiatives is to facilitate discussion and spark interest among those present at the Blue Lagoon Summit 2010 in developing a vision for the area.

A. UNESCO World Heritage Site Designation

The first initiative presented is the possibility of obtaining UNESCO Designation for the Blue Lagoon area.

a) UNESCO World Heritage Site Background

The United Nations Educational, Scientific and Cultural Organization was founded in 1946 to help aid peace by promoting international cooperation in education, science and culture. In 1972 UNESCO sponsored an international agreement to establish a World Heritage List of sites which have either cultural or natural significance that would receive government protection [14]. “UNESCO seeks to encourage the identification, protection and preservation of cultural and natural heritage around the world considered to be of outstanding value to humanity” [14]. “What makes the concept of World Heritage exceptional is its universal application. World Heritage sites belong to all the peoples of the world, irrespective of the territory on which they are located” [14]. There are currently 890 World Heritage Sites located in 148 Countries [15]. “To be included on the World Heritage List, sites must be of outstanding universal value and meet at least one out of ten selection criteria” [16]. As outlined in Appendix H. Each country is responsible for making a list of its significant properties it wishes to be placed on the “Tentative List”. Once placed on the Tentative List properties can then be nominated for UNESCO designation. The Tentative List nomination form is provided in Appendix I.

b) How Can Blue Lagoon Benefit from UNESCO Designation

If the Blue Lagoon is selected as a World Heritage Site, the local area will gain world wide exposure and attention. This will benefit the Portland area tremendously due to associated increase in tourism. This increase in tourism will create jobs in the community and may also result in increased government funding for the local area. This direct link between the UNESCO World Heritage designation and job creation is very important. The process itself of applying for World Heritage Site designation will bring exposure to the Blue Lagoon and the surrounding areas, encouraging the government to become more involved with the community. Not only will the government have motivation to help the community but the community itself will gain a sense of pride. Although this may be a hard benefit to quantify it is one key to saving the Blue Lagoon. Members of the community will be inclined to protect the Blue Lagoon because of this linkage. Therefore, the financial and environmental benefits created by receiving UNESCO World Heritage designation will support each other in moving forward.

c) Jamaica’s Current Tentative List

Jamaica signed the World Heritage Convention on June 14th, 1983. It does not currently have any properties on the World Heritage List, but there are currently 3 properties on the tentative list. These include; Blue and John Crow Mountains National Park, Seville Heritage Park and The Underwater City of Port Royal. These properties were placed on the tentative list on the 28th of August 2006, 2nd of March 2009, and the 3rd of February 2009 respectively [15].

d) World Heritage Site Designation Process

The first and most crucial step is to receive Government and Non-Government support throughout this process. Without having agencies such as; The National Environmental Planning Agency, Jamaican National Heritage Trust and The Ministry of Tourism involved it will be impossible to receive a UNESCO World Heritage Designation. Community involvement and support is as equally crucial for the Blue Lagoon to become a World Heritage Site. UNESCO will want to meet with people from the community itself to see if The Blue Lagoon as a World Heritage Site is supported locally. Refer to Appendix J for a list of relevant Government and Non Government Organizations [17].

The next step in this process is having the Blue Lagoon placed on the Tentative List [15].

Once placed on the Tentative List the Blue Lagoon will become eligible for nomination. This process is

very lengthy and requires a great deal of input from all parties involved. Information UNESCO will require include:

- hat is the uniqueness of the Blue Lagoon - What makes the Blue Lagoon different from other lagoons in the world?
- roof of protection – The government must have legislative and regulatory measures in place to protect the property. Community stewardship is also an important aspect of protecting the property.
- uffer Zone – An adequate buffer zone must be present to protect the property.
- ntegrity of Property – Proof of the integrity of the property must be shown. i.e. pollution has not caused irreversible damage.
- ffects of Climate Change – In the case of the Blue Lagoon a rise in sea levels may become an issue in the future and the nomination file must show that these effects will not affect the universal value of the property.
- cientific Significance – Scientific studies will be required to show the natural significance of the property. Comparative studies will also be required to verify the findings.

In the nomination file there must be a statement of the outstanding universal value that the Blue Lagoon offers. For reference, the statement of universal value for The Joggins Fossil Cliffs, a recent addition to the UNESCO World Heritage Site List, is provided in Appendix K. This statement is the most important aspect of the nomination file. Without proving what outstanding universal value the Blue Lagoon offers humanity, inscription on to the World Heritage List is unlikely.

Once the nomination file is completed it is then submitted to the World Heritage Centre for review and to check its completion. A copy of the nomination form is provided in Appendix L. When the nomination file is complete the World Heritage Centre sends it to the appropriate Advisory Bodies for evaluation. An overview of the advisory bodies can be found in Appendix M.

e) *World Heritage Sites and SCD*

It is important to understand UNESCO's stance on Sustainable Community Development and the impact a UNESCO World Heritage designation will have on a local community. UNESCO's stance on SCD could possibly affect the initiatives that could be

undertaken for the Blue Lagoon. It is also important to understand how other potential initiatives could affect the World Heritage Nomination process. The following statement summarizes UNESCO's view on sustainability. "World Heritage properties may support a variety of ongoing and proposed uses that are ecologically and culturally sustainable. The State Party and partners must ensure that such sustainable use does not adversely impact the outstanding universal value, integrity and/or authenticity of the property. Furthermore, any uses should be ecologically and culturally sustainable. For some properties, human use would not be appropriate" [17].

B

B. *Conceptual Blue Lagoon Heritage Site Facilities*

I

The following outlines potential initiatives which could be engaged to develop the Blue Lagoon as a Heritage Site Facility.

E

a) *Land*

(i) *Day Passes*

Blue Lagoon Heritage Site would balance recreation with the protection of the natural and cultural features that attract people. With this in mind, the number of visitors entering Blue Lagoon Heritage Site each day is limited. Available space would be distributed between guided and independent travellers.

Entry and services fees would be charged at the Blue Lagoon Heritage Site and Marine Gardens to support the visitor services and the upkeep of facilities. This means that every time you visit the site, an investment would be made in its future – and in a legacy for future generations. Water Sports, Marine and Spa activities could all support a Blue Lagoon Ambassador program, public safety, visitor orientation, interpretation, monitoring of teaching programs, fresh drinking water, jetty, and a dock.

(ii) *Modern Day Spa Facility*

This initiative would leverage the natural beauty of the area to draw visitors/clients to a spa facility which will be solely run by the local community. In the initial stages of this initiative it would be imperative to have an accredited professional, as a resource available on location, to train local inhabitants in the various operational aspects of spa treatment to ensure that clients are serviced at a very high level. A spa facility, built from items found in the local environment could be constructed and equipped with necessary supplies and furnishings close to the water. Extensive marketing would be needed and support would be required from the tourism department nationally and in the Port Antonio area to spur day trips by tourists to the Blue Lagoon area. The vision

for this facility is that it would be open ten months of the year to service guests, and the other two months devoted to upgrading the training and skills of the staff along with upkeep and maintenance of the facility.

b) Wood

(i) Heritage Creative Centre & Health Bar

This initiative would encompass all of the natural beauty of the area and be integrated with the distinctive competencies of the local inhabitants. A building would be constructed to house a Heritage Creative Centre. This Centre would provide the locals with the opportunity to create authentic crafts, food, drinks, and clothing to be sold in a retail/market format.

The building and all items sold will be generated from indigenous materials gathered from the community and everything would showcase the skills of the local inhabitants. Extensive marketing will be needed in the Port Antonio area to spur trips by tourists to the Blue Lagoon area to support such an initiative. Again, the vision for this facility is to be open for ten months of the year and closed for two during the tourism off season to complete upgrades to the facility, and to train and develop staff.

c) Water

(i) Dock

Building a dock on the shoreline of the Blue Lagoon would employ three to four members of the local population while generating a revenue stream via self propelled watercraft rentals and charging docking fees for visiting boaters. The training required for this initiative would be minimal and the construction of the wharf would require a relatively small amount of capital and time to complete. Again, the vision for this facility is that it would be open for ten months of the year and closed for two during the tourism off season, for wharf maintenance and to train and develop staff. Environmental assessments may be required to proceed with this initiative.

(ii) Jetty

This initiative would be done in conjunction with the dock and would be created to stop all motorized watercrafts from entering the Blue Lagoon. This would serve as an ocean side dock for those travelling in motorized watercrafts and allow them the chance to rent more traditional means of transportation while visiting the Blue Lagoon. Much

like the aforementioned initiatives, capital required for the construction of the jetty would be minimal and it will be open for ten months of the year with the other two being used for maintenance. All people using the dock, jetty, or spa facilities will be given one free day pass. Like the dock, environmental assessments may be required to proceed.

(iii) Heritage Water Sport Facility

Again, this facility would be constructed from materials in the local area. A building would house watercrafts which would be available for rent on the dock. In addition to marine sports, a station where handcrafted canoes and rafts are made would round out the facility usage. This initiative would leverage the distinctive skills of the local community while also showing visiting tourists the craftsmanship which accompanies producing such boats. There is potential with this initiative to partner with various organizations promoting eco-tourism such as Portland Ecotourism Art Community Endeavour (PEACE), and have the Blue Lagoon be a featured attraction for some of their tours. There is also the opportunity to build upon the established Blue Lagoon brand, and sell some of these handcrafted boats as skills become more and more polished. Again, the vision for this facility is to be open for ten months of the year and closed for two during off season for tourism for maintenance to the facility and to re-evaluate the programs offered.

d) Potential Action Plan Timeline

The creation of this document had two major objectives, the first of which was to uncover the “why”. Why is the Blue Lagoon area and the quality of life for the local inhabitants continuing to decline? The second objective of this document is to outline a “how”. How can the problems which the Blue Lagoon area faces be addressed to provide sustainable development and an income stream for local inhabitants?

Figure 1 is a visual depiction of a potential action plan which could see the aforementioned initiatives put in place. For the purposes of the action plan potential funding sources (1) include: CIDA, USAID, GOJ, Portland Development, Royal Bank of Canada, Bank of Nova Scotia, The Commonwealth Fund, and American Express.

C. Evaluation Criterion for Proposed Initiatives

The identified initiatives provide a base of activity that could provide added value within the Blue Lagoon area. They can be used as a stepping stone in the creation of an action

	90 Day Planning Phase	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
Assemble Volunteer Committee													
Acquire Start-up Funding													
Recruit Heritage Site Director													
Recruit Architect													
Build Partnerships													
Source Funding (1)													
Hire Contractor													
Hire Site Director													
Hire Grounds Manager													
Approve Architect Designs													
Apply For Building Permits													
Build Spa and Heritage Center													
Hire and Train Employees													
Contract Suppliers													
Open Heritage center													
Open Dock/ Water Sports Facility													
Open Spa Facility													
Open Jetty													
Lobby Government Buy-in													
Submit UNESCO World Heritage Tentative Form													

Fig. 1 Potential Action Plan

plan which will encompass all of the input from stakeholder's present at the Summit. The following are offered evaluation criterion which could be used to assess individual initiatives, along with an estimate for potential revenue which could be realized through implementation of these initiatives. These rankings are based on a scale of 1, 3, and 5; where 5 is the best case. Each evaluation criteria is based on assumptions and estimates provided in section 6.6.

Start up costs – This criterion identifies the initial investment required to put an initiative into effect.

- 1 = > \$50,000
- 3 = \$10,000 - \$50,000
- 5 = < \$10,000

Training Required – This criterion estimates the amount of time necessary to train the local population to complete the tasks necessary to make the initiative successful.

- 1 = > 3 Months
- 3 = 1 Month – 3 Months
- 5 = < 1 Month

Sustainability – This criterion assesses whether the initiative provides the opportunity for continued growth and if, in fact, it may be a sustainable solution for a current challenge experienced within the Blue Lagoon area.

- -1 = Not sustainable
- 1 = Small opportunity for sustainable growth
- 3 = Moderate opportunity for sustainable growth
- 5 = High opportunity for sustainable growth

Environmental Effects – This criterion rates the implications an initiative has on the environmental integrity of the Blue Lagoon area.

- -1 = Adverse effect on environmental status
- 1 = No change in current environmental status

- 3 = Moderate beneficial change in environmental status
- 5 = High beneficial change in environmental status

Overall Community Impact – This criterion rates an initiative's impact on the community as a whole (collaboration of community, reinvigoration of environmental integrity, etc.)

- -1 = Negative community impact
- 1 = Low community impact
- 3 = Moderate community impact
- 5 = High community impact

Implementation Time – This criterion rates the estimated time required to implement each initiative.

- 1 = > 3 Months
- 3 = 1 Month – 3 Months
- 5 = < 1 Month

Jobs Created – This criterion estimates the number of jobs that might be created for each initiative.

- 1 = < 5 jobs
- 3 = 5 – 10 jobs
- 5 = > 10 jobs

Table 1 shows one possible evaluation of the aforementioned initiatives based on the presented evaluation criterion. Please keep in mind that this is a high level evaluation and there would need to be detailed costing and budgeting to ensure accuracy in the evaluation process.

As is evident from the matrix provided, all of these initiatives, with the exception of the UNESCO World Heritage Site Designation, have potential to be put into motion in a short time horizon and all have the ability to have a positive impact on the natural surroundings and the local population. Please see

Appendix N for a visual representation of the results of the evaluation matrix.

D. Potential Revenue Stream for Proposed Initiatives

In any business venture potential revenue streams are key assessment criteria. These potential revenues must outweigh the initial investment required to start the business and the costs that will be incurred on an ongoing basis. For any business to be sustainable it must be profitable. To determine the viability of each business alternative presented, a full business plan would need to be completed. Although looking

Table II
Potential Revenue Streams

Business Alternatives	Daily Revenue Potential	Weekly Revenue Potential	Annual Revenue Potential
Day Passes	100	700	38,000
Modern Day Spa Facility	2500	17500	770,000
Heritage Creative Center	500	3500	154,000
Dock/Jetty	250	1750	77,000
Heritage Water Sport Facility	2000	14000	616,000

Table I
Evaluation of Proposed Initiatives

	Start Up Costs	Training Required	Sustainability	Environmental Effects	Overall Community Impact	Implementation Time	Jobs Created
UNESCO World Heritage Site Designation	1	1	5	5	5	1	5
Blue Lagoon Day Passes	5	5	5	5	3	5	1
Modern Day Spa Facility	1	1	5	1	3	1	3
Heritage Creative Center	1	3	5	3	5	1	5
Dock	3	5	5	5	1	5	1
Jetty	1	5	5	5	1	5	1
Heritage Water Sport Facility	3	3	5	3	3	1	1

at the maximum potential revenues streams alone can provide a great deal of insight. The following chart outlines the potential weekly and annual revenues for each alternative. It must be understood that these business ventures could be undertaken in many different ways and on very different scales. The revenue numbers are in American Dollars. For a detailed description of assumptions made to generate the potential revenue streams please refer to Appendix O.

VIII. CONCLUSIONS

There is no better time for action than now, and the Blue Lagoon Summit of 2010 proposes to be a stepping stone to sustainable development and the continued preservation of a Jamaican national treasure. There are two major resources which will be needed from concerned stakeholders to drive action and not have this process stall or result in another detailed proposal with nothing resulting from it.

The first and arguably most important is the stakeholder's commitment of time. In order to effectively drive action in the Blue Lagoon area volunteerism from stakeholders is essential. Establishing a collective vision among stakeholders to support specific initiatives will be vital to uniting

the group. The time committed is an investment, to not only add value to the lives of the local community, but to preserve an area that has intrinsic value to all those in attendance.

The second resource which will be needed for action to commence is financial support. Funding is accessible from various governmental bodies, but will also initially need to come from concerned stakeholders to spur the initial development process. An intrinsic motivation to see positive results must be present from all attendees of the Summit. With Prime Minister Bruce Golding becoming more heavily vested in community economic development and environmental sustainability the time for action is now. As a collective, establishing a unified vision at the Blue Lagoon Summit of 2010 is the first step to ensuring a brighter future for the Blue Lagoon area.

The action plan presented within the text shows the potential for 16 jobs to be directly created. Although this is just one possible group of initiatives which could be undertaken, the creation of new jobs will also create off site jobs in the area surrounding the Blue Lagoon. These jobs have potential to generate a significant stream of income which will in turn flow into the Parish. The employed individuals will receive professional development opportunities to enhance their marketable skills through the form of education programs. With new developments and infrastructure which promote the culture and natural beauty of the Blue Lagoon, sustainable community awareness will be consistently raised as residents begin to interact in a new, vibrant way.

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APPENDIX A

San San Sustainable Development Project Overview

Author: Fredrick Zenny, 2009 [18]

The San San Association in Port Antonio was established as a community based organization with the help of philanthropists, businessmen and key people from the Jamaican Prime Minister's Office. The objective is to save the natural beach from excessive degradation and pollution. The strategy or the action plan developed comprised the following steps:

- a) Organizing a conference which would bring together all the information sharing and dissemination from the stakeholders involved.
- b) The topics covered in the conference would be the development of hotels and villas in the areas, protection of the coastline, required infrastructure such as, roads, water. Training of workers.
- c) Clearing of beaches in the area from the garbage.

APPENDIX B

San San Sustainable Development Study [18]

SUSTAINABLE DEVELOPMENT OF SAN SAN AND ITS ADJACENT COMMUNITIES

Background

The parish of Portland on the north eastern coast of Jamaica has so far not seen the type of mass tourism development that has occurred in other parts of the island. Portland encompasses some of the most spectacular and diverse scenery in Jamaica – from the heights of the Blue and John Crow Mountains to a variety of coastal landscapes – rocky shore, white and black sand beaches, coves, rivers and waterfalls.

Portland is also rich in heritage and historical resources from the maroon locations of Charles Town, Moore Town and Maroon town, to the ruins of the 1700's Fort George at Titchfield School, the neo Romanesque Anglican Church built in 1840 and the quaint Massachusetts sea captain homes such as the De Montevin lodge.

Portland is known for some of Jamaica's most famous attractions – Blue Lagoon, rafting on the Rio Grande, Reich Falls at Drivers River in Manchioneal, Somerset Falls, Nonesuch caves, Boston Beach, Winifred Beach, Long Bay, Folly Point, and Navy Island.

First developed for tourism in the mid 19th century, Portland enjoyed an economic boom associated with the banana industry for over a hundred years and this was followed by the construction of high end tourism properties at Titchfield in the early 1900's, Bonnie View in the 1950's, Frenchman's Cove and Trident in the early 1960's, Dragon Bay in the early 1970's.

Portland also has a number of smaller hotels, including Fern Hill, Goblin Hill, Jamaica Crest, the Castle, Mocking Bird Hill and many villas, the most spectacular of which are located along the San San coast and on the road to the Blue Lagoon.

In recent years access to Portland has become increasingly difficult, as a result of poor road conditions and the cessation of scheduled flights to Ken Jones airstrip in April 2007. The Parish also suffers from constraints of water supply, and although Portland has the highest annual rainfall in Jamaica and an abundance of rivers and streams, there are no water storage facilities. Sewage treatment is also problematic – there is no central sewage system in the parish, although one is currently being planned at Turtle Crawl. Villas and hotels located in close proximity to the coast employ a range of sewage treatment options; some effective and others not. There are 500 villa and hotel rooms now available, given the closure of Dragon Bay and the renovation of Trident Hotel. The main economic activities are agriculture and tourism.

Plans for the renovation of Titchfield Hotel and the villas on Navy Island are in train and new environmentally sensitive developments such as Geegam and Canopy on the shores of the Blue Lagoon have occurred. Ownership of the resort properties is a mix of foreign and local with key emphasis on preserving the magic of the area.

RECENT EVENTS AFFECTING SUSTAINABLE DEVELOPMENT IN JAMAICA

As a small island developing country, Jamaica is vulnerable to downturns in the world economy, to climate change, and to the continuing degradation of the environment.

Jamaica has entered a period of profound economic turbulence caused by the current meltdown of world financial markets, the recent bursting of a local five year speculative bubble based on foreign exchange trading and pyramid schemes, and the deep recession now engulfing US and European economies. Already, this can be seen in the expected performance of Jamaica's main foreign exchange earners. In recent months bauxite revenue to the government has gone from J\$ 5.0 billion in 2007/2008, to an expected J\$ 139 million in 2009/2010. Remittances

from abroad have fallen by 16.6% and tourism earnings are projected to decline in 2009/2010 by as much as 20-30%. Invariably, this will lead to successive devaluations of the J \$ and significant increases in national debt and debt servicing.

Unlike the US and other countries, the Jamaican government has virtually no capacity to mobilize significant financial resources to confront this crisis through major investments in Education, Health, Environment, Agriculture and basic infrastructure. It is burdened by large persistent fiscal deficits (now 5.3 % of GDP) and, as a consequence, one of the highest levels of debt in the world (approx.140% of GDP); a disproportionate amount of national revenue committed to debt servicing (almost 60%); and little or no access to grant and concessionary finance from international donors and financing agencies. As for the Private Sector, its contribution to national economic and social development has been disappointing, to say the least. Because of extremely high interest rates on government's domestic debt and commercial lending from banks for the past twenty years or so, it has had little incentive to engage in productive job-creating economic activities. Indeed, government debt has succeeded in crowding out private investment by (a) reducing the amount of credit available to the private sector; and (b) driving up interest rates to heights that discourage investments and makes uncompetitive those businesses that need credit to operate and invest. In fact, as stated by the Prime Minister in his Budget Presentation to Parliament in May 2009, "banks have become unenthusiastic about lending for real investment, preferring instead to spend much of their time counting the deposits they take in, calculating their returns on the last issue of government paper and awaiting the next one. They are not too keen on taking on the burden of assessing a loan application, modelling projections and validating market analysis. For many, banking has come to mean high returns and low risks".

On the environmental front, there has been, by any objective measure, a consistent failure of the citizens and government of Jamaica to prevent the continuing and accelerated deterioration of Jamaica's most important assets - its land, forests, mountains, rivers, beaches, reefs and sea. Forests and watersheds continue to be threatened by population growth, agricultural expansion, shifting cultivation and mining, land clearing for housing and the consumption of wood for energy. Rivers and the sea are being inundated with sewage effluent, chemical/insecticide poisoning and mountains of solid waste such as plastic garbage. Beach erosion, overfishing and coral reef degradation have become the most noteworthy features of the marine environment. In fact, Jamaica has now achieved the dubious distinction of having 99% of its coral reefs at risk, and being the most overfished country in the Caribbean. In the case of tourism, in particular, the physical deterioration of public places, the insecurity, the visitor harassment and the blaring day and night of sound systems are calculated more to drive away tourists than to welcome them.

In his recent Budget Presentation the Prime Minister tabled before Parliament, the National Development Plan for Jamaica (Vision 2030) and the Medium Term Socio-Economic Policy Framework setting out a range of policy actions to get the country on the path of sustained growth and prosperity. He also challenged a wide range of stakeholders, including the private sector and individual Jamaicans, to participate in and assume responsibility for their own development, while highlighting a number of initiatives to this effect. These include:

- Participation of the private sector, trade unions and the Opposition through the Partnership for Transformation, and The Social Partnership, aimed at building support and forging a consensus around national strategic objectives, policies and plans;
- As an intended consequences of the government strategy of tightening public expenditure, partnership with the private sector to undertake some public investments, investing the money they would otherwise have invested in government paper;
- A call for all Jamaicans to develop a sense of their individual responsibility and for a conversation to take place on what is government and what is the responsibility of government. As illustrations of that ongoing national conversation he pointed to The National Transformation Programme being spearheaded by the Rev. Al Miller to get people in their homes and communities to start taking responsibility. Similarly, he cited the Parenting Commission being spearheaded by the Minister of Education to get parents to start taking responsibility.

However, what was noticeable by its absence in his call for partnership and individual responsibility, was recognition of the work of numerous civil society organizations operating in Jamaican society; although the Minister of Security did go out of his way, some days later, to laud and support the efforts of one of the best known of these organizations: Jamaicans For Justice.

In the environmental field, Jamaica is fortunate in having a small but dedicated number of civil society organisations striving to contribute to the sustainable management of economic and environmental resources. Regrettably, most of them have suffered from government neglect and a reluctance/unwillingness to recognise how critically important their efforts could be in creating economic opportunities and improving the quality of life of ordinary Jamaicans. Moreover, they are ill equipped to confront the systemic failure in sustainably managing and conserving natural resources that is in large measure due to the ineffectiveness of key institutions such as the NRCA, NEPA, and the Parish Councils, and the plethora of un-coordinated local and national initiatives lacking policy direction, resources, and government support.

There is therefore an overwhelming need for farsighted, courageous and innovative political leadership combined with citizen/stakeholder participation to confront the current economic and environmental crisis. The Prime Minister's recent decision to take over the environmental portfolio would seem to provide the opportunity for such a sea change in governance. Only the power and prestige of his office can bring the often competing and fractious government agencies, members of the private sector, and other civil society organisations, to work together under a national policy and regulatory framework. Similarly, the Prime Minister is best placed, at a time of extremely scarce government resources to: (a) motivate and galvanise the private sector and non- governmental community to actively participate in and contribute additional resources to this overarching effort; and (b) to ensure compatibility of short term opportunities and benefits with the long term goals of economic and environmental sustainability.

But it is also incumbent on those operating at local and community levels, such as the San San Association, who wish to engage with the government and the private sector, to organize themselves to bring to the table a coherent vision and plan of what they are willing and able to contribute.

ISSUES REGARDING SUSTAINABLE DEVELOPMENT IN PORTLAND

Some attempts have been made in the past to promote sustainable development in Portland. The most noteworthy occurred in the mid 1990s, when a draft proposal for a marine protected area for Portland was developed. The area concerned was (describe it). Led by the Portland Environmental Protection Association (PEPA), the Portland Area Marine Park (PAMP) enjoyed some level of public consultation, but no consensus was reached on the management regime and the protected area/marine park was never declared.

More recently, the Portland Development Order has been completed in the past three to four years. Some level of public consultation took place under the Town and Country Planning Act, which requires consultation with landowners only. The Order has reportedly been signed by the Prime Minister, but is not available to the public until it has been presented to Cabinet. It is therefore difficult at this time to know to what extent it promotes/enables concerted action in addressing the many outstanding issues regarding sustainable development in Portland. These include:

- The campaign to keep Pellew Island in its natural state, including the possibility of purchasing it and placing it in a land trust.
- The rights of access of San San property owners to the San San Beach.
- Finding out what is planned for Portland in the short and medium term under the Portland Development Plan. One particularly sensitive issue is the densities to be allowed under the Plan. This is where the rubber meets the road - if a park is declared but the development plan allows high densities, then that's what will

get built. A Parish Development Committee similar to those in St. Ann and Manchester should be established to warn the public of large scale plans before they are finalized.

- Revisiting the Portland Marine Park to advocate/ensure that it is legally declared; that its boundaries are adequate by including e.g. enough land area as most of the effects on the sea are land based; and that some kind of management organization is set up to run it. Getting it declared is straight advocacy work that does not need a lot of money- and though the protected area designation alone will not protect anything, it is a critical first step. It would also build on the extensive work already done that failed principally because of lack of local funding, in particular the 30% that international funding agencies require from stakeholders to fund projects.
- Getting the government to designate certain parts of the coastline protected seascapes. There is a proposed designation for this under the law, but no one has ever done it. Long Bay springs immediately to mind, but there are other parts of the coast that could qualify. A consultant could be contracted to make recommendations. This should stop (or at least delay) the type of development that moves the road inland and then "captures" the sea.
- Reviewing and cleaning up all the fishing beaches in Portland. Work with the fishers to get them to observe closed seasons, use large size mesh for their traps, and observe fish sanctuaries. Give them refrigeration and market facilities. Train some to act as snorkelling guides. See if they can agree to Portland being the first place in Jamaica to protect parrot fish - important herbivores which conserve the reefs.
- Reviewing and cleaning up all the public beaches in Portland. Conduct surveys as to who uses them, whether they think they should be free or not, and what kind of facilities should be there. Develop standards for Portland's public beaches - keep the trees, or plant new ones, thatch roof shelters, no disposable items, picnic areas, proper bathrooms and washing areas. Make sure there are places Jamaicans can go to in Portland - to the beach, to watch the sunset, just to look over a great view.
- Undertaking rapid reef assessments to start collecting data on the coral reefs and assess their health. Find out where the problem sites are, and where are the areas in good shape that should be jealously guarded.
- Launching a water quality monitoring program. Much of the coral reef die off in Jamaica has been caused by land based pollution, mostly from sewage, and poor fishing practices. Publish the results. If people on the coast have inadequate sewage treatment, get them to clean it up, starting with those who can afford it. Monitor the results. Get people to start understanding that algae on a reef means there is a problem.
- Establishing standards for all types of developments - attractions, hotels, housing, beaches, roads, lay bys, and protection of views. A consultant could do this and then his findings/recommendations could be presented to the public and the govt.
- Re-launching the greening efforts for the accommodation sector, particularly in light of the fact that Jamaica has now been named as one of the 6 Caribbean islands that are in the top 40 climate hotspots in the world experiencing extreme weather impacts due to climate change risk (German Watch 2009 climate risk index). The issue is to convince the operators. A lot of work has been done in conjunction with benchmarking as a first step towards certification as a green destination by Green Globe. Again, this work was halted due to lack of funds but most of the documentation can be retrieved and the program re-launched and continued; starting with an estimate and action plan from those who spear-headed the previous attempt funded by USAID.

- Improving sanitation and sewage treatment, especially as regards certification as a sustainable destination. Investigate what is happening to most of the sewage. Is the new sewage treatment plant at Turtle Crawl sufficient? The Port Antonio Water, Drainage and Sewage Project is reputed to be on track for completion by the fourth quarter of 2011, with a contract for the construction of the new sewage plant scheduled to be awarded in the third quarter of 2009, with a 22-month construction period. Also, the installation of the new sewage lines will take place under two contract packages - stage one and stage two- with stage one beginning in May 2009 with construction to last 18 months.
- Carrying out an assessment of solid waste in Portland - where's it all going? What's the state of the dump? Is everything ending up in the sea like the rest of the island? Should a proper landfill programme with recycling arrangements be launched? It appears that lot of ground work has already been done to try and set up a system in Portland for this- perhaps even provide incentives to establish private companies to deal with it.
- Establishing an inventory of attractions - existing and potential. Get someone who really knows what they are doing to assess them - often, the way attractions are developed in Jamaica destroys them e.g. exotic plants are brought in, the sewage is not properly treated, river banks are cleared leading to erosion, waste is burnt etc. Come up with a phased plan to address/resolve problems.
- Educating the public by developing, for example, really cool, rustic signage, garbage bins, bus stops, vendor's stalls, benches in lookout points. These would need the approval of the government. Let people know they are in a part of the island where different rules apply - somewhere really Jamaican, really environmentally friendly, really beautiful and worth protecting.
- Developing employment generating opportunities that help people in Portland - for instance, training in authentic craft work (not giant penises and giraffes), food handling, and other tourism related employment activities, get the market in Port Antonio looking great and make sure it becomes a resource for farmers as well.
- Fixing-up Blue Hole and opening it to the public. Although it is privately owned, it is a national resource and should not be in the kind of limbo it is in. The development should be low impact, tasteful and the sewage treatment should be tertiary. No motorized craft allowed.
- Cleaning up and rehabilitating Folly. It is now a dump and should be a big public park, green space, for recreation as well as nature appreciation.
- Cleaning up Port Antonio. Identify some old buildings that perhaps could be saved. Paint them and fix them up.
- Funding beach clean-up. This happens the third week of Sept every year. Really promote this and get all Portlanders to come out and clean the beaches.
- Revisiting the proposed "Highway development, "which will decimate the area if it follows the original plan. Lobby for rerouting on existing off-coast road.
- Promoting village development –to enhance villages and create community tourism offers –see Martin Goodman's plan for Drapers.
- Reviewing/assessing available funding (grant, soft loan) for investment in renewable energy, recycling etc.

A STRATEGY AND PLAN OF ACTION FOR THE SUSTAINABLE DEVELOPMENT OF SAN SAN AND ITS ADJACENT COMMUNITIES

Portlanders and Jamaicans from other parts of the island have long articulated a parish vision of high end, low impact, environmentally sensitive tourism development. In mid 2009, there is particular concern about the direction of Portland's development, in view of the rapid expansion of large scale hotels along Jamaica's north coast, often in the absence of the required social and environmental infrastructure, the completion of the North Coast Highway from Negril to Port Antonio scheduled for completion shortly, plans for a new international airport at Duckenfield, the improvement of some attractions, and a proposed villa development on Pellew Island, just off the San San coast.

The likelihood of a deep and prolonged recession in the United States and Europe means that there is little chance that further significant investments in mass tourism will materialise in the near future. This may force the powers to be to adopt a more differentiated approach, with a greater emphasis on small scale eco tourism development that is more visitor-friendly and suitable for Portland. Furthermore, there have been a number of developments showing a heightened awareness of the local citizenry to the dangers of damaging Portland's unique environmental assets. The most recent concerns a proposed development of Pellew Island, an iconic image of Jamaica's coastline and a much loved place, visited year round by locals and visitors alike. The prospect of exclusion from this small cay galvanized Jamaicans both residents and non residents of Portland, visitors and Jamaicans overseas, to try and ensure that it remains in its natural state. Similarly, there has been a recent stand-off between the UDC and local concerned citizenry about plans to develop and manage Winifred Beach, another place much loved by locals and visitors alike.

These citizen initiatives can be seen as a wake-up call for closer consultation and involvement of local communities in their own economic and environmental development. But in order to do so effectively these communities need to respond to the Prime Minister's call for responsibility, participation and partnership and come together to agree on how best they can contribute to Portland's development and the protection of its most important environmental resources/assets. In particular, they should seize the opportunity provided by the Portland Development Order to guide and influence economic and social development at the local and community levels in a sustainable and environmentally friendly direction.

The San San Association is fortunate in counting among its members, a number of prominent businessmen and philanthropists, local and foreign - to say nothing of an important member of the government in the Prime Minister's Office with special responsibility for the environment. It is therefore incumbent on it, as a community based organization, to publicly declare its interest and willingness to make a contribution to the sustainable and environmentally sound development of San San, its adjacent communities, and the Parish of Portland. One practical way of doing this could be to develop a strategy and action plan that would indicate how and in what areas it is willing and able to work with government, local authorities and other stakeholders. This could take multiple forms ranging from lobbying or petitioning government and local authorities, to participating in or funding projects etc.

One way to begin this process could be to organize a conference which would serve as a starting point and platform for disseminating and sharing all the available information and for forging a consensus and road map on developing and implementing such a strategy and plan of action. Areas covered by the conference could include:

- (a) villa development;
- (b) hotel development;
- (c) public beach and coastline access;
- (d) identification of required infrastructure (roads, water, energy, schools, housing, sewage, airport, training for workers, other);
- (e) attraction development;
- (f) protected area/protected landscape development;
- (g) guidelines for resource users (e.g. fishermen);
- (h) protection of landscapes, tree preservation, solid waste management;

APPENDIX C

Map of Jamaica and Map of Port Antonio

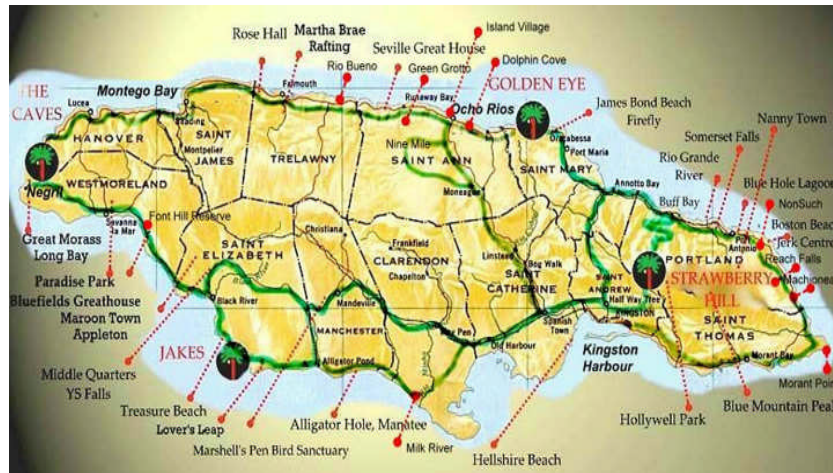


Fig. C.1 Map of Jamaica [19]

The map shows the major tourist destinations and places of interest across Jamaica. The Blue Lagoon/ Blue Hole can be seen in the North Eastern part.



Fig. C.2 Map of Port Antonio [20]

This map is a depiction of major tourist spots in Port Antonio. Copyright by VRX Studios Inc.

APPENDIX D

Port Antonio Accommodations

Port Antonio Hotels and Villas

The various hotels located around Port Antonio can accommodate from 15 -200 guests at a time. With 80 suites, the Jamaica Palace Hotel (one of the biggest hotels) offers its guests spacious accommodations, complete with hand-carved beds, oriental rugs, and a unique décor [21]. The Trident Port Antonio Villas situated in the east of town have rooms for \$120/night. There are also some good Port Antonio hotels for the budget travelers which have rooms for under \$40 a night [21]. The Trident Castle, which is one of the most famous attractions (visited by and has hosted wedding receptions for celebrities like Denzel Washington, Tom Cruise and Merrill Lynch family) is available for \$3,500/night in low season (April 15-Dec15) and \$6,000/night in high season (Dec 15- April 14) [22].

On average, an 8- bedroom villa may cost as high as \$35,000/week in the Christmas to New Year period while 1/3 rd of its cost in summer. A 4- bedroom villa costs around \$4,000-\$6,000 in low season, \$6,000-\$8,000/week in high season. While a 1- bedroom villa costs vary from \$900-\$3,500/week in low season and \$900-\$4,500/week in high season [22].

(*Rates are stated in U.S dollars. Summer: April 16-Dec 20; Winter: Jan 15- Apr 15; Christmas/New Year- Dec 21-Jan 4) [23].

Guest Houses

There is also an option of guest houses with prices as low as \$30for a person to \$70 for double occupancy in the Port Antonio region [23].

Villas in Blue Lagoon

The villas located in the exquisite Blue Lagoon area are rented out on a week-to-week basis and cost upwards of \$7,000-\$10,000 for a 2– 4 bedroom retreat [24]. Some cottages are available for as low as \$500 a week during the summer. Prices are generally cheaper during the summer months and most expensive from mid-December to mid-April [21].

APPENDIX E

Sustainable Community Development Background

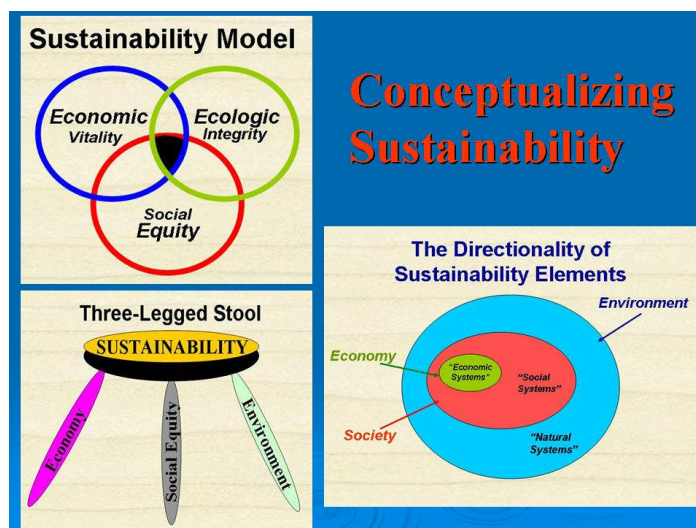


Fig. E.1 A Pictorial Representation of the Term Sustainability [8]

The above figure shows the representation of the term “Sustainability” as a 3-legged stool. Authored by Dr. R. Warren Flint on the website of Five Es Unlimited. Copyrighted by Five E’s Unlimited, 2005 – 2009.

Origin and Background of Sustainable Community Development (SCD)

What is Sustainable Development?

Society’s collective demand on resources is greater than the productive capacity of the Earth (natural resource capital versus human demand projections at the right), and this impact continues to grow because of our numbers, technologies, and affluence (Flint, 2004b). Social and economic disparities among the expanding global population are also wide and growing, resulting in more international conflict among the haves and have-nots. Much about our current situation is clearly unsustainable, with dire consequences for our way of life if not addressed (Brown, 1999b). And the consequences for future generations are sobering. The reality is that these circumstances will change toward some kind of equilibrium condition over time. The only question is whether changes will occur in pleasant ways of our own choice – through the taking of stewardship for Earth systems – or in unpleasant ways not of our choice – inhumane and natural earthly phenomena take over and do it for us at severe human detriment, such as warfare, genocide, starvation, epidemics, or failure of societies (Sagoff, 1997). We also live in a time of significant global environmental change, the consequences of which remain poorly understood. What economic, social, and political choices can we still make so that we don’t meet the same ends as many past civilizations? And more importantly, how do we incorporate these choices across sectors to be most effective in solving present problems?

One potential answer can be found in the concept of sustainable development. Scientists and policy-makers have begun to recognize it would eventually be suicidal to allow a further undermining of the sustainability of ecological life support systems, locally and globally (McMichael, et al., 2003). At the same time, they acknowledge that

development is required to eliminate destitution, ensure material security, and allow individuals and communities more choices and more power to exert greater control over the factors affecting their lives – thus the call for “sustainable development.”

Sustainable development emerged as three things: a critique, a set of principles implying positive objectives, and a focus of strategies for change (Marshall and Toffel, 2005). It gained worldwide attention chiefly through the work of the World Commission on Environment and Development (the Brundtland Commission), which addressed two intractable and apparently conflicting problems.

1. Continuing environmental degradation was leading not only to local and regional resource depletion and damage to essential ecological functions, but also to cumulative global effects.
2. General failure of development initiatives in numerous places around the world was leaving many people in destitution and insecurity while the gap between rich and poor deepened.

In 1987 global discussion of these problems, combined with a continuing rise in human numbers, pointed to an ugly future of increasingly desperate poor people with little choice but to eat into their remaining natural capital (Rees and Wackernagel, 1994) – in a world which apparently could not support everyone at even a moderate European standard with current levels of technological and distributional efficiency. As defined in the Brundtland context, **development with sustainability** demanded initiatives designed and pursued in ways that would protect resources and ecological integrity over the long term while greatly improving human well-being, especially among the poor.

Just how this is to be accomplished has been and continues to be a matter of debate and commands attention almost 20 years after the Brundtland Commission called for sustainable development because many alarming signs are still with us. The Commission's Report (World Commission on Environment and Development, 1987a) defined sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (*the principle of ensuring that our actions today do not limit the range of environmental, social, and economic options open to future generations*). This vague definition has proven to be open to a host of interpretations (Parris and Kates, 2003), especially in considering the key elements in the Commission's concept; “needs,” “compromising the ability” and “future generations,” all of which involve difficulties. So, what exactly does the Brundtland Commission's definition mean in terms of actually taking steps? How can we accurately predict the “needs” of “future generations” or predict the capacity of future technology to meet those needs in such a quickly changing technological world, and when we lack the confidence required to unequivocally delineate the limits of natural resources in the first place?

In trying to envision the big picture then, **sustainability** suggests working to improve people's well-being (often equated to economic condition) without damaging or undermining society or the environment – development that provides real improvements in the quality of human life and at the same time conserves the vitality and diversity of the Earth. For example, business is about both improving the well-being of consumers and the company's bottom-line (Burns, 2001). Business's degradation of the environment, natural resources, or social capacity does not improve well-being. Instead, well-being is improved by the development of methods to minimize energy, material use, noxious emissions, and social impact per unit of economic activity. Commitment to human and societal well-being is as important as ecological commitment to the planet. We must preserve a planet fit to live on and also create organizations that sustain the quality of our social life.

Sustainable development equates to thinking and acting as suggested by the 3 Cs: recognizing and acknowledging that everything of concern to us is somehow connected and considering these multi-dimensional connections in our lives when faced with making choices so that unintended consequences from our actions do not undermine future social, environmental, or economic health (well-being). In acting sustainably therefore, our economic desires/demands become accountable to an ecological imperative to protect the ecosphere, and a societal imperative to create equal access to resources and minimize human suffering. This is the foundation of sustainable development, as represented by the 3-overlapping circles (pillars) model of sustainability. These three pillars interact with each other so continuously that we cannot manufacture, consume, recreate, build, make political decisions, or essentially do anything without

considering the nexus (intersection – shaded overlap of the circles) of their impacts on the benefits and costs to society from taking action.

Large-scale actions, in and of themselves, or combinations of actions by individuals or a particular community, usually related to some short-term economic prospect, can irreversibly change the many opportunities and constraints provided by much more slowly evolving natural resource conditions (Norton, 2005). Living sustainably is maintaining the important mix of options and opportunities while creating no new and onerous constraints; living unsustainably is losing them, narrowing the range of options that people in other places or subsequent generations can choose among in their attempt to adapt, survive, and prosper.

Instead of attempting to understand the potential needs of the future, present societal members should instead be concerned about making sure that the opportunities they have to achieve their own values, the things important to them, are not in any way constrained for other places or the future by actions they might take. To hold open options requires the complicated and difficult process of a community attempting to conscientiously specify what obligations toward people in other places and the future it accepts, which require protection of the stuff so designated as long as present society's costs are bearable, and to compare those ideals its members would like to project into the future with the very real and present needs of people in the present generation (Norton, 2005). The communities themselves are responsible for choosing what is important to monitor and what is important to protect, not inhibited by some kind of sustainability definition established somewhere else. Our task ahead is to shape a sustainable future, using resources less intensively by combining social, economic and environmental strategies that produce opportunities and minimize constraints for future generations (Norton, 2005) and people in other places through the practice of sustainable development.

What is Sustainable Community Development?

Sustainable community development (SCD) aims to integrate economic, social and environmental objectives in community development. Sustainable community development is based on a consideration of the relationship between economic factors and other community elements such as housing, education, the natural environment, health, accessibility and the arts. SCD has emerged as a compelling alternative to conventional approaches to development, a participatory, holistic and inclusive process that leads to positive, concrete changes in communities by creating employment, reducing poverty, restoring the health of the natural environment, stabilizing local economies, and increasing community control

The concept of a "sustainable community" does not describe just one type of neighborhood, town, city or region. Activities that the environment can sustain and that citizen's want and can afford may be quite different from community to community. Rather than being a fixed thing, a sustainable community is continually adjusting to meet the social and economic needs of its residents while preserving the environment's ability to support it.

A sustainable community uses its resources to meet current needs while ensuring that adequate resources are available for future generations. It seeks a better quality of life for all its residents while maintaining nature's ability to function over time by minimizing waste, preventing pollution, promoting efficiency and developing local resources to revitalize the local economy. Decision-making in a sustainable community stems from a rich civic life and shared information among community members. A sustainable community resembles a living system in which human, natural and economic elements are interdependent and draw strength from each other.

Potentially significant employment opportunities, consistent with more sustainable patterns of development, exist in many economic sectors. Redesigned and improved infrastructure, knowledge-based services, environmental technologies, improved management and use of natural resources, and tourism are all rich areas for private sector investment, supportive government policies, and expanded training. Some of the most promising employment opportunities include:

- Upgrading the efficiency of energy use in buildings, products, and transportation systems;
- Adopting and implementing sustainable forestry, fisheries, soil, and watershed management practices;

- Expanded delivery and use of information technologies;
- Sustainable tourism activities centered around areas of environmental, cultural, and historic significance;
- Recycling and remanufacturing of solid and hazardous waste into marketable products;
- Accelerated and expanded development of marine and freshwater aquaculture;
- Adding value to fish, agricultural, and forest products;
- Developing, manufacturing, and marketing products, services, and technologies that reduce environmental burdens; and
- Designing energy-efficient and people-friendly cities.

Achieving sustainable community development means emphasizing sustainable employment and economic demand management (EDM). Sustainable employment includes turning "wastes" into resources (e.g., recycling); improving efficiency with regard to energy and materials; converting to greater reliance on renewable energy sources; increasing community self-reliance (e.g., food and energy production); and sustainable management of natural resources (e.g., community forestry). EDM shifts our economic development emphasis from the traditional concern with increasing growth to instead reducing social dependence on economic growth.

Examples of sustainable community development include car cooperatives to reduce the cost and necessity of car ownership (Vancouver), sustainable employment plans to create jobs, spur private spending, and reduce pollution through public investment in energy conservation and audits (San Jose, California), new product development to encourage manufacturers to develop environmentally-friendly products through municipal R&D assistance (Gothenberg, Sweden), increasing affordable housing supply through zoning codes that promote a variety of housing types, including smaller and multi-family homes (Portland, Oregon), experimenting with local self-reliance by establishing closed-loop, self-sustaining economic networks (St. Paul, Minnesota), community supported agriculture to preserve farmland and help farmers, while making fresh fruits and vegetables available in city neighborhoods (Vancouver; London, Ontario; New York City), local currencies such as LETS: Local Employment and Trading Systems (Toronto), a local ownership development project with a revolving loan fund to encourage employee-owned businesses, considered more stable over the long term and more likely to hire, train and promote local residents (Burlington, Vermont), and a community beverage container recycling depot which employs street people - "dumpster divers" - and provides them with skills, training, and self-esteem (Vancouver).

APPENDIX F

About Five E's Unlimited [25]

Five E's Unlimited is a small business located in Seattle, WA. It was founded in 1997 with more than 25 years experience in environmental science research and management initiatives, as well as sustainability science, watershed land-use, and sustainable community economic development projects. The firm provides consultant services to local governments, nonprofit organizations, or any entity interested in planning for sustainable development and taking action. For more than 15 years we have offered clients consultative services toward taking charge of their own destiny and achieving sustainability goals that they themselves identify to improve community economic opportunities and social vitality in environmentally sound ways. We help people and organizations understand how sustainable economic development, offering equal opportunity to all people (social equity), can only occur if the natural environment upon which it depends is carefully managed. We assist communities and groups in taking actions specifically directed toward sustainability. These actions comprise plans that are flexible, integrated, and provide environmental protection while advancing the sound and enduring advancement of human communities.

Five E's addresses the many sides of sustainability -- flexible, integrated, environmental resource planning, policy, and protection simultaneous to the sound, enduring advancement of neighboring human communities. Sustainable development implies the ability of humans to coexist in a manner that achieves economic well-being while maintaining wildlife, wildlands, decent environments, and social equality, today and for future generations.

Five E's encourages clients to look beyond solving problems one at a time, to a position where one can envision the development of systems that prevent problems from occurring in the first place. Through his international work and leadership, *Five E's* encourages collaborative relationships among ecologic, social justice, and economic development interests. Dr. Warren Flint, Principal of *Five E's*, provides both visionary inspiration and pragmatic, science-based understanding, assisting people in thinking broadly across disciplines and boundaries.

We know sustainability in its integration of socio-economic and ecological concerns representing issues often in opposition but requiring reconciliation. We can explain to others what sustainable development involves. Sustainability means working to improve human's quality of life without damaging or undermining society or the environment, now or in the future. We believe that through sustainable development our economic desires become accountable to an ecological imperative to protect the biosphere and a social equity imperative to create equal access to resources and maximize human well-being. We have worked on its theoretical foundations and its practical implementation in many different global contexts and are able to transform public dialogue and input in order to quantify and evaluate components of the most promising action paths for achieving stakeholder sustainability goals.

Our work is designed to demonstrate how sustainable development provides an effective set of organizing principles to guide the seeking of sound solutions, whether one is working on community-based strategic planning design and implementation, conservation-based development and biodiversity maintenance, adaptive coastal zone management, watershed assessment and protection, sustainable agriculture, integrated global climate change mitigation, sustainable economic development in forest-dependent communities, regional comprehensive planning, urban planning and sustainable redesign including low impact development, green building/energy conservation, dispute resolution and mediation, sustainability education and communication, or advancement of ecotourism for sustainable economic development.

APPENDIX G

About The Dauphin Island Project [26]

Achieving community sustainability requires understanding connected economic, social, and environmental consequences of actions that support informed choices allowing people to lead healthy, productive, and enjoyable lives, now and in the future. Designing successful sustainable development strategies reveals a tight connection between resilience, diversity, and long-lasting stability of social-ecological systems. Dauphin Island (AL) wanted to secure a resilient and sustainable future after experiencing destruction from two hurricanes.

Leaders recognized the importance of natural resources and ecologic systems in supporting both economic development and societal well-being, as represented by maintenance and improvement in quality of life and preservation of cultural integrity. Likewise, the community showed a deep concern for environmental responsibility as it related to the social and economic capacity concerns of people. Accordingly the Town expressed fear for potential uncontrolled growth that might degrade resources and the community's quality of life following hurricane destructive impacts. These potential changes on the island landscaped caused anxiety about community well-being, prompting the community to pose a number of questions it felt needed to be answered during a community-wide strategic planning process. Discussions around this project also motivated the community's articulation of needed emphasis on "sustainable" development for effectively influencing the direction and momentum of the change affecting resource management, land-use, and community growth over the next several decades in a way that would promote resiliency. Wanting to be in control of their own destiny the community inspired stakeholders to engage in strategic planning and build consensus on sustainable development programs that would collectively improve the well-being of all residents.

During 10 months of a transparent, all-inclusive public consultation process, culminating in a community initiated, driven, and concluded strategic plan, stakeholders designed a program of consensus-building and policy-making toward a more sustainable community with a resilient future. Facilitated stakeholder groups used the Community Capitals Framework to evaluate how various issues historically played important roles in community development. A "spiraling capital assets" model was employed to define points of decline and potential strategic improvement milestones. Resulting plans included shifting the tax base from reliance on expensive rental home lodging and property taxes to growing a more diverse, small business community emphasizing cultural heritage. As an outcome of the planning processes stakeholders examined all community assets (environmental, cultural, historic, etc.) they possessed to determine leverage points for reversing rural economic leakage patterns and promoting new local forms of value-added economic development that protected environmental resources.

Through a public consultation process strategic actions were identified that would allow the community to become more sustainable and resilient than it had been in the past. Emphasis of this strategic effort was placed upon shifting their economy from one dominated by expensive rental home lodging and property taxes to a more diverse small business community. In addition, the community conducted an intensive examination into its internal assets (environmental, cultural, historic, etc.) in order to reverse their significant rural economic leakage patterns and to regain their sense of community around the environment of a small fishing village, which had been their history. The strategic planning process defined a path of action that could prove resilient and sustainable because it addressed four areas the community felt extremely dedicated to for its future. First, they were committed to partnering for the community's success, which included creating a shared vision, strategizing to achieve that vision, and assuming full community responsibility. Second, they firmly believed in protecting their future through community-based conservation development and environmentally sound infrastructure expansion. Third, they articulated that in order to build a vibrant community they would have to develop a "sense of community," preserve their cultural integrity, and consider how best to meet the needs of a local workforce with strategies for affordability and adequate access to health care and education. Finally, the public consultation process identified means they could pursue to enrich the community experience through conservation-based economic systems, sound land-use

and urban design, and appropriate access and transportation mobility that would be sensitive to the pristine natural environment of the Island.

The need to account for resilience in a world of transformations was a perspective that became embedded in Dauphin Island strategies and policy of sustainable community development programming. Coupled systems of humans and nature are complex and uncertain, in terms of how they anticipate and respond to natural disasters. The community learned the capacity to deal with the types of uncertainty and surprises required novel approaches, creative combinations of strategies, and the ability to adapt in a changing environment. They recognized that resilience-building increased the capacity of a social-ecological system to cope with surprise. Accelerating learning and supporting novel approaches that limited vulnerability and expanded the community's understanding of the occurrence and impacts of natural disasters seemed to be critical components of building community resilience.

The Dauphin Island experience of desiring to achieve a more resilient and sustainable community from efforts to reinvent itself after two natural disasters serves as an excellent example of building community capacity through vision and leadership. Citizens were provided with the information and opportunities necessary to participate meaningfully in decision-making (citizen engagement), and all affected people were encouraged to participate in policy formulation and implementation (responsibility). As a result of the lens of sustainability they chose to look through in their exploration of possibilities, their decision-making considered the full environmental, economic, and social costs (full cost accounting) to ensure that all projects and programs proposed for both the short- and long-term contributed to the sustainability vision for the community and provided them with increased economic security.

The Dauphin Island Project was recently selected as a Finalist in the International Association of Public Participation's (IAP2) 2009 Project of the Year Award (http://www.iap2.org/associations/4748/files/CoreValues_2009StateofthePractice.pdf). The project was acknowledged for its participatory sustainable community development program to design a sustainable community strategic plan for Dauphin Island, AL (http://www.eeeee.net/dauphin_island/dauphinisland.htm). The international recognition by IAP2 on pages 8 and 67 in the above linked report acknowledged the diversity of environmental, social, and economic issues addressed, as well as the project's promotion of the IAP2 Core Values in public participation.

APPENDIX H

UNESCO World Heritage Selection Criteria [27]

The Criteria for Selection

To be included on the World Heritage List, sites must be of outstanding universal value and meet at least one out of ten selection criteria. These criteria are explained in the Operational Guidelines for the Implementation of the World Heritage Convention which, besides the text of the Convention, is the main working tool on World Heritage. The criteria are regularly revised by the Committee to reflect the evolution of the World Heritage concept itself.

Until the end of 2004, World Heritage sites were selected on the basis of six cultural and four natural criteria. With the adoption of the revised Operational Guidelines for the Implementation of the World Heritage Convention, only one set of ten criteria exists.

	Cultural criteria	Natural criteria
Operational Guidelines 2002	(i) (ii) (iii) (iv) (v) (vi)	(i) (ii) (iii) (iv)
Operational Guidelines 2005	(i) (ii) (iii) (iv) (v) (vi) (viii) (ix) (vii) (x)	

Selection criteria:

- i. to represent a masterpiece of human creative genius;
- ii. to exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;
- iii. to bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared;
- iv. to be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;
- v. to be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change;
- vi. to be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance. (The Committee considers that this criterion should preferably be used in conjunction with other criteria);
- vii. to contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance;
- viii. to be outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features;
- ix. to be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals;
- x. to contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation.

The protection, management, authenticity and integrity of properties are also important considerations.

Since 1992 significant interactions between people and the natural environment have been recognized as cultural landscapes.¹

APPENDIX I

UNESCO World Heritage Tentative Form [17]

Tentative List Submission Format

Annex 2



TENTATIVE LIST SUBMISSION FORMAT



STATE PARTY:

DATE OF SUBMISSION:

Submission prepared by:

Name:

E-mail:

Address:

Fax:

Institution:

Telephone:

NAME OF PROPERTY:

State, Province or Region:

Latitude and Longitude, or UTM coordinates:

DESCRIPTION:

Justification of Outstanding Universal Value:

(Preliminary identification of the values of the property which merit inscription on the World Heritage List)

Criteria met [see Paragraph 77 of the *Operational Guidelines*]:

(Please tick the box corresponding to the proposed criteria and justify the use of each below)

☐ (i) ☐ (ii) ☐ (iii) ☐ (iv) ☐ (v) ☐ (vi) ☐ (vii) ☐ (viii) ☐ (ix) ☐ (x)

Statements of authenticity and/or integrity [see Paragraphs 78-95 of the *Operational Guidelines*]:

Comparison with other similar properties:

(The comparison should outline similarities with other properties on the World Heritage List or not, and the reasons that make the property stand out)

- The Tentative List submission format is available from the UNESCO World Heritage Centre and at the following Web address: <http://whc.unesco.org/en/tentativelists>
- Further guidance on the preparation of Tentative Lists can be found in Paragraphs 62-67 of the *Operational Guidelines*.
- An example of a completed Tentative List submission format can be found at the following Web address: <http://whc.unesco.org/en/tentativelists>
- All Tentative Lists submitted by States Parties are available at the following Web address: <http://whc.unesco.org/en/tentativelists>
- The original signed version of the completed Tentative List submission format should be sent in English or French to: UNESCO World Heritage Centre, 7 place de Fontenoy, 75352 Paris 07 SP, France
- States Parties are encouraged to also submit this information in-electronic format (diskette or CD-Rom) or by e-mail to wh-tentativelists@unesco.org

APPENDIX J

Government and Non-Government Organization Contact Information

1) The World Heritage Centre [28]

United Nations Educational, Scientific and Cultural Organization
7, place de Fontenoy
75352 Paris 07 SP, France
Tel: +33-(0)1-45 68 24 96
Fax: +33-(0)1-45 68 55 70
E-Mail: wh-info@unesco.org

2) Maria-Paz Fernandez Undurraga [28]

Secretary
Latin America and the Caribbean Section (CLT/WHC/LAC)
World Heritage Centre
7, place de Fontenoy
75352 Paris
France
Email: MP.Fernandez@unesco.org
Tel: +33-(0)1-4568-1091

3) National Environment and Planning Agency (NEPA) [29]

10 & 11 Caledonia Avenue, Kingston 5
Tel: 876-754-7540 Fax: 876-754-7595/6
Toll Free: 876-1-888-991-5005

4) Jamaica National Heritage Trust [30]

Headquarters House
79 Duke Street, Kingston, Jamaica W.I.
Telephone: (876) 922-1287 -8 / 922-3990
Fax: (876) 967-1703
email: webmaster@jnht.com, jnht@cwjamaica.com

5) Jamaica UNESCO Relations [31]

Official relations
Joined UNESCO: 7 November 1962
Head of State and/or Government in relation with UNESCO
Prime Minister: The Hon. Bruce GOLDING
Permanent Delegation to UNESCO
H. E. Mrs Marcia Gilbert-Roberts
Ambassador Extraordinary and Plenipotentiary of Jamaica to Belgium, Permanent Delegate
(10/8/2007)
Permanent Delegation of Jamaica to UNESCO
Bureaux M4.09/M4.10 1, rue Miollis 75732 Paris Cedex 15
Telephone: +33 (0) 1.45.68.33.60
Fax: +33 (0) 1.43.06.84.51
E-mail: dl.jamaïque@unesco-delegations.org
National Commission for UNESCO
*Chairperson: Hon. Olivia Grange**
Secretary-General: Mr Everton Hannam
Jamaica National Commission for UNESCO
25, Dominica Drive The Towers, 3rd Floor Kingston 5 Jamaica
Telephone: (1.876) 618 13 33; (1.876) 926 54 80
Fax: (1.876) 929 40 22
E-mail: 2ajamaica.natcom@unesco.org; ehannam@hotmail.com;
Web site: www.jncunesco.gov.jm

Table J.1
Representation on the Executive Board

Title	Name	Years	Sessions
Member	Mr Hector Wynter	1970-1976	86-100
Chairperson	Mr Hector Wynter	1974-1976	96-100
Member	Ms Phyllis Claire MacPherson-Russell	1980-1981	111-112
Member	Mr Hector Wynter	1981-1985	112-122
Member/Representative	Mr Rex Nettleford	1991-1995	138-147
Representative		2001-2005	163-172

6) Jamaica Conservation and Development Trust [32]

29 Dumbarton Avenue, Kingston, t
 960-2848/49 or 920 8278/79
<http://www.greenjamaica.or>
 64 KNUTSFORD BOULEVARD, KINGSTON 5
 TELEPHONE: 920-4926/920-4924
 FAX: 920-4944
 E-mail: mts@cwjamaica.com
g.jm/content/home/

7) Ministry of Tourism [33]

64 KNUTSFORD BOULEVARD, KINGSTON 5
 TELEPHONE: 920-4926/920-4924
 FAX: 920-4944
 E-mail: mts@cwjamaica.com

APPENDIX K

Joggins Fossil Cliffs Statement of Universal Value [34]

Values

The Joggins Fossil Cliffs have been termed the “coal age Galápagos” and are the world reference site for the “Coal Age”. Their complete and accessible fossil-bearing rock exposures provide the best evidence known of the iconic features of the Pennsylvanian (or Carboniferous) period of Earth History. Criterion (viii): Earth’s history, geological and geomorphic features and processes: The “grand exposure” of rocks at Joggins Fossil Cliffs contains the best and most complete known fossil record of terrestrial life in the iconic “Coal Age”: the Pennsylvanian (or Carboniferous) period in Earth’s history. The site bears witness to the first reptiles in Earth history, which are the earliest representatives of the amniotes, a group of animals that includes reptiles, dinosaurs, birds, and mammals. Upright fossil trees are preserved at a series of levels in the cliffs together with animal, plant and trace fossils that provide environmental context and enable a complete reconstruction to be made of the extensive fossil forests that dominated land at this time, and are now the source of most of the world’s coal deposits. The property has played a vital role in the development of seminal geological and evolutionary principles, including through the work of Sir Charles Lyell and Charles Darwin, for which the site has been referred to as the “coal age Galápagos”.

Integrity

The boundaries of the property are clearly defined in relation to logical stratigraphic criteria and include all of the areas necessary to fully display the fossil record of Joggins including the cliff face and foreshore rock exposures, and include both the most fossiliferous strata and younger and older rocks that provide geological context. The inland extent of the property is defined based on the eroding top of the cliffs and this is a fully justifiable and logical basis to cope with the dynamic nature of this coastal property. A relatively narrow buffer zone is defined, which is not part of the inscribed property, but is sufficient to control coastal development which could otherwise threaten the values of the property.

Requirements for Protection and Management

The property has effective legal protection and has the strong support of all levels of government, including in relation to the provision of funding. Some aspects of the legislation, such as for the licensing of fossil collection are cumbersome and would benefit from review, although can be better implemented if site managers are empowered to do so. The site is well resourced, including through the provision of a new visitor centre, and is managed in a way that can be considered to set international standards. The effective process of community involvement and partnerships between scientists, museums and economic interests are also noted, and the biggest challenge of the property will be to maintain the level of performance and resources required in the future.

APPENDIX L

Nomination Form [17]

*Format for the nomination of properties for inscription
on the World Heritage List*

Annex 5



FORMAT FOR THE NOMINATION OF PROPERTIES FOR INSCRIPTION ON THE
WORLD HERITAGE LIST



**This Format must be used for all nominations
submitted after 2 February 2005**

- The Nomination Format is available at the following Web address: <http://whc.unesco.org/en/nominationform>
- Further guidance on the preparation of nominations can be found in Section III of the *Operational Guidelines*
- The original signed version of the completed Nomination Format should be sent in English or French to
UNESCO World Heritage Centre
7, place de Fontenoy
75352 Paris 07 SP
France
Telephone: +33 (0) 1 4568 1571
Fax: +33 (0) 1 4568 5570
E-mail: wh-nominations@unesco.org

*Format for the nomination of properties for inscription
on the World Heritage List*

Annex 5

Executive Summary

This information, to be provided by the State Party, will be updated by the Secretariat following the decision by the World Heritage Committee. It will then be returned to the State Party confirming the basis on which the property is inscribed on the World Heritage List.

State Party	
State, Province or Region	
Name of Property	
Geographical coordinates to the nearest second	
Textual description of the boundary(ies) of the nominated property	
A4 (or "letter") size map of the nominated property, showing boundaries and buffer zone (if present)	Attach A4 (or "letter") size map
Justification Statement of Outstanding Universal Value (text should clarify what is considered to be the outstanding universal value embodied by the nominated property)	
Criteria under which property is nominated (itemize criteria) (see Paragraph 77 of the <i>Operational Guidelines</i>)	
Name and contact information of official local institution/agency	Organization: Address: Tel: Fax: E-mail: Web address:

*Format for the nomination of properties for inscription
on the World Heritage List*

Annex 5

Properties for inscription on the World Heritage List

Note: In preparing the nomination, States Parties should use this format but delete the explanatory notes.

NOMINATION FORMAT	EXPLANATORY NOTES
1. Identification of the Property	<p>Together with Section 2, this is the most important section in the nomination. It must make clear to the Committee precisely where the property is located and how it is geographically defined. In the case of serial nominations, insert a table that shows the name of the component part, region (if different for different components), coordinates, area and buffer zone. Other fields could also be added (page reference or map number, etc.) that differentiate the several components.</p>
1.a Country (and State Party if different)	
1.b State, Province or Region	
1.c Name of Property	<p>This is the official name of the property that will appear in published material about World Heritage. It should be concise. Do not exceed 200 characters, including spaces and punctuation.</p> <p>In the case of serial nominations (see Paragraphs 137-140 of the <i>Operational Guidelines</i>), give a name for the ensemble (e.g., <i>Baroque Churches of the Philippines</i>). Do not include the name of the components of a serial nomination, which should be included in a table as part of 1.d and 1.f.</p>
1.d Geographical coordinates to the nearest second	<p>In this space provide the latitude and longitude coordinates (to the nearest second) or UTM coordinates (to the nearest 10 metres) of a point at the approximate centre of the nominated property. Do not use other coordinate systems. If in doubt, please consult the Secretariat.</p> <p>In the case of serial nominations, provide a table showing the name of each property, its region (or nearest town as appropriate), and the coordinates of its centre point. Coordinate format examples:</p> <p>N 45° 06' 05" W 15° 37' 56" or UTM Zone 18 Easting: ⁵45670 Northing: ⁴⁵86750</p>

*Format for the nomination of properties for inscription
on the World Heritage List*

Annex 5

NOMINATION FORMAT	EXPLANATORY NOTES
<p>1.e Maps and plans, showing the boundaries of the nominated property and buffer zone</p>	<p>Annex to the nomination, and list below with scales and dates:</p> <p>(i) An original copy of a topographic map showing the property nominated, at the largest scale available which shows the entire property. The boundaries of the nominated property and buffer zone should be clearly marked. Either on this map, or an accompanying one, there should also be a record of the boundaries of zones of special legal protection from which the property benefits. Multiple maps may be necessary for serial nominations.</p> <p>Maps may be obtained from the addresses shown at the following Web address http://whc.unesco.org/en/mapagencies</p> <p>If topographic maps are not available at the appropriate scale, other maps may be substituted. All maps should be capable of being geo-referenced, with a minimum of three points on opposite sides of the maps with complete sets of coordinates. The maps, untrimmed, should show scale, orientation, projection, datum, property name and date. If possible, maps should be sent rolled and not folded.</p> <p>Geographic Information in digital form is encouraged if possible, suitable for incorporation into a GIS (Geographic Information System). In this case the delineation of the boundaries (nominated property and buffer zone) should be presented in vector form, prepared at the largest scale possible. The State Party is invited to contact the Secretariat for further information concerning this option.</p> <p>(ii) A Location Map showing the location of the property within the State Party,</p> <p>(iii) Plans and specially prepared maps of the property showing individual features are helpful and may also be annexed.</p> <p>To facilitate copying and presentation to the Advisory Bodies and the World Heritage Committee A4 (or "letter") size reduction and a digital image file of the principal maps should be included in the nomination text if possible.</p> <p>Where no buffer zone is proposed, the nomination must include a statement as to why a buffer zone is not required for the proper conservation of the nominated property.</p>

*Format for the nomination of properties for inscription
on the World Heritage List*

Annex 5

NOMINATION FORMAT	EXPLANATORY NOTES
<p>1.f Area of nominated property (ha.) and proposed buffer zone (ha.)</p> <p>Area of nominated property: _____ ha</p> <p>Buffer zone _____ ha</p> <p>Total _____ ha</p>	<p>In the case of serial nominations (see Paragraphs 137-140 of the <i>Operational Guidelines</i>), insert a table that shows the name of the component part, region (if different for different components), coordinates, area and buffer zone.</p> <p>The serial nomination table should also be used to show the size of the separate nominated areas and of the buffer zone(s).</p>
<p>2. Description</p>	
<p>2.a Description of Property</p>	<p>This section should begin with a description of the nominated property at the date of nomination. It should refer to all the significant features of the property.</p> <p>In the case of a cultural property this section will include a description of whatever elements make the property culturally significant. It could include a description of any building or buildings and their architectural style, date of construction, materials, etc. This section should also describe important aspects of the setting such as gardens, parks etc. For a rock art site, for example, the description should refer to the rock art as well as the surrounding landscapes. In the case of an historic town or district, it is not necessary to describe each individual building, but important public buildings should be described individually and an account should be given of the planning or layout of the area, its street pattern and so on.</p> <p>In the case of a natural property the account should deal with important physical attributes, geology, habitats, species and population size, and other significant ecological features and processes. Species lists should be provided where practicable, and the presence of threatened or endemic taxa should be highlighted. The extent and methods of exploitation of natural resources should be described.</p> <p>In the case of cultural landscapes, it will be necessary to produce a description under all the matters mentioned above. Special attention should be paid to the interaction of man and nature.</p> <p>The entire nominated property identified in section 1 (Identification of the Property) should be described. In the case of serial nominations (see Paragraphs 137-140 of the <i>Operational Guidelines</i>), each of the component parts should be separately described.</p>
<p>2.b History and Development</p>	<p>Describe how the property has reached its present form and condition and the significant changes that it has undergone, including recent conservation history.</p>

*Format for the nomination of properties for inscription
on the World Heritage List*

Annex 5

NOMINATION FORMAT	EXPLANATORY NOTES
	<p>This should include some account of construction phases in the case of monuments, sites, buildings or groups of buildings. Where there have been major changes, demolitions or rebuilding since completion they should also be described.</p> <p>In the case of a natural property, the account should cover significant events in history or pre-history that have affected the evolution of the property and give an account of its interaction with humankind. This will include changes in the use of the property and its natural resources for hunting, fishing or agriculture, or changes brought about by climatic change, floods, earthquake or other natural causes.</p> <p>Such information will also be required in the case of cultural landscapes, where all aspects of the history of human activity in the area needs to be covered.</p>
<p>3. Justification for Inscription</p>	<p>This section must make clear why the property is considered to be of "outstanding universal value".</p> <p>The whole of this section of the nomination should be written with careful reference to the criteria for inscription found in Paragraph 75 of the <i>Operational Guidelines</i>. It should not include detailed descriptive material about the property or its management, which are addressed in other sections, but should concentrate on why the property is important.</p>
<p>3.a Criteria under which inscription is proposed (and justification for inscription under these criteria)</p>	<p>See Paragraph 77 of the <i>Operational Guidelines</i>.</p> <p>Provide a separate justification for each criterion cited.</p> <p>State briefly how the property meets those criteria under which it has been nominated (where necessary, make reference to the "description" and "comparative analysis" sections below, but do not duplicate the text of these sections.).</p>
<p>3.b Proposed Statement of Outstanding Universal Value</p>	<p>Based on the criteria used above, the proposed Statement of Outstanding Universal Value should make clear why the property is considered to merit inscription on the World Heritage List (see Paragraphs 154-157 of the <i>Operational Guidelines</i>). It may be a unique survival of a particular building form or habitat or designed town. It may be a particularly fine or early or rich survival and it may bear witness to a vanished culture, way of life or eco-system. It may comprise assemblages of threatened endemic species, exceptional eco-systems, outstanding landscapes or other natural phenomena.</p>
<p>3.c Comparative analysis (including state of conservation of similar properties)</p>	<p>The property should be compared to similar properties, whether on the World Heritage List or not. The comparison should outline the similarities the nominated property has with other properties and the reasons that make the nominated property stand out. The comparative</p>

*Format for the nomination of properties for inscription
on the World Heritage List*

Annex 5

NOMINATION FORMAT	EXPLANATORY NOTES
3.d Integrity and/or Authenticity	<p>The statement of integrity and/or authenticity should demonstrate that the property fulfils the conditions of integrity and/or authenticity set out in Section II.D of the <i>Operational Guidelines</i>, which describe these conditions in greater detail.</p> <p>In the case of a cultural property it should also record whether repairs have been carried out using materials and methods traditional to the culture, in conformity with the Nara Document (1995) (see Annex 4).</p> <p>In the case of natural properties it should record any intrusions from exotic species of fauna or flora and any human activities that could compromise the integrity of the property.</p>
4. State of Conservation and factors affecting the Property	
4.a Present state of conservation	<p>The information presented in this section constitutes the base-line data necessary to monitor the state of conservation of the nominated property in the future. Information should be provided in this section on the physical condition of the property, any threats to the integrity of the property and conservation measures at the property (see Paragraph 132).</p> <p>For example, in a historic town or area, buildings, monuments or other structures needing major or minor repair works, should be indicated as well as the scale and duration of any recent or forthcoming major repair projects.</p> <p>In the case of a natural property, data on species trends or the integrity of eco-systems should be provided. This is important because the nomination will be used in future years for purposes of comparison to trace changes in the condition of the property.</p> <p>For the indicators and statistical benchmarks used to monitor the state of conservation of the property see section 6 below.</p>
4.b Factors affecting the property	<p>This section should provide information on all the factors which are likely to affect or threaten the Outstanding Universal Value of a property. It should also describe any difficulties that may be encountered in addressing such problems. Not all the factors suggested in this section are appropriate for all properties. They are indicative and are intended to assist the State Party to identify the factors that are relevant to each specific property.</p>

*Format for the nomination of properties for inscription
on the World Heritage List*

Annex 5

NOMINATION FORMAT	EXPLANATORY NOTES
(i) Development Pressures (e.g., encroachment, adaptation, agriculture, mining)	Itemize types of development pressures affecting the property, e.g., pressure for demolition, rebuilding or new construction; the adaptation of existing buildings for new uses which would harm their authenticity or integrity; habitat modification or destruction following encroaching agriculture, forestry or grazing, or through poorly managed tourism or other uses; inappropriate or unsustainable natural resource exploitation; damage caused by mining; the introduction of exotic species likely to disrupt natural ecological processes, creating new centres of population on or near properties so as to harm them or their settings.
(ii) Environmental pressures (e.g., pollution, climate change, desertification)	List and summarize major sources of environmental deterioration affecting building fabric, flora and fauna.
(iii) Natural disasters and risk preparedness (earthquakes, floods, fires, etc.)	Itemize those disasters which present a foreseeable threat to the property and what steps have been taken to draw up contingency plans for dealing with them, whether by physical protection measures or staff training.
(iv) Visitor/tourism pressures	Describe the "carrying capacity" of the property. Can it absorb the current or likely number of visitors without adverse effects? An indication should also be given of the steps taken to manage visitors and tourists. Possible forms of deterioration due to visitor pressure are: wear on stone, timber, grass or other ground surfaces; increases in heat or humidity levels; disturbances to species habitats; or disruption of traditional cultures or ways of life.
(v) Number of inhabitants within the property and the buffer zone Estimated population located within: Area of nominated property _____ Buffer zone _____ Total _____ Year _____	Give the best available statistics or estimate of the number of inhabitants living within the nominated property and any buffer zone. Indicate the year this estimate or count was made.
5. Protection and Management of the Property	This section of the nomination is intended to provide a clear picture of the legislative, regulatory, contractual, planning, institutional and/or traditional measures (see Paragraph 132 of the <i>Operational Guidelines</i>) and the management plan or other management system (Paragraphs 108 to 118 of the <i>Operational Guidelines</i>) that is in place to protect and manage the property as

*Format for the nomination of properties for inscription
on the World Heritage List*

Annex 5

NOMINATION FORMAT	EXPLANATORY NOTES
	and protective measures and with the practicalities of day-to-day administration and management.
5.a Ownership	Indicate the major categories of land ownership (including State, Provincial, private, community, traditional, customary and non-governmental ownership, etc.).
5.b Protective designation	List the relevant legal, regulatory, contractual, planning, institutional and/ or traditional status of the property: For example, national or provincial park; historic monument, protected area under national law or custom; or other designation. Provide the year of designation and the legislative act(s) under which the status is provided. If the document cannot be provided in English or French, an English or French executive summary should be provided highlighting the key provisions.
5.c Means of implementing protective measures.	Describe how the protection afforded by its legal, regulatory, contractual, planning, institutional and/ or traditional status indicated in section 5.b. actually works.
5.d Existing plans related to municipality and region in which the proposed property is located (e.g., regional or local plan, conservation plan, tourism development plan)	List the agreed plans which have been adopted with the date and agency responsible for preparation. The relevant provisions should be summarized in this section. A copy of the plan should be included as an attached document as indicated in section 7.b. If the plans exist only in a language other than English or French, an English or French executive summary should be provided highlighting the key provisions.
5.e Property management plan or other management system	As noted in Paragraphs 132 of the <i>Operational Guidelines</i> , an appropriate management plan or other management system is essential and shall be provided in the nomination. Assurances of the effective implementation of the management plan or other management system are also expected. A copy of the management plan or documentation of the management system shall be annexed to the nomination, in English or French as indicated in section 7.b. If the management plan exists only in a language other than English or French, an English or French detailed description of its provisions shall be annexed. Give the title, date and author of management plans annexed to this nomination. A detailed analysis or explanation of the management plan or a documented management system shall be provided.
5.f Sources and levels of finance	Show the sources and level of funding which are available to the property on an annual basis. An

*Format for the nomination of properties for inscription
on the World Heritage List*

Annex 5

NOMINATION FORMAT	EXPLANATORY NOTES
	estimate could also be given of the adequacy or otherwise of resources available, in particular identifying any gaps or deficiencies or any areas where assistance may be required.
5.g Sources of expertise and training in conservation and management techniques	Indicate the expertise and training which are available from national authorities or other organizations to the property.
5.h Visitor facilities and statistics	As well as providing any available statistics or estimates of visitor numbers or patterns over several years, this section could describe the facilities available on site for visitors, for example interpretation/explanation, whether by trails, guides, notices or publications; property museum, visitor or interpretation centre; overnight accommodation; restaurant or refreshment facilities; shops; car parking; lavatories; search and rescue.
5.i Policies and programmes related to the presentation and promotion of the property	This section refers to Articles 4 and 5 of the <i>Convention</i> regarding the presentation and transmission to future generations of the cultural and natural heritage. States Parties are encouraged to provide information on the policies and programmes for the presentation and promotion of the nominated property.
5.j Staffing levels (professional, technical, maintenance)	Indicate the skills and training which are available at the property.
6. Monitoring	This section of the nomination is intended to provide the evidence for the state of conservation of the property which can be reviewed and reported on regularly so as to give an indication of trends over time.
6.a Key indicators for measuring state of conservation	<p>List in table form those key indicators that have been chosen as the measure of the state of conservation of the whole property (see section 4.a above). Indicate the periodicity of the review of these indicators and the location where the records are kept. They could be representative of an important aspect of the property and relate as closely as possible to the Statement of Outstanding Universal Value (see section 2.b above). Where possible they could be expressed numerically and where this is not possible they could be of a kind which can be repeated, for example by taking a photograph from the same point. Examples of good indicators are the:</p> <ul style="list-style-type: none"> (i) number of species, or population of a keystone species on a natural property; (ii) percentage of buildings requiring major repair in a historic town or district; (iii) number of years estimated to elapse before a major conservation programme is likely to be completed; (iv) stability or degree of movement in a particular building or element of a building; (v) rate at which encroachment of any kind on a property has increased or diminished.

*Format for the nomination of properties for inscription
on the World Heritage List*

Annex 5

NOMINATION FORMAT		EXPLANATORY NOTES
Indicator	Periodicity	Location of Records
NOMINATION FORMAT		EXPLANATORY NOTES
6.b	Administrative arrangements for monitoring property	Give the name and contact information of the agency(ies) responsible for the monitoring referenced in 6.a.
6.c	Results of previous reporting exercises	List, with a brief summary, earlier reports on the state of conservation of the property and provide extracts and references to published sources (for example, reports submitted in compliance with international agreements and programmes, e.g., Ramsar, MAB).
7.	Documentation	This section of the nomination is the check-list of the documentation which shall be provided to make up a complete nomination.
7.a	Photographs, slides, image inventory and authorization table and other audiovisual materials	<p>States Parties shall provide a sufficient number of recent images (prints, slides and, where possible, electronic formats, videos and aerial photographs) to give a good general picture of the property.</p> <p>Slides shall be in 35mm format and electronic images in jpg format at a minimum of 300 dpi (dots per inch) resolution. If film material is provided, Beta SP format is recommended for quality assurances.</p> <p>This material shall be accompanied by the image inventory and photograph and audiovisual authorization form as set out below.</p> <p>At least one photograph that may be used on the public web page illustrating the property shall be included.</p> <p>States Parties are encouraged to grant to UNESCO, in written form and free of charge, the non exclusive cession of rights to diffuse, to communicate to the public, to publish, to reproduce, to exploit, in any form and on any support, including digital, all or part of the images provided and license these rights to third parties.</p> <p>The non exclusive cession of rights does not impinge upon intellectual property rights (rights of the photographer / director of the video or copyright owner if different) and that when the images are distributed by UNESCO a credit to the photographer / director of the video is always given, if clearly provided in the form.</p> <p>All possible profits deriving from such cession</p>

*Format for the nomination of properties for inscription
on the World Heritage List*

Annex 5

NOMINATION FORMAT	EXPLANATORY NOTES
	of rights will go to the World Heritage Fund.

IMAGE INVENTORY AND PHOTOGRAPH AND AUDIOVISUAL AUTHORIZATION FORM

Id. No	Format (slide/print/video)	Caption	Date of Photo (mo/yr)	Photographer/Director of the video	Copyright owner (if different than photographer/director of video)	Contact details of copyright owner (Name, address, tel/fax, and e-mail)	Non exclusive cession of rights

NOMINATION FORMAT	EXPLANATORY NOTES
7.b Texts relating to protective designation, copies of property management plans or documented management systems and extracts of other plans relevant to the property	Attach the texts as indicated in sections 5.b, 5.d and 5.e above.
7.c Form and date of most recent records or inventory of property	Provide a straightforward statement giving the form and date of the most recent records or inventory of the property. Only records that are still available should be described.
7.d Address where inventory, records and archives are held	Give the name and address of the agencies holding inventory records (buildings, monuments, flora or fauna species).
7.e Bibliography	List the principal published references, using standard bibliographic format.
8. Contact Information of responsible authorities	This section of the nomination will allow the Secretariat to provide the property with current information about World Heritage news and other issues.
8.a Preparer	Provide the name, address and other contact information of the individual responsible for

*Format for the nomination of properties for inscription
on the World Heritage List*

Annex 5

NOMINATION FORMAT	EXPLANATORY NOTES
Name: Title: Address: City, Province/State, Country: Tel: Fax: E-mail:	preparing the nomination. If an e-mail address cannot be provided, the information must include a fax number.
8.b Official Local Institution/Agency	Provide the name of the agency, museum, institution, community or manager locally responsible for the management of the property. If the normal reporting institution is a national agency, please provide that contact information.
8.c Other Local Institutions	List the full name, address, telephone, fax and e-mail addresses of all museums, visitor centres and official tourism offices who should receive the free <i>World Heritage Newsletter</i> about events and issues related to World Heritage.
8.d Official Web address http:// Contact name: E-mail:	Please provide any existing official web addresses of the nominated property. Indicate if such web addresses are planned for the future with the contact name and e-mail address.
9. Signature on behalf of the State Party	The nomination should conclude with the signature of the official empowered to sign it on behalf of the State Party.

APPENDIX M

UNESCO World Heritage Advisory Bodies [17]

Evaluation procedures of the Advisory Bodies for nominations

Annex 6



EVALUATION PROCEDURES OF THE ADVISORY BODIES FOR NOMINATIONS



This Annex includes:

- A. THE ICOMOS PROCEDURE FOR THE EVALUATION OF CULTURAL PROPERTIES
- B. THE IUCN PROCEDURE FOR THE EVALUATION OF NATURAL PROPERTIES
- C. ADVISORY BODY COLLABORATION - PROCEDURE FOR THE EVALUATION OF CULTURAL AND NATURAL PROPERTIES AND OF CULTURAL LANDSCAPES

For further information please also refer to Paragraphs 143-151 of the *Operational Guidelines*.

A. THE ICOMOS PROCEDURE FOR THE EVALUATION OF CULTURAL PROPERTIES

1. In carrying out its evaluation of nominations of cultural properties ICOMOS (the International Council of Monuments and Sites) is guided by the *Operational Guidelines*; (see Paragraph 148).
2. The evaluation process (see Figure 1) involves consultation of the wide range of expertise represented by the membership of ICOMOS and its National and International Committees, as well as the many other specialist networks with which it is linked. Members are also sent on expert missions to carry out confidential on-site evaluations. This extensive consultation results in the preparation of detailed recommendations that are submitted to the World Heritage Committee at its annual meetings.

Choice of experts

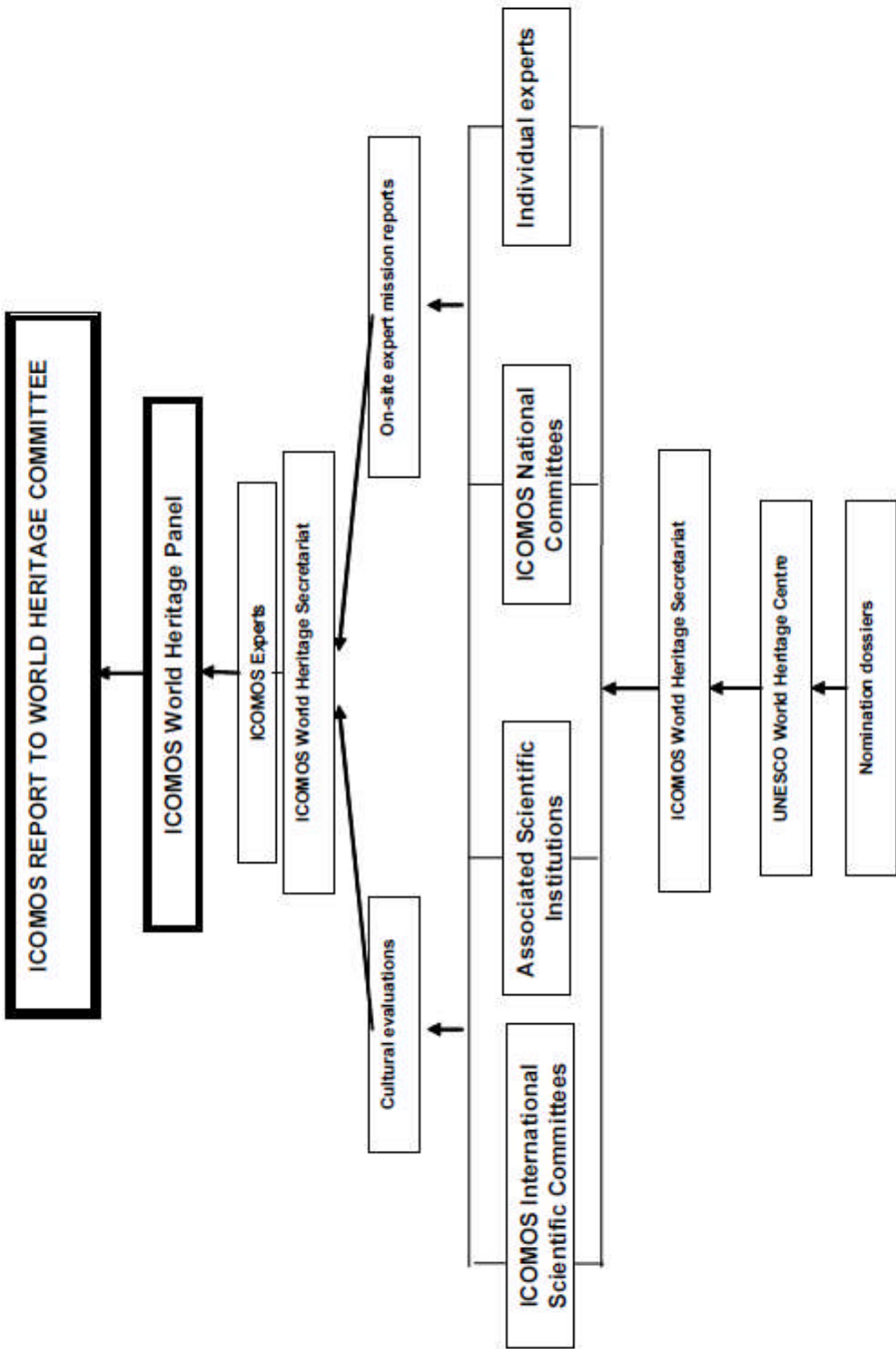
3. There is a clearly defined annual procedure for the submission of properties to the World Heritage List. Once new nominations have been checked for completeness by the UNESCO World Heritage Centre and the Advisory Bodies, the nomination dossiers are then delivered to ICOMOS, where they are handled by the ICOMOS World Heritage secretariat. The first action involved is the choice of the experts who are to be consulted. This involves two separate groups. First, there are those who can advise on the "outstanding universal value" of the nominated property. This is essentially a "library" exercise for specialist academics, and may sometimes involve non-ICOMOS members, in cases where there is no adequate expertise within the ICOMOS membership on a specific topic: an example is the occasional nomination of fossil hominid sites, where the services of palaeontologists are required.
4. The second group of experts are those with practical experience of the management, conservation, and authenticity aspects of individual properties, who are required to carry out site missions. The process of selecting these experts makes full use of the ICOMOS network. The advice of International Scientific Committees and individual members is sought, as is that of specialist bodies with whom ICOMOS has partnership agreements, such as The International Committee for the Conservation of the Industrial Heritage (TICCIH), the International Federation of Landscape Architects (IFLA), and the International Committee for the Documentation and Conservation of Monuments and Sites of the Modern Movement (DoCoMoMo).

*Evaluation procedures of the Advisory Bodies for nominations**Annex 6***Site missions**

5. In selecting experts to carry out on-site evaluation missions, the policy of ICOMOS is wherever possible to choose someone from the region in which the nominated property is located. Such experts are required to be experienced in heritage management and conservation: they are not necessarily high academic experts in the type of property. They are expected to be able to talk to site managers on a basis of professional equality and to make informed assessments of management plans, conservation practices, visitor handling, etc. They are provided with detailed briefings, which include copies of the relevant information from the dossiers. The dates and programmes of their visits are agreed in consultation with States Parties, who are requested to ensure that ICOMOS evaluation missions are given a low profile so far as the media are concerned. ICOMOS experts submit their reports in confidence to the Executive Committee on practical aspects of the properties concerned, and premature publicity can cause embarrassment both to ICOMOS and to the World Heritage Committee.

World Heritage Panel

6. The two reports (cultural assessment and site mission report) that emerge from these consultations are received by the ICOMOS secretariat in Paris, and from them a draft evaluation is prepared. This contains a brief description and history of the property, summaries of its legislative protection, management, and state of conservation, comments on these aspects, and recommendations to the World Heritage Committee. Draft evaluations are then presented to a two or three-day meeting of the ICOMOS World Heritage Panel. The Panel comprises the members of the Executive Committee, who come from all parts of the world and who possess a wide range of skills and experience. The Executive Committee members are supplemented by experts in certain categories of heritage that figure on the annual list of nominations but which are not represented on the Committee.
7. Each nominated property is the subject of a 10–15 minute illustrated presentation by a representative of ICOMOS, followed by discussion. Following the objective and exhaustive examination of the nominations, the collective recommendations of ICOMOS are prepared, and the evaluations are revised and printed, for presentation to the World Heritage Committee.



B. THE IUCN PROCEDURE FOR THE EVALUATION OF NATURAL PROPERTIES

8. In carrying out its evaluation of nominations of natural properties, IUCN (the World Conservation Union) is guided by the *Operational Guidelines* (see Paragraph 148). The evaluation process (see Figure 2) involves five steps:
 - (i) **Data Assembly.** Following receipt of the nomination dossier from the World Heritage Centre, a standardised data sheet is compiled on the property by the UNEP-World Conservation Monitoring Centre (UNEP-WCMC), using the Protected Area database, and verified with the State Party during the field inspection.
 - (ii) **External Review.** The nomination is normally sent for desk review to up to 15 experts knowledgeable about the property, primarily members of IUCN's specialist Commissions and networks.
 - (iii) **Field Inspection.** One or two IUCN experts visit each nominated property to clarify details about the area, to evaluate site management and to discuss the nomination with relevant authorities and stakeholders. IUCN experts, selected for their global perspective on conservation and natural history as well as their knowledge of the *Convention*, are usually members of the IUCN World Commission on Protected Areas' World Heritage Expert Network or are IUCN secretariat staff. (This field inspection is undertaken jointly with ICOMOS in certain situations - see Part C below)
 - (iv) **Other sources of information.** IUCN may also consult additional literature and receive comments from local NGOs and others.
 - (v) **IUCN World Heritage Panel Review.** The IUCN World Heritage Panel reviews all field inspection reports, reviewers' comments, the UNEP-WCMC data sheet and other background material before finalising the text of the IUCN evaluation report for each nominated property.

Each evaluation report presents a concise summary of the outstanding universal value of the property nominated, a comparison with other similar sites and a review of integrity and management issues. It concludes with the assessment of the applicability of the criteria, and a clear recommendation to the World Heritage Committee. The UNEP-WCMC data sheets are also made available to the World Heritage Committee.

The Udvardy biogeographic classification system

9. In the evaluations, IUCN uses Udvardy's "Biogeographical Provinces of the World" (1975) biogeographic classification system. This is a classification system for freshwater and terrestrial areas of the world which enables predictions and assumptions to be made about similar biogeographical regions. The Udvardy system provides an objective means of comparing nominated properties with sites of similar climatic and ecological conditions.
10. It is stressed, however, that the Biogeographical Province concept is used as a basis for comparison only and does not imply that World Heritage properties are to be selected solely on this criterion. The guiding principle is that World Heritage properties must be of outstanding universal value.

*Evaluation procedures of the Advisory Bodies for nominations**Annex 6***Systems to identify priority areas for conservation**

11. IUCN also uses systems which identify priority areas for conservation such as the Worldwide Fund for Nature's (WWF) Global Ecoregions, WWF/IUCN's Centres of Plant Diversity, Conservation International's Biodiversity Hotspots, and Birdlife International's Endemic Bird Areas and Important Bird Areas.

Systems to evaluate properties for earth science value

12. In evaluating properties which have been nominated for their geological value, IUCN consults with a range of specialised organisations such as the UNESCO Earth Sciences Division, the International Union of Speleology and the International Union of Geological Sciences (IUGS).

Relevant publications used in the evaluation process

13. The evaluation process is aided by the publication of some 20 reference volumes on the world's protected areas published by IUCN, UNEP, UNEP-WCMC, Birdlife International and other publishers. These include:
 - (i) Reviews of Protected Area Systems in Oceania, Africa, and Asia;
 - (ii) The four volume directory of Protected Areas of the World;
 - (iii) The World Atlas of Coral Reefs;
 - (iv) The six volume Conservation Atlas series;
 - (v) The four volume "A Global Representative System of Marine Protected Areas";
 - (vi) The three volume Centres of Plant Diversity; and
 - (vii) Important Bird Areas and Endemic Bird Areas of the World
14. These documents together provide system-wide overviews which allow comparison of the conservation importance of protected areas throughout the world. With the development of the Global Strategy work for natural heritage, IUCN is increasingly using its "global overview" papers to identify gaps in natural World Heritage coverage and properties of World Heritage potential. These can be viewed on the IUCN website at <http://iucn.org/themes/wcpa/wheritage/globalstrategy.htm>

Evaluation of Cultural Landscapes (see also Annex 3)

15. IUCN has an interest in many cultural properties, especially those nominated as cultural landscapes. For that reason, it will on occasion participate in joint field inspections to nominated cultural landscapes with ICOMOS (see Part C below). IUCN's evaluation of such nominations is guided by an internal paper, "The Assessment of Natural Values in cultural landscapes", available on the IUCN web site at <http://www.iucn.org/themes/wcpa/wheritage/culturallandscape.htm>
16. In accordance with the natural qualities of certain cultural landscapes identified in Annex 3, Paragraph 11, IUCN's evaluation is concerned with the following factors:
 - (i) Conservation of natural and semi-natural systems, and of wild species of fauna and flora
 - (ii) Conservation of biodiversity within farming systems;
 - (iii) Sustainable land use;
 - (iv) Enhancement of scenic beauty;
 - (v) Ex-situ collections;

*Evaluation procedures of the Advisory Bodies for nominations**Annex 6*

- (vi) Outstanding examples of humanity's inter-relationship with nature;
- (vii) Historically significant discoveries

The following table sets each of the above list in the context of the categories of cultural landscapes in Annex 3, thereby indicating where each consideration is most likely to occur (the absence of a consideration does not mean that it will *never* occur, only that this is unlikely):

Cultural Landscape type (see also Annex 3)	Natural considerations most likely to be relevant (see Paragraph 16 above)						
Designed landscape					(v)		
Organically evolving landscape - continuous	(i)	(ii)	(iii)	(iv)			
Organically evolving landscape - fossil	(i)					(vi)	
Associative landscape							(vii)

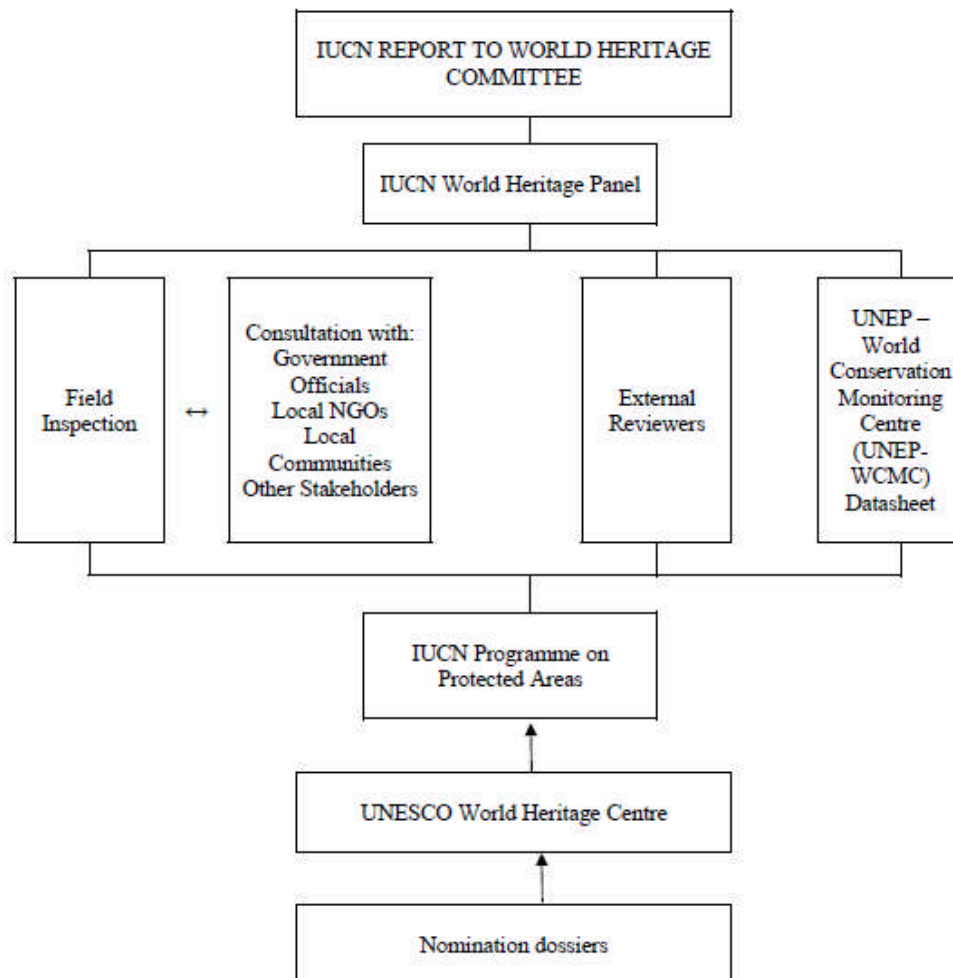
C. ADVISORY BODY COLLABORATION - THE EVALUATION OF MIXED PROPERTIES AND OF CULTURAL LANDSCAPES

Mixed properties

17. Properties that are nominated as having both natural and cultural value entail a joint IUCN and ICOMOS mission to the nominated property. Following the mission, IUCN and ICOMOS prepare separate evaluation reports of the property under the relevant criteria (see A, Paragraph 5 and B, Paragraph 9 (iii) above).

Cultural Landscapes

18. Properties nominated as Cultural Landscapes are evaluated by ICOMOS under criteria (i) - (vi) (see Paragraph 77 of the *Operational Guidelines*). IUCN is called upon by ICOMOS to review the natural values and the management of the nominated property. This has been the subject of an agreement between the Advisory Bodies. In some cases, a joint mission is required.

FIGURE 2: IUCN EVALUATION PROCEDURE

APPENDIX N

Visual Depiction of Evaluation Criteria

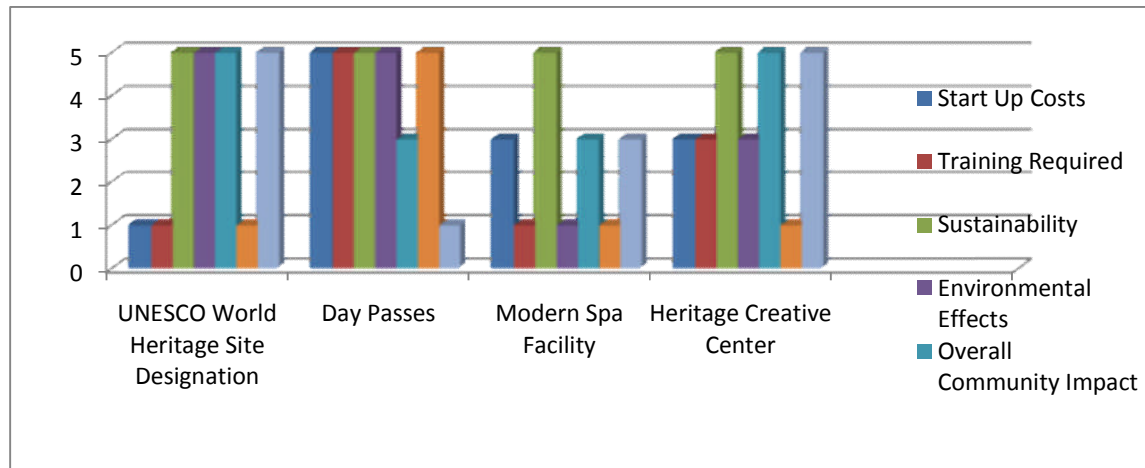


Fig. N.1 Visual Depiction of Evaluation Criteria (part 1)

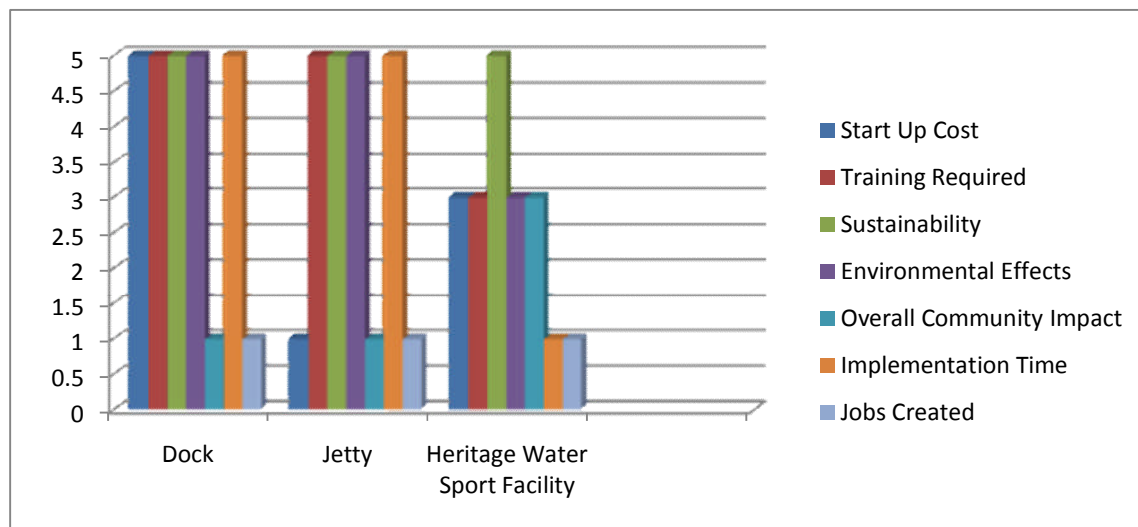


Fig. N.2 Visual Depiction of Evaluation Criteria (part 2)

APPENDIX O

Revenue Assumptions

Revenue assumptions are based on the previous descriptions of each business venture.

Day Passes: Day Passes will be included for Spa and Dock fees; 20 walk in passes sold at \$5 per day = \$100

Modern Day Spa Facility: \$100 per hour, 5 employees, 5 hr/per day ($\$100 \times 5 \times 5 \times 7 = \17500 weekly revenue potential)

Heritage Creative Center: \$500 in sales and services daily = \$3500 weekly revenue potential

Dock/Jetty: 5 dock spaces at \$50 a day ($5 \times \$50 \times 7 = \1750 weekly revenue potential)

Heritage Water Sports Facility: 10 water crafts with 8 hours of potential daily use at \$20 per hour ($10 \times 8 \times \$20 = \1600 weekly revenue potential)

It must be mentioned that a budget of \$30,000 US be allocated to professional development of employees.

a)