

JAMAICA PROTECTED AREAS TRUST

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October 10, 2008

Ms. Luisa Fernanda Neira
Department of Sustainable Development
Organization of American States
1889 F. St., NW, Suite 773-C
Washington, D.C. 20006
USA

**Re: The Inter-American Biodiversity Information Network (IABIN) RfP –
The Development of Value-Added Tools for Decision-Making**

Dear Ms. Neira:

Further to your above-mentioned request for proposal, the Jamaica Protected Area Trust and the Forest Conservation Fund (FCF), working in conjunction with the Nature Conservancy and Mountain Visions are happy to submit our attached proposal: *“JPAT - Promoting the Development of Internet-Based Eco-Knowledge Systems for Protected Area Locations Using Emerging Geospatial, Information and Networking Tools”* for your consideration.

The Jamaica Protected Area Trust (JPAT) is a public-private initiative that seeks to protect and enhance Jamaica’s natural resources and biodiversity. The JPAT website has been under development since 2004 and currently provides a starting point for Protected Areas interactive map locations, limited data and information about several major Protected Areas, including some high quality visualizations of selected locations, as well as a Conservation Network Center, inviting web users to participate. JPAT and our partners are committed to the expansion of our web site to increase educational, networking and partnering opportunities for citizens, local communities, organizations, scientific groups and government agencies.

This project supports the goals of both IABIN and JPAT of integrating natural and social data and information as vital tools for scientific research and societal decision-making related to a wide range of pressing environmental and biodiversity issues. It will therefore add content and value to IABIN by increasing Web availability of natural and social science data identification and analysis in a Geospatial context for Jamaica Protected Areas. The JPAT web site will also initiate greatly increased learning and networking opportunities to encourage more Jamaicans, and others interested, to be more involved in management decisions in the future. The interactive format of the JPAT web site will also become a model for Protected Areas in other Caribbean countries.

Luisa Fernanda Neira
Page 2
October 10, 2008

This project will therefore greatly enhance JPAT's capacity in this area.

We thank you for the opportunity to respond to this RFP, and look forward to working with your organization to fulfill our common objectives.

Yours Sincerely,

A handwritten signature in cursive script, appearing to read "Trevor O. Spence".

Trevor O. Spence
Executive Director

c: Mr. Richard Huber

Project Proposal
Inter-American Biodiversity Information Network (IABIN)
Development of Value-Added Tools for Decision-Making

A. Project Name:	“JPAT - Promoting the Development of Internet-Based Eco-Knowledge Systems for Protected Area Locations Using Emerging Geospatial, Information and Networking Tools”
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B. Cover letter signed by the authorized representative of the firm.

Please see attached cover letter.

C. Contact Information of the Firm

Name of Firm:	The Jamaica Protected Areas Trust (JPAT)
Name of Contact Person(s):	Trevor O. Spence
Address:	The Jamaica Protected Areas Trust (JPAT) Suite 203, 85 Hope Road P.O. Box 280 Kingston 6, Jamaica W.I.
Country:	Jamaica
Office Telephone:	1-(876) – 978-2927
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D. Contact Information of Associated Firm

Name of Firm:	Mountains Visions
Name of Contact Person(s):	Gary O. Grimm
Address:	2001 Canal St. Boise, Idaho 83705
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E. Project Summary (English and Spanish)

This proposal is being developed to facilitate an Internet-Based Eco-Knowledge System of New and Emerging Geospatial and Networking Tools, Data and Information for conservation locations identified by the Jamaica Protected Areas Trust. This project can also be used as a model for other Caribbean Protected Areas.

To accomplish this, a highly interactive and collaborative networking web site is being developed to encourage and facilitate the use of place and time-based natural and social science data and information in a geospatial context. The major objective of the project is to continue to create a rich and diverse data and image information ecosystem for each Protected Area. This system will also include innovative neo-geographic and networking opportunities inviting people who are interested to become more involved in collecting, collaborating and sharing information online. In addition, the use of standard and emerging methods of attaching Meta Data and Semantic tags to all data sources will be emphasized.

This effort will increasingly encourage the use of new scientific, management and community networking and geospatial Internet tools which will also result in an aggregation of more reliable and reputable data and information available to a broader public. As a consequence, decision-making opportunities for citizens, local communities, organizations, scientific groups and government agencies will improve.

La presente propuesta se diseña con el fin de facilitar un Sistema de Eco-Conocimiento por medio de la Internet con Nuevos y Emergentes Instrumentos Geoespaciales y de Redes, Datos e Información para la conservación de lugares identificados por el Fondo Jamaicano para Áreas Protegidas. Este proyecto puede ser utilizado también como un modelo para otras Áreas Protegidas en el Caribe.

Con el fin de lograr esto, se esta diseñando un sitio Web con una red altamente interactiva y de colaboración con el objeto de estimular y facilitar el uso de datos e información científicos sociales y naturales basados en espacio y tiempo dentro de un contexto geoespacial. El objetivo principal del proyecto es continuar creando un ecosistema de información con datos e imágenes ricos y diversos para cada Área Protegida. Este sistema incluirá también oportunidades innovadoras neogeográficas y de redes para invitar a aquellas personas interesadas a tener una mayor participación en la recopilación, colaboración e intercambio de información en línea. Adicionalmente, se enfatizará en el uso de métodos estándar y emergentes para la inclusión de Meta Datos y etiquetas Semánticas a todas las fuentes de datos.

Este esfuerzo estimulará de manera creciente el uso de nuevos instrumentos de Internet para las redes científicas, administrativas y comunitarias, así como geoespaciales que también resultarán en una agregación de datos e información más confiables y reconocidos que estarían disponibles a un público más amplio. Como consecuencia, se perfeccionarán las oportunidades de toma de decisión para los ciudadanos, las comunidades locales, las organizaciones, los grupos científicos y las agencias gubernamentales.

F. Project Description

1. Project Background

The Jamaica Protected Areas Trust Limited (JPAT) is a public-private initiative that seeks to protect and enhance Jamaica's natural resources and biodiversity. Registered in 2004, JPAT supports the effective management of the country's protected areas by:

1. Facilitating engagement, dialogue and partnerships among non-government organizations, the Government of Jamaica, private sector entities, and other stakeholders;
2. Monitoring the administration and distribution of conservation funds;
3. Assisting in the implementation of Jamaica's National Biodiversity Strategy and Action Plan;
4. Facilitating technical, managerial and other support to enhance resource management and fulfil obligations under international treaties, and
5. Helping to produce, market, and distribute information about protected areas.

JPAT was established out of discussions between the Governments of the United States and Jamaica, the Nature Conservancy and NGOs about the inadequate support for protected areas. As a result, JPAT was established and a Debt Swap was negotiated between the Governments of the United States and Jamaica, facilitated by The Nature Conservancy. JPAT is the administrator of the Forest Conservation Fund that was put in place through this Debt Swap Agreement.

JPAT's members include government, non-government, and international organizations. Individual membership is limited to persons interested in furthering and pursuing the objects of JPAT, and whose application for admission receives approval from the Board of Directors.

The Island of Jamaica with its Protected Areas is unique with interactive biological/geological ecosystems. Many specific locations throughout the island have been identified as areas that need to be protected. The JPAT web site that represents an interactive ecosystem of related knowledge and networking opportunities has been under development since 2004 and currently provides a starting point for Protected Areas Interactive map locations, limited data and information about several major Protected Areas including some high quality visualizations of selected locations, and a Conservation Network Center inviting web users to participate. The Jamaica Internet Map Server that has been made available online also contains a wealth of information about biology, geology, and climate, socioeconomic, political and protected areas.

<http://www.jpat-jm.net/>

<http://65.183.9.234/website/jamaica/viewer.htm>

2. Project Rationale:

What is the project's value to IABIN?

The Inter-American Biodiversity Information Network (IABIN) is an Internet-based forum for technical and scientific cooperation that seeks to promote greater coordination among Western Hemisphere countries in the collection, sharing, and use

of biodiversity information relevant to decision-making and education. It was established as a response to the importance in the Americas of protection of biodiversity (the Americas houses eight of the world's 25 biodiversity hotspots¹). The objective of IABIN is to promote sustainable development and the conservation and sustainable use of biological diversity in the Americas through better access to and management of biological information.

This project: “JPAT - Promoting the Development of Internet-Based Eco-Knowledge Systems for Protected Area Locations Using Emerging Geospatial, Information and Networking Tools” is of significant value to IABIN since the on-going and proposed work responds to IABIN emphasis on, and demonstrate with concrete products how biodiversity information is useful to decision-makers in the public and private sectors at the community, local government and national levels in Jamaica, as well as in the wider Caribbean Basin, especially in the English-speaking Caribbean, who in general looks to the larger island of Jamaica for some aspects of leadership.

More specifically, the tools to be expanded and/or developed includes new and emerging geospatial and networking open source web based projects such as Google Earth/Maps, GeoCommons and Web 2.0 social, image, and interest collaborative networking projects. These tools supports the IABIN objectives for providing access to and integrating scientifically credible biodiversity status information; developing tools necessary to draw knowledge from that wealth of resources, which in turn will support sound decision-making concerning the conservation of biodiversity; and implementing a mechanism to exchange information relevant to conservation and sustainable use of biological diversity. As both public and private sectors are routinely required to make decisions in an atmosphere of uncertainty and limited resources, these tools will help prioritize the conservation landscape and maximize resources.

Decision-makers require up-to-date information on the viability of an ecosystem, the level of socio-economic threat to that ecosystem, and the actual protected area management that is being implemented on the ground. This information can be used to help policy and environmental managers set conservation priorities, respond to critical needs in an effective manner, and distribute limited resources efficiently. The ability to make informed decisions, which consider unforeseen circumstances is fundamental to achieving efficient and effective environmental management, conservation of biodiversity, and sustainable development.

Why is it important that this project be implemented?

The accumulation of eco-knowledge and integration of natural and social science data and information is increasingly recognized as vital to scientific research and societal decision making related to a wide range of pressing environmental and biodiversity issues. In addition, the use of GIS for visualization and spatial analysis of data is well documented.

Many information products have been developed that allow users to perform a variety of functions on biodiversity and remote sensing data. These functions include

¹ Myers N, Mittermeier RA, Mittermeier CG, da Fonseca GAB, Kent J. 2000. Biodiversity hotspots for conservation priorities. *Nature* 403 (6772): 853-858 (Feb 24).

predictions of spatial distribution, changing distributions according to key variables, three dimensional visualization, and time-series animation (fly-through).

The socio-economic and biodiversity data generated would include all known sources of data and information for land use, protected areas and conservation status, as well as heritage and cultural areas of significance for eco-tourism, mining and other development themes important for proper sustainable development planning in the Caribbean region.

What important issue or need in the region is being addressed?

Collaborative tools, including a web site, will provide all possible links to other Caribbean countries. JPAT has started a model web site where protected areas in Jamaica are the main focus. This model will easily be expanded by creating a map of all of the Caribbean Countries and linking specifically to protected area efforts, and more generally to web-site projects that promote the collection, sharing and use of biodiversity eco-knowledge relevant to decision-making and education.

This is already a primary function for IABIN and the JPAT project will aid this effort by creating positive examples of interactive educational information and networking projects that can be shared with other countries.

The major theme being currently addressed is Protected Areas, but this can be easily expanded to include other biodiversity areas such as Species and Specimens; Invasive Species; Pollinators and Ecosystems. Priority will also be given to socio-economic areas of linkages that Caribbean planners are struggling to disaggregate data for, including eco, heritage and cultural tourism.

Is there any overlap with existing tools?

JPAT in many ways is not developing tools, but providing new ways that many useful tools, old and new, can be aggregated by communities of scientists, conservation area managers, community groups and citizens who share ideas, projects and decisions to help others also make better decisions.

How could this be made useful to the IABIN community?

One of IABIN's major Thematic Networks is Protected Areas. This proposed project will add value to the IABIN by collecting and sharing extensive biodiversity eco-knowledge about Jamaica Protected Areas on the JPAT web site, in the first instance, with the capacity to expand the model to the Caribbean region.

In addition it should be noted that information on the JPAT web-site will also accumulate topical information that relates to other IABIN Thematic Networks, i.e., Species and Specimens, Invasive Species, Pollinators and Ecosystems.

It is anticipated that, over time, the JPAT web-site project will also develop educational, networking and partnering opportunities for citizens, local communities, organizations, scientific groups and government agencies for all of these network themes.

JPAT has also developed a number of collateral products that will compliment its web site as it relates to public information and education, as well as fundraising efforts.

These and similar products can be developed by different countries. The products already developed by JPAT include:

- Jamaica Conservation Photo Book - showcase protected areas and other intact areas of biological diversity on the island;
- Date Planner/Diary - two-year calendar and planner includes conservation and protected areas information; and
- Visitor Opportunity Guide - promote conservation-based tourism through the development of and sales of map guides.

JPAT also sponsors with TNC events (for example, Conservation Week) and join with other civil society groups to promote Green Expo.

The existing tool-sets for information gathering, networking and decision-making are becoming much more powerful and new ones are emerging constantly. We are already seeing the promise of the next generation of the "open source" Internet appearing and this proposal aims at incorporating the best of the tools that are available now and that will emerge in the future.

Identifiable representative categories for these tools include those being developed for the Geospatial Web or GeoWeb, MobileWeb, Semantic or DataWeb, OpenSourceWeb, ImageWeb and Interest/SocialWeb. More detail about these is available in the Project Goals and Objectives below.

How will this work fill existing gaps?

"JPAT - Promoting the Development of Internet-Based Eco-Knowledge systems for Protected Area Locations Using Emerging Geospatial, Information and Networking Tools" the JPAT web site and the associated Jamaica Internet Map Server will set up opportunities to address all these areas identified by IABIN. With the JPAT project we are developing a "Collaborative and Interactive Internet/Web opportunity" that can expand in new ways as people participate and share ideas, projects, content and decisions.

3. Project Goals and Objectives:

Goals: The goal of this project is to continue work on the development of the JPAT interactive web site and add more capabilities for GeoWeb, DataWeb, ImageWeb, Interest/SocialWeb and MobileWeb for JPAT and the Forest Conservation Fund. Through this process, an Eco-Knowledge system that has semantic search capabilities will emerge. The best practices and lessons from this demonstration will be integrated in the web site and be accessible to local and national decision makers in the first instance and later to the IABIN Network and the wider Caribbean area.

This JPAT project is preparing material to be compatible with the 3rd phase of the Internet, or Web 3.0, that has been emerging and broadly discussed for the past few years. This phase is expected to continue to expand for the next decade and longer until a 4th advanced phase starts to develop in the future.

Summary of the process describing the Web 3.0 transformation

The Internet and the World Wide Web has been a transformational agent of change in the world and continues to go through transformational phases.

Historically, the process of cooperatively sharing ideas and resources between small human groups has always been important for the individual and group survival in primitive times. This remains true today in our modern global economic and political world. This "Open Source" sharing of ideas, software and knowledge between individuals, self organizing groups, organizations, communities, businesses, and governments continues to be the foundation of the growth of the Internet from the beginning and it will remain so into the future.

Originally, in the 1980's, the magic of the Internet was that it provided a way to connect computers in distant locations together. The World Wide Web grew popular in the mid 1990's and provided a way for governments, organizations, businesses, communities, interest groups and individuals to connect and share web sites and pages worldwide. This has been called the Web 1.0 phase. In the mid 2000's an explosion of open source and social networking services provided new ways for many millions of web users to interact and also provide content to a still growing number of new social and interest networking web sites, Web 2.0 is a name attached to this phase.

Now, as we approach 2010 the emerging Semantic Web, or Web 3.0, is starting to provide new ways to connect data sources available on web site pages with data on other web sites. More sophisticated meta tagging and Semantic tagging techniques are providing new Semantic search engines that can provide more accurate, reliable and useful search efforts for specific and connected information than ever before.

For example, expanding open source software initiatives and projects and a push to openly share a wide range of information about almost everything is transforming the web in the mutually connected fields of geospatial, photography and imagery and interest/social networking.

Between 2010 and 2020 and in the future we can expect these transformative technologies to continue to be developed and become more useful for people everywhere to make better and more informed personal individual and social decisions.

Already Web site projects are beginning to create interactive social networking interfaces, semantic links, and cross referenced data aggregation opportunities to aid future environmental networking decision making processes at a local, regional, national, and global level. The brief outline below provides a general summary of the important components that are already providing impetus for this developing new phase of the Internet.

Geospatial Web Or GeoWeb

This includes Online GIS Internet Map Servers, and expanded with the new use of neogeographic tools that provide web users the ability to use make their own online maps, which can include content such as text images, and links and invite others to contribute. This also includes online maps loaded with Place & Time Based data about specific places in the physical world. Google Earth/Maps, Virtual Earth, NASA World Wind, are examples of popular neogeographic tools.

Another popular tool is the growth of “3D Virtual Communities” such as Second Life where people are creating simulated models representing a special environment that may closely approximate the real world, or may be surreal and artificial. Many people are learning skills that are enabling realistic 3D visual simulations of the potential results of various decision scenarios.

MobileWeb

The World Wide Web as accessed from mobile devices such as cell phones, PDAs, and other portable “remote sensing gadgets” connected to a public network continues to grow exponentially. Access does not require a desktop computer. Web users and devices can access and input comments, images and data from the field.

Semantic or DataWeb

It is desirable for natural resource web sites to contain Expert and Knowledge based Content and Concepts. Semantic Searching is becoming available that will increasingly result in much more defined, reputable and reliable search findings for individuals, organizations, communities, and governments. Related to Geospatial place and time projects all data sources noted below will increasingly use better Metadata and Semantic tags:

- Scientific papers, reports, studies, etc.
- Environmental Impact Statements, Planning documents, etc.
- GIS Data bases from many sources - local regional, national and global.
- Other Databases - Government, environmental, knowledge, economic, visual, etc.

OpenSourceWeb

The open source model of operation and decision-making allows concurrent input of different agendas, approaches and priorities, and differs from the more closed, centralized models of development. The principles and practices are commonly applied to the development of source code for software that is made available for public collaboration. However the term open source culture also applies to the creative practice of appropriation and free sharing of found and created content. Participants in the culture can modify those products and redistribute them back into the community or other organizations:

- Open Source software, public domain knowledge, etc.
- Online web applications, public domain imagery etc.
- Shared GIS data and GIS technology
- See the GeoNetwork Open Source project:
<http://geonetwork-opensource.org>

ImageWeb

In the past few years there has been an increasingly expanding growth of very popular image web servers that encourage sharing of photographs, images, video and maps. Flickr, YouTube and Google Maps are only a few examples. In addition virtual worlds projects are available for people to build and share realistic 3 D environmental

scenarios. Second Life and others are examples. Google earth is another model that has attracted millions of users. As Semantic tags become the norm, it is becoming possible to search and find images and projects related to geographic locations and subject matter from many diverse web related repositories.

- A proliferation of shared GIS data, historical maps, paintings, graphics, photos, video, audio, animation, etc. related to the Geospatial and Data Web.
- 3D Simulations, Virtualization, and future scenarios and models based on existing data.
- Virtual Environmental game scenarios.

Interest (Social) Web

Corresponding to much of the growth in web site interaction is the growth in networking projects that encourage users to interact with each other because they share common interests. Hundreds of millions of people are now engaging in these opportunities provided by many web sites and by networking organizations such as Ning, MySpace, FaceBook, Google Maps, and photo sharing servers like Flickr and YouTube mentioned above are examples.

- Social Networking 2.0 and 3.0
- Education - K-12, Community and College Networking.
- Citizen participation, volunteers, public input.
- Public tagging and rating tools for data, photos, knowledge, etc.
- Posting photos, citizen monitoring data, blogs, wikis, and much more
- Public involvement in planning decisions.

Objectives:

The specific objectives of this project are:

1. To begin to integrate the database information and analytical capabilities that are behind the Jamaica Internet Map Server and other related data base material into the GeoWeb and Data Web areas of the web site. Neogeographic Digital 3Dimensional Virtual Earth tools such as Google Earth and Microsoft Virtual Earth and related 2D map programs will be used to identify place-based and time-based information sources.
2. To the extent possible, collect all data such as scientific reports, monitoring studies, planning documents, etc. for each Protected Area and for important specific locations and other relevant and prioritized thematic areas. Scientists, planners, and resource personnel will be asked to contribute, but interested and active citizens will also be encouraged to add content when possible. The project will encourage increased standard uses of Metadata, Meta tags, micro formats, folksonomy tags and Semantic Web concepts to be attached to all web site content.

The ultimate objective is to create a process that encourages the contribution of additional biodiversity knowledge that is increasingly reliable and reputable and useful to decision-makers in the public and private sectors. The adopted and modified tools will demonstrate to decision makers how data and information can be effectively used in the decision making process to improve the environmental outcomes of their management decisions.

For example, the government of Jamaica is in desperate need for disaggregated information on tourism. Jamaica is signature to many treaties and protocols but have no uniform tracking systems. This web site, expanding through this project, will have the built-in capacity to generate this required information.

3. For each protected area and specific locations, collect images such as:
 - a) Historic photographs, maps, drawings;
 - b) Contemporary photographs, video, slide shows, animations, presentations etc., and
 - c) Visual simulation models of possible future scenarios related to planning option variables.
4. To provide an interest/social networking system for each Protected Area that will encourage citizen discussions, participation in the gathering, submission, tagging and rating of data and images, and involvement in ongoing future decision making processes.

Jamaica has a number of declared protected areas with some management authority delegated by the state to civil society groups. The conservation impacts we are having in these declared protected areas are not harmonious and/or not open to tracking or monitoring, and do not include input from the general citizenry. This interactive web site will allow for information sharing to inform decision-making, multi-stakeholders coordination, community participation and public education programmes.

5. This Internet-Based Eco-Knowledge System of New and Emerging Geospatial and Networking Tools, with its acquired data and information for conservation, planning and development can be rolled out as a model for other Caribbean Protected Areas and other thematic areas.

These value-added tools can therefore help guide environmental management, conservation of biodiversity and sustainable development decision-making processes in Jamaica and throughout the Caribbean. This partnership with IABIN would assist IABIN to promote an efficient use of available resources within the network in this specific area

4. Project Activities and Methodologies:

The JPAT web site already has a structure that is complementary to this effort, however major modifications will be made over time to accomplish the goals stated above. One feature that will be incorporated in this proposal is a series of "Learning tutorials" to help web site users understand how to use the web site and contribute to the networks associated with each Protected Area. These tutorials would include;

- a. Learning how to use and interpret the Internet Map Server without needing a GIS background. This tutorial would specifically help people learn about biology, geology, climate, socioeconomic, political data related to the protected areas. The use of Google Earth and Maps, and Microsoft Virtual Earth and other

recently popular neogeography tools will be used to encourage participation whenever possible.

- b. Learning how to examine the scientific, planning and image data available on the web site about a Protected Area, and to ask questions when they have them. This would include a tutorial about how to contribute links to data, information, photographs, presentations they may know about.
- c. Learning how to organize and/or work with a community group to volunteer for events or monitor for specific variables in a Protected Area.
- d. Learning how to photograph, create slide shows and presentations and contribute these to the Protected Area Network.
- e. Learning how to participate in, or even start, a special interest or social networking group related to Protected areas.

What will be achieved?

A wealth of data, eco-knowledge, images and citizen involvement will become available related to each Protected area over time. In one year we would expect a significant increase in knowledge and content to become available on the web site for each Protected Area and this will grow year by year in the future. A complementary growth in networking efforts will result in more opportunities for a broader participation in decision-making by interested people.

What outputs will be delivered?

An interrelationship between the GIS data behind the Jamaica Internet Map Server and the existing JPAT web site data, images and Protected Area networking efforts will help make important scientific, planning and community efforts a much more open and understandable process for everyone. This will result in more citizen participation in Protected Area management decisions.

For each Protected Area and for specified discrete locations inside these areas, the amount of data, number of images, and number of involved people will grow in measurable ways.

The Protected Areas interest/social networking will grow in measurable ways.

Neogeographic map projects using Google Earth and Maps and other map programs will be developed.

This JPAT project can add content and value to IABIN by increasing Web availability of natural and social science, knowledge, data identification and analysis in a Geospatial context for Jamaica Protected areas. The JPAT web site will also initiate greatly increased learning and networking opportunities to encourage more Jamaicans, and others interested, to be more involved in management decisions in the future. The interactive format of the JPAT web site will also become a model for Protected Areas in other Caribbean countries.

What innovation will be generated?

The JPAT web site and this project will be developed using innovative methods that are emerging now as the 3rd Phase of the Internet, or Web 3.0. These include the GeoWeb, Linked Data Web, Semantic Search, ImageWeb, OpensourceWeb, MobileWeb and Interest/SocialWeb trends. (See project descriptions above)

How will the project be measured?

One measure will be the increase in amount of knowledge and data for each Protected Area that becomes available and this increase can be counted. This includes the identification of additional specific locations of interest in larger Protected Areas and also scientific reports, planning documents, images, and volunteer and community projects.

Another measure will be the increase in the number of people participating in the Protected Areas interest/ social networks. It is expected that some of these participants will become significantly more involved in future decisions related to Protected Area issues. This increase can also be measured.

Another measure will be in the statistics counting the number of users of the web site and the various pages and discrete pieces of information that become available.

5. Time frame / work plan

We would follow the “Deliverables and Timetable” identified in the TOR and the “Schedule of Process” identified in the RfP.

1. Commence progress on the project by November 28, 2008.
2. Detailed work plan by December 2008.
3. Progress Reports by March 2008, and in June and September 2009.
4. Beta version, user guide and demonstration events by July, August and October 2009.
5. Final production and report by November 2009.

Related work has already been started and is currently in progress on the JPAT web site. This includes:

1. Creation of Interactive maps locating Protected Areas recently supported by the Forest Conservation Fund.
2. Collection of data, images and other resources related to each of these protected areas. This will continue on through 2009 and in the future.
3. Creation of neogeography tutorial projects to help citizens and students become more involved in submitting information such as images, to the project. This will continue on through 2009 and in the future
4. Creation of the structure for interest networking hubs for each protected area to provide opportunities for Jamaica citizens and others worldwide to become involved in discussions, contribute content, and participate in protected area management decisions. This will continue on through 2009 and in the future.

6. Team Composition and Task Assignment:

The Mountain Visions team of Gary O. Grimm and Katy Flanagan will expand the JPAT web site design to provide new pages for 8 protected area projects that have already been approved by JPAT and the Forest Conservation Fund. This will include adding the following information.

- GIS data and knowledge such as scientific articles, planning documents, and monitoring studies.
- Images including historical maps, photographs, video and scenario visualizations.
- Interest/Social Networks.

The Nature Conservancy- Jamaica office will help develop and coordinate new ways to make available the data and knowledge behind the GIS Internet Map Server for the project.

JPAT administration working with the Forest Conservation Fund staff, Protected Area NGOs, scientists and others will provide reports, monitoring studies, educational and concept material for the project.

7. CVs of Proposed Staff:

Katy Flanagan and Gary O. Grimm have a long history of working with community service, public affairs, environmental and outdoor recreation resource networks in the North America. We started Mountain Visions in 1979. Our vision was to help people understand our natural resources by creating and presenting exciting interactive multimedia productions. In the mid 80s to the mid 90s we also were participating in computer bulletin boards and the Internet, anticipating the Information Superhighway that has become the World Wide Web. Since the beginning of 1995, we have been creating interactive multimedia web sites and Virtual Tours for natural resource organizations and agencies. Resulting from this history we have also been involved in research and experimental opportunities related to operational changes that are ongoing with the Internet and the World Wide Web. We attempt to work with organizations to help them understand how these changes affect how they can present information on the web and how important it is to create interactive networking opportunities for people who use their web sites. One example is the web site we are helping develop for the Jamaica Protected Areas Trust. This and a few additional example web sites Mountain Visions has produced, or is currently working on include the following:

Jamaica Protected Area Trust
<http://www.jpat-jm.net/>

MountainVisions:
<http://www.mountainvisions.com/Basecamp.html>

Mountain Visions Google Earth Tour Gallery
<http://www.mountainvisions.com/getours/getourgallery.html>

Idaho Weed Awareness Campaign
<http://idahoweedawareness.net/>

Portneuf Basin Pulse
<http://www.portneufriver.org/>

US Interactive Watersheds Map Portal
<http://www.interactivewatersheds.net/uswtrmap.html>

Gary O. Grimm's Blog
<http://garyogrimm.blogspot.com/>

Idaho Environmental Summit Network
<http://idenvironet.ning.com/>

8. Staffing Schedule:

Mountain Visions web site production and networking staff, Gary Grimm and Katy Flanagan will be working on this project one half time over a period of 12 months.

JPAT Staff, Trevor Spence and Forest Conservation Fund representatives will provide communication and networking resources as needed over a period of 12 months.

9. Work Schedule:

Related work already completed:

2004 - Design and production of initial JPAT web site.

2005-2206 - Additional production and photography for JPAT web site.

2006-2007 – Work plans developed for further development dependent on funding sources.

2008 – Production of new web pages and networking projects for Forest Conservation Fund projects.

Work to be done:

2008- 2009 - Redesign of the JPAT Web site to incorporate the IABIN RfP proposal for JPAT - Promoting the Development of Internet-Based Eco-Knowledge Systems for Protected Area Locations Using Emerging Geospatial, Information and Networking Tools project. (See description of this project in the RfP text in the pages above.)

December 2008 - Detailed work plan to IABIN and JPAT

March 2009 - Progress Report to IABIN and JPAT

June 2009 - Progress Report to IABIN and JPAT

July 2009 – Beta Version demonstration and User Guide

August 2009 – Demonstration to IABIN and JPAT

September 2009 – Progress Report to IABIN and JPAT

November 2009 – Current funding phase of JPAT - Promoting the Development of Internet-Based Eco-Knowledge Systems for Protected Area Locations Using Emerging Geospatial, Information and Networking Tools project completed and available for public use.

10. Relevant literature cited as footnotes

Below we will provide current links to relevant conferences, meetings and other resources that are now, and have been for the past few years, discussing emerging web features that are part of this proposal.

The Geospatial Web

How Geobrowsers, Social Software and the Web 2.0 are Shaping the Network Society

<http://www.geospatialweb.com/>

GeoWeb 2008 Conference

<http://geowebconference.org/>

GeoCommons

Delivers Visual Analytics through Maps - enabling non-technical professionals to view multiple datasets, draw conclusions, make decisions, and solve problems without traditional GIS overhead.

<http://www.geocommons.com>

Where 2.O Conference

<http://en.oreilly.com/where2008/public/content/home>

Web 2.0 Summit

<http://www.web2summit.com/>

Web 3.0 – Luminaries look to the future web

<http://news.bbc.co.uk/2/hi/technology/7373717.stm>

Semantic Technology Conference

<http://www.semantic-conference.com/>

Data Web (The Semantic Web is a web of data)

<http://www.w3.org/2001/sw/>

Interest/ Social Web Networking

http://en.wikipedia.org/wiki/Social_network


G. Summary of Costs

Category	IABIN Funds
Personnel	
Mountain Visions web site production and networking staff	\$30,000
Grand Total	\$30,000

Co-Financing Category	Co-Financing Amount			Total Co-Financing
ITEM	JPAT	MV	TNC	
Personnel				
Technical experts	\$10,000.00	\$10,000.00	\$10,000.00	\$30,000.00
Secretarial Support	\$1,000.00	\$0.0	\$1,000.00	\$2,000.00
Subtotal	\$11,000.00	\$10,000	\$11,000.00	\$32,000.00
Project Development				
Web Site Design and Development to Date	\$0.00	\$10,000.00	\$120,000.00	\$130,000.00
Continuation of web site development	\$18,000.00	\$5,000.00	\$12,000.00	\$35,000.00
Subtotal	\$18,000.00	\$15,000.00	\$132,000.00	\$165,000.00
Grand Total	\$29,000.00	\$25,000.00	\$143,000.00	\$197,000.00

Legal Status of JPAT Organization:

CERTIFICATE OF THE INCORPORATION OF A COMPANY



I hereby Certify that

JAMAICA PROTECTED AREAS TRUST LIMITED

was Incorporated under the

Companies Act, as a Limited Company

on the TWENTY-FIRST day of SEPTEMBER

Two Thousand and Four.

Given under my hand at St. Andrew this TWENTY-FIRST

day of SEPTEMBER Two Thousand and Four.

J. B. Howse
for Registrar of Companies

No. of Company 69,392.