JAMAICA PROTECTED AREAS TRUST

Suite 203, 85 Hope Road, Kingston 6, Jamaica W.I.

Tel: (876) 978-2927; Fax: (876) 978-9080; Email: jpat@infochan.com

April 29, 2008

Ms. Carolina Pena
Department of Sustainable Development
Organization of American States
1889 F. St., NW, Suite 794-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. Pena:

Further to your above-mentioned request for proposal, the Jamaica Protected Areas 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 – Internet Information and Networking Ecosystems"* for your consideration.

The Jamaica Protected Areas 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 an access point for Protected Areas interactive map locations, as well as limited data and information about several major Protected Areas within the island. This includes some high quality visualizations of selected locations, as well as a Conservation Network Center, which invites web users to explore the information presented. 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 alike.

We are very encouraged by the fact that 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 is anticipated that it will provide additional content and value to IABIN by increasing Web access to natural and social science data identification and analysis in a Geospatial context for Jamaica's Protected Areas. The JPAT web site will also promote increased learning and networking opportunities by encouraging more Jamaicans, and other interested stakeholders, 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.

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

Trevor O. Spence
Executive Director

c: Mr. Richard Huber

IABIN
REQUEST FOR PROPOSALS (RFPs)
For the Development of Value-Added Tools for Decision-Making

A. Title of Proposed Project:
Jamaica Protected Area Trust - Internet Information and Networking Ecosystems

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: Jamaica Protected Areas Trust
- Name of Contact Person(s): Mr. Trevor Spence
- Address: Suite 203, 85 Hope Road, Kingston 6
- Country: Jamaica
- Telephone: (876) 978-2927
- Fax: (876) 978-9080
- Email: fcf@infochan.com or t.spence@infochan.com
- Website: http://jpat-jm.net/

D. (In case of association) Contact information of Associated Firm(s):
- Name of Firm: Mountain Visions
- Name of Contact Person(s): Gary O. Grimm
- Address: 2001 Canal St., Boise, Idaho 83705
- Country: US
- Telephone: 208-336-2992
- Fax: same
- Email: gogrimm@mountainvisions.com
- Website: mountainvisions.com

E. Project Summary:

JPAT - Internet Information and Networking Ecosystems

The Jamaica Protected Area Trust is an initiative that seeks to protect and enhance Jamaica's natural resources and biodiversity and also supports the effective management of the country's protected Areas.

To this end, an Online Ecological Atlas of Jamaica web server and a highly interactive web site are being developed to increase the availability of place and time based natural and social science 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 neogeographic 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 methods of attaching Meta Data and Semantic tags to all data sources will be encouraged.

As this information ecosystem networking project develops, it is expected that many more citizens of Jamaica and other people worldwide, will become interested in being involved in decisions guiding environmental management, conservation of biodiversity and sustainable development in Jamaica Protected Areas.

Fondo de Jamaica para Áreas Protegidas – Ecosistema de información y Redes sobre la Internet.

El Fondo de Jamaica para Áreas Protegidas es una iniciativa que busca la protección y mejoría de los recursos naturales y la biodiversidad de Jamaica; así como el apoyo al manejo eficaz de las áreas protegidas del país.

Con este objeto, se están creando un servidor de Web con un Atlas Ecológico Electrónico (Online) de Jamaica y un sitio Web altamente interactivo para aumentar la disponibilidad de espacio y tiempo de información basada en la ciencia natural y social dentro de un contexto geoespacial. El objetivo principal del proyecto es crear un ecosistema de información con datos e imágenes ricas y diversas sobre cada Área Protegida. Este sistema incluirá además oportunidades novedosas neogeográficas y de redes atractivas para aquellas personas interesadas en involucrarse mucho más en la recopilación, colaboración e intercambio de información por medio de la Internet. Por otra parte, se estimulará el uso de métodos estándar para adjuntar Meta Data y Semantic tags a todas las fuentes de datos.

En la medida en que avanza este proyecto de ecosistema de información y redes, esperamos que muchos otros ciudadanos de Jamaica, y otros lugares en el mundo, se sientan interesados en participar de las decisiones que orientan el manejo medioambiental, la conservación de la biodiversidad y el desarrollo sostenible en las Áreas Protegidas de Jamaica.

E. Project description:

The **JPAT - Internet Information and Networking Ecosystems** can 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 encouraging 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.

1. Rationale:

The Jamaica Protected Area Trust (JPAT) and the Forest Conservation Fund (FCF) has developed goals with the proposed JPAT - Internet Information and Networking Ecosystems project that are closely aligned with IABIN Goals to make biodiversity information useful to decision-makers in the public and private sectors.

For example, the IABIN TOR for this project states the following:

"The 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 Geographic Information System (GIS) for visualization and spatial analysis of data is well documented.

*Proposals should propose to develop, adapt, or modify a value-added tool that addresses the need for information products tools in **one** of the following areas:*

1. ***Integrate data from biodiversity and socio-economic databases***
2. ***Visualize and analyze data and information***
3. ***Utilize data with models to develop scenarios (options and consequences) for decision makers."***

The JPAT - Internet Information and Networking Ecosystems project, the JPAT web site and the associated Jamaica Internet Map Server will set up opportunities to address all three of these areas identified by IABIN.

Furthermore, 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 information about Jamaica Protected Areas on the JPAT web site.

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, ie, 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.

As described below 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 appear in the future.

2. Project Goals and Objectives:

<u>Summary of Goals and Objectives</u>

Goals - to continue work on the development of the JPAT interactive web site and adding more capabilities for Geo Web, Data Web, Image Web and Interest/Social Web etc., for JPAT and the Forest Conservation Fund, to also be accessible to the IABIN Network.

1. To begin to integrate the Jamaica Internet Map Server information 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 to collect all data such as scientific reports, monitoring studies, planning documents, etc. for each Protected Area and for important specific locations as well. 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, microformats, folksonomy tags and Semantic Web concepts to be attached to all web site content.

3. For each Protected area and specific locations, to collect images such as;
    a. Historic photographs, maps, drawings;
    b. Contemporary photographs, video, slide shows, animations, presentations etc.,
    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 and tagging and rating of data and images, and involvement in ongoing future decision making processes.

What is proposed - (Project overview)

Consider the Island of Jamaica and Protected Areas as unique and interactive biological/geological ecosystems and that the JPAT web site represents an interactive ecosystem of related knowledge and networking opportunities. Many specific locations throughout the island have been identified as areas that need to be protected. This project will continue to expand the preparation of an ecosystem of data and information about larger Protected Areas in Jamaica and specific locations of interest in these areas as well.

The JPAT web site 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, climate, socioeconomic, political and protected areas.
http://www.jpat-jm.net/
http://65.183.9.234/website/jamaica/viewer.htm

Plans to further develop this web site with an increased amount of educational information, data and images related to specific locations in each Protected Area and an increase in learning opportunities and conservation networking for all people interested in these areas are being developed now.   This proposal for IABIN funds is to aid in this expanded development in the next year.

The long range plan is to modify the structure of the web site over time to be compatible with new Internet communication technologies that are emerging now 2008-2012 (Web 3.0) and will continue to emerge in the next 5-20 years (Web 4.0).

1. JPAT is continuing to develop a flexible web site structure that will provide opportunities for the JPAT web site and the JPAT online Internet map server to provide an expanded amount of specific data and information about many more important protected area locations in Jamaica. For example, learning and educational options "are being" developed to enhance the public understanding of GIS by using many neogeography emerging Internet tools such Google Earth and Microsoft Virtual Earth.

2. The development of the JPAT web site can now also start to incorporate more sophisticated Semantic and meta tagging techniques to provide much more useful "Web Search" results as the functions of the Semantic tools become increasingly more sophisticated.

3. A significant effort is also being developed on the JPAT web site to stimulate and promote interest and social networking projects for the each of the Protected Areas. The growth in the use of mobile phones and remote sensing units that can access the Internet and send

content from the field is growing and this capability will aid in the availability of information that is up to date which will also aid in ongoing future decision-making processes.

The JPAT web site (and Internet Map Server) 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 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.

Web site projects can now 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 Interent 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.

Related to JPAT web site:

JPAT The Nature Conservancy and Mountain Visions have already produced an interactive Jamaica Map with links to identified protected areas and specific locations inside of each area. In addition, the Jamaica Protected Area Trust: Online Mapping System is a huge geospatial resource. Both of these map systems should be made to interrelate and cross link with information as much as possible with this project. In addition, it is becoming more common for agencies, organizations and communities to use Google Earth/Maps and/or other neo geographic maps to provide access to easy to understand GIS and other visualization features at specific locations such as each of the Jamaica Protected Areas. Mountain Visions has already made two Google Earth projects that includes links to 18 panorama locations and a total of 55 specific locations in Protected areas. Resource managers, local citizens, visitors, and foreign tourists can begin to use this concept to easily add photos, comments, and links to other sources of information. Mountain Visions can make an online tutorial that will help people learn how to do this.

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 input comments, images and data from the field.

Related to JPAT web site:

The exponential use of more powerful mobile phones allows people to submit comments, photos, and other data to Protected Area web site locations. This activity can be encouraged and again tutorials can be produced to help people learn how to do this. Also in this category is the use of remote sensing devices (Motes) that can send data from the field to web servers and to Protected Area web sites. Web cams fit in this category, but the growth in the availability and use of all kinds of very inexpensive "motes" that can monitor environmental conditions such as water temperature, turbidity, air quality, etc. etc. is also expanding exponentially.

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.

Related to JPAT web site:

All papers, studies, PowerPoint presentations, planning and other environmental documents should be made available for each Protected Area and each specific location when possible. Presentations given at past Conservation Training Weeks in 2004, 2006 and 2007 are good examples. This includes the textual and numerical documents that are used to create GIS maps whenever possible. These documents should be "semantically" and Meta-tagged for variables such as location, time, author, and a detailed list of concepts and content categories.   The documents should also be linked to the Geospatial maps. Semantically tagging all documents will allow much more efficient Internet searching for specific and related topics and content. A feature of the Data Web that is important is that users will be invited to provide additional relational tags and ratings (folksonomies) to documents and content in order to provide better searches for more accurate and reliable information sources. Semantic Internet Search engines will be available to make it possible to search for other related information that might be available elsewhere on the Internet.

OpenSourceWeb

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/

Related to JPAT web site:

The IABIN RfP specifically notes that open source Internet tools are preferred. Starting a few years ago many of the emerging Social Networking Internet tools are open source. This allows a much broader population of people to fine tune a project and continue making it more efficient over time.

People who use the JPAT web site and the specific Protected Areas networking web sites will be encouraged to comment and make suggestions about the ongoing structure and design, to provide content, such as images and documents to add to these projects, and to help structure the decision making networks that develop.

ImageWeb

 - 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.

Related to JPAT web site:

The JPAT web site already has a start on providing high quality interactive panorama visualizations for each of the Protected Areas. These are geo referenced on the interactive maps and a page for data already exists.   These pages can be expanded to include a comprehensive image library, a DataWeb and a Social Web section for each protected area. This will provide a way for a web user to find all the available information about that location in one place and will also allow resource managers, local citizens, visitors and foreign tourists to add comments, photos, and links to additional data. Meta tags for place, time, content and other variables will be encouraged to be submitted for all images. It is already possible to find some Jamaica Protected Area images on the web because some logical tags were attached to them.

Interest (Social) Web

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

Related to JPAT web site:

The global growth in the number of people who are now learning how to use Interest Networking tools is phenomenal. It is estimated that over 300 million people are using Google Earth/Maps as just one example of a neogeographic geospatial Interest Networking opportunity.   There are probably hundreds of different tools providing different Interest Networking access to an even much larger number of people and attempts are being made to link these sources together. Producing similar networking opportunities for people interested in participating in each of the Jamaica Protected Areas will be a desirable outcome and will provide an easy to understand way of becoming involved in Protected Area networking functions that are of personal, organizational and/or community interest.

The long-range plan is to modify the structure of the web site over time to be flexible and compatible with new Internet communication technologies that are emerging now and will continue for the next 5 –10 and 20 years.

To conclude and summarize, it should be noted that the JPAT - Internet Information and Networking Ecosystems project is moving into this future whether IABIN funds are available or not.

1. JPAT is continuing to develop a flexible web site structure that will provide opportunities for the JPAT web site and the JPAT online Internet map server to provide an expanded amount of specific data and information about many more important protected area locations in Jamaica. For example, learning and educational options "are being" developed to enhance the public understanding of GIS by using many of the neogeography emerging Internet tools such Google Earth and Microsoft Virtual Earth.

2. The development of the JPAT web site can now also start to incorporate Semantic meta tagging techniques to provide much more useful results as Semantic Search tools become more common in the next few years.

3. A significant effort is also being made on the JPAT web site to stimulate and promote interest and social networking projects for the each of the Protected Areas. The growth in the use of mobile phones and remote sensing units that can access the Internet and send content from the field is growing and this capability will aid in the availability of information that is up to date which will also aid in future decision making.

3. Project Activities and Methodologies:

The JPAT web site already has a structure that is complementary to this effort, however some modifications will be made to accomplish the goals stated above. One feature that will be incorporated 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, images and citizen involvement will become available related to each Protected area over time. In one year we would expect a significant increase in content available on the web for each Protected Area and this will grow year by year in the future. A 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 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 specified locations, 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.

The **JPAT - Internet Information and Networking Ecosystems** can 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 encouraging 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 the **JPAT - Internet Information and Networking Ecosystems** 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 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.

4. 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 July 1, 2008.
2. Detailed work plan by August 4, 2008.
3. Progress Reports by September 1, 2008, and in January and April 2009.
4. Beta version, user guide and demonstration events by February and March 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 – by June, 2008.
2. Collecting data, images and other resources related to each of these protected areas. This will continue on through 2009 and in the future.
3. Creating 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. Creating the structure for interest networking hubs for each protected area to provide opportunities for Jamaica citizens and others worldwide to become involve in discussions, contribute content, and participate in protected area management decisions. This will continue on through 2009 and in the future

5. 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.

- Data 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 GIS Internet Map Server data 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.

6. 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:

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

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

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

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/

7. 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. (Volunteer time)

Note: we put the Staffing Schedule in text above and did not use the chart below:

Example:

N o	Name of Staff	Staff input (in the form of a bar chart)													Total staff-month input	
		1	2	3	4	5	6	7	8	9	10	11	12	n	Home	Total
1												▨	▨			
2							▨	▨	▨	▨						
3		▨														
										Subtotal				

8. Work Schedule:

Related work already completed:
2004 - Design and production of initial JPAT web site.
2005-2006- Additional production and photography for JPAT web site.
2006-2007 – Work plans developed for further development dependent on funding sources.

Work in Progress:
June 30, 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 the JPAT - Internet Information and Networking Ecosystems project. (See description of this project in the RfP text in the pages above.)
August 4, 2008 - Detailed work plan to IABIN and JPAT
September 1, 2008 - Progress Report to IABIN and JPAT
January, 2009 - Progress Report to IABIN and JPAT
February 2, 2009 – Beta Version demonstration and User Guide
March 2, 2009 – Demonstration to IABIN and JPAT
April 1, 2009 – Progress Report to IABIN and JPAT
June 30, 2009 – Current funding phase of JPAT - Internet Information and Networking Ecosystems project completed and available for public use.

Note: we put the Work schedule in text above and did not use the chart below:

Example:

N°	Activity[1]	Months[2]											
		1	2	3	4	5	6	7	8	9	10	11	12
1		▓	▓	▓									
2					▓	▓	▓						
3								▓	▓				

9. 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/

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

Budget request for IABIN Funds:

An Online Ecological Atlas of Jamaica web server and a highly interactive web site are being developed to increase the availability of place and time based natural and social science information about Jamaica Protected Areas 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 neogeographic 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 methods of attaching Meta Data and Semantic tags to all data sources will be encouraged. $30,000 in IABIN funds will enable the continued development of the JPAT web site and the emerging JPAT - Internet Information and Networking Ecosystems project as described in this proposal.

The budget and deliverables below represent the funds that will be spent during the IABIN grant timeframe, July 1, 2008 – June 30, 2009. All of these costs will be spent for communication, consultation and production of the project by Mountain Visions.

 Please note that additional co-financing amounts of $87,900.00 have previously been committed for the development of this project and are outlined following the chart below.

DELIVERABLES	DUE DATE	BUDGET – IABIN Share	BUDGET – JPAT Share
1. Detailed work plan to IABIN and JPAT	August 4, 2008		$1000.00
2. Continue development of interactive maps on the JPAT web site locating specific project sites in Protected Areas recently supported by the Forest Conservation Fund.	June 30, 2009		$10,900.00
3. First progress report to IABIN and JPAT	September 1, 2008	$600.00	
4. Continue collection of data, images and other resources and place on the JPAT web site related to specific project sites in each of the Protected Areas supported by the Forest Conservation Fund.	June 30, 2009	$6000.00	$6000.00
5. Create online neogeography tutorial demonstration projects on the JPAT web site to help citizens and students learn more about GIS and the Jamaican web map server and to become more	June 30, 2009	$10,400.00	

involved in submitting GeoWeb information for specific project site locations such as: • Data in the form of scientific articles, planning documents, and monitoring studies. • Images including historical maps, photographs, video and scenario visualizations.			
6. Continue creation of the structure and maintenance for the interest networking hubs for each specific project site in the Protected Areas to provide opportunities for Jamaican citizens and others worldwide to become involved in discussions, contribute content, and participate in Protected Area management decisions.	June 30, 2009		$10,300.00
7. Create online interest networking tutorial demonstration projects on the JPAT web site to encourage citizens and students to become more active in discussion, planning, contributing content and participating in Protected Area management decisions.	June 30, 2009	$10,000.00	
8. Second progress report to IABIN and JPAT	January, 2009		$600.00
9. Beta version and draft manual and user guide	February 2, 2009	$600.00	
10. Two demonstration events of beta version to IABIN and JPAT	March 2, 2009	$1200.00	
11. Third progress report to IABIN and JPAT	April 1, 2009		$600.00
12. Production version	May 1, 2009		
13. Two demonstration events of production version to IABIN and JPAT	June 2009	$1200.00	
14. Final production version, manual and user guide and report.	July 1, 2009		$600.00
Total		$30,000.00	$30,000.00

Co-Financing considerations:

1. $30,000 - JPAT and The Forest Conservation Fund expects to update the web site emphasizing the development of the JPAT - Internet Information and Networking Ecosystems project between July 1, 2008 and June 30, 2009, corresponding to the time frame for funds available from IABIN.

2. $15,500 – The Nature Conservancy and MacArthur Foundation funds have recently been made available for Mountain Visions to update portions of the JPAT web site, especially those initial projects funded by the newly established Forest Conservation Fund. This short term funding contract will be completed by June 30, 2008. Noteworthy is the fact that some of the preliminary parts of the JPAT - Internet Information and Networking Ecosystems project are already being constructed with these funds.

3. $72,400 - The JPAT - Internet Information and Networking Ecosystems project being developed in this proposal is the continuation and extension of the JPAT web site project that started in 2004 and will be ongoing for at least 20 years into the future.   Below is a history of Budgets and Funding (USD) that have already been spent on this developing project.

In 2004- The Nature Conservancy contracted with Mountain Visions for $10,000 to design and produce the initial structure of the JPAT web site. Participation in the 2004 Conservation Training Week in Jamaica was part of this effort. Protected Area NGOs and resource people from throughout Jamaica participated.

In 2005 –2006 - The Nature Conservancy contracted with Mountain Visions for $62,400 to continue producing the web site by adding data, visual content and networking features in 2005 and 2006. A total of about 5 weeks of field photography with JPAT and Protected Area NGO support was part of this effort, as was participation in the 2006 Conservation Training Week.

From 2004 – 2008 there have already been many In-kind and volunteer effort contributions to the development of the JPAT web site. We expect this to continue in the future, but we do not have   dollar figures for these efforts that we can provide at this time. However, they could be estimated if needed by IABIN to support this proposal