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*WWF Global Learning  
Annual Report  
10/01/2005 - 09/30/2006*

*for*

## **World Wildlife Fund**

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Submitted by:  
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## **WWF Global Learning**

### **Project Overview**

In the past year, WWF focused on six areas of learning that were supported by USAID GCP funds (FY06 and previous years):

1. Promoting progress in the Conservation Measures Partnership
2. Developing practical tools for using hydrological information and analyses in conservation
3. Developing a collaborative ‘Climate Change Camp’ for integrating climate change adaptation and mitigation strategies into large-scale conservation
4. Support for WWF participation in the GCP-funded MPA Learning Initiative
5. Support for the Lower Mekong Dry Forests Ecoregion to participate in *Changemakers*, a community of practice that helped them to focus on and achieve a chain of actions to leverage significant advancement toward their large-scale conservation target in an 18-month period (began in FY04)
6. Support for migration component of WWF’s Population Health, Gender and Environment Program.

### **Summary: Period 10/01/2005- 9/30/2006**

#### **Activity 1: Promoting progress in the Conservation Measures Partnership**

The USAID-funded Global Conservation Program (GCP) was a critical supporter of early efforts to promote adaptive management. The most influential is the genesis of the Conservation Measures Partnership or CMP ([www.conservationmeasures.org](http://www.conservationmeasures.org)) which is comprised of conservation NGOs that came together to seek better ways to design, manage, and measure the impacts of their conservation actions. Through CMP, we have for the first time a common forum to understand that while conservation organizations may use different languages, we share the same concepts for best practices in project management. These best practices for how to plan, monitor and implement projects are expressed in the CMP Open Standards. The collaboration of USAID has helped advance the progress of CMP initiatives across the conservation community. The following summarizes the Conservation Measures Partnership (CMP) activities and accomplishments thanks to USAID’s Global Learning support.

**Open Standards for the Practice of Conservation** – In June 2006, CMP held a strategic planning meeting where the next iteration of the Open Standards (OS) were presented and discussed. This version incorporates input from last year’s June CMP meeting that devoted significant time to revisiting the OS. In addition this version includes feedback from our newest collaborating member, IUCN. This version will be managed as an internal edition because we expect more significant revisions to the OS to be completed by the end of the year. The next version will be based on extensive use, field testing, adaptation, and improvement by a number

of CMP core and collaborating members. Although the basic structure and content will not radically change, there have been significant additions to the OS with some good models offered and suggestions made as to how to make the OS more readable and accessible. Rather than produce two full versions in the same year, we decided to produce one, more complete version at the end of the year. We fully anticipate that the final '06 draft will be translated into Spanish and French, thanks to the contribution of USAID. Primary distribution will continue through CMP member organizations.

More information about the *Open Standards* is available at:  
[http://www.conservationmeasures.org/CMP/Initiatives\\_Active.cfm](http://www.conservationmeasures.org/CMP/Initiatives_Active.cfm).

WWF, as a core member of CMP, has informed and adopted the CMP Open Standards that are now represented in WWF's Standards for Project & Programme Management. As part of this process, USAID's financial and philosophical support for effective adaptive management at the raised bar set by CMP has leveraged other efforts in a significant way throughout WWF. Testing and intensive training in the WWF Standards has been applied to 9 ecoregion action programs and two thematic programs with over 189 conservation professionals participating:

- Mesoamerican Reef (Belize, Guatemala, Honduras, and Mexico)
- Forests of Lower Mekong (Laos)
- Upper Paraná Atlantic Forests (Argentina, Brazil and Paraguay)
- Bering Sea (joint TNC-WWF process) (
- Galapagos (Ecuador)
- Southwest Amazon (Brazil, Bolivia and Peru)
- Gulf of California (Mexico)
- Eastern African Marine Ecoregion (Kenya, Tanzania and Mozambique)
- Chihuahuan Desert (Mexico)
- DGIS-TMF Program (Peru, Ecuador, Lao PDR, Zambia)
- Asian Rhino and Elephant Action Strategy (AREAS) Project (India, Indonesia, Malaysia, Nepal, Vietnam, Cambodia, Lao PDR, Thailand, Myanmar)



This work has produced clear and measurable benefits that include:

- Robust plans that have 1) earned - and in some cases restored – donor, manager and team confidence that we know why we're doing what we're doing, 2) shifted - sometimes dramatically - our strategic approach and way of operating and 3) influenced wider group of partners by bringing a clear framework to the table.
- Skills to think critically in a systematic way. Staff learned how to use different tools but more importantly how the tools help them think more strategically and enable them to express their logic explicitly in a comprehensive and defensible plan.
- Drafted/completed monitoring plans with a full set of measures. The need for measures was a major driver for many programs who wanted to articulate how they measure success over time. This includes biological impact as well as all the measures along the chain of affecting change.

- Team-building during training when both old and new staff were challenged to debate priorities and analytically understand how various efforts fit together.
- Strengthened ability to respond to future changes/dynamics by learning a process and system of management that can maintain rigor and focus.

**e-Adaptive Management Software Program** – CMP is working to develop a new software program that will help practitioners to implement the Open Standards for the Practice of Conservation. This program will help conservation practitioners to design, manage, monitor, and learn from their conservation projects. The e-Adaptive Management software has progressed with new support from donors such as the Hewlett Foundation, as well as support from many of the core members of CMP who have provided funding to begin development of the first active modules. These modules are being tested, and will continue to be improved as new funding becomes available. A revised business plan has been produced and fundraising efforts continue.

More information about the e-AM software is available at:

[http://www.conservationmeasures.org/CMP/Site\\_Page.cfm?PageID=22](http://www.conservationmeasures.org/CMP/Site_Page.cfm?PageID=22).

**Conservation Audits** – The CMP *Open Standards* is an effective foundation for systematic audits of conservation projects and programs. The goal of CMP's conservation audit initiative is to design and test a conservation audit system that is flexible enough to be applied throughout the conservation sector- to different themes, scales, organizations - and propose this system as a basis for assessing conservation process and practice over the long term. A guide to conducting conservation audits was compiled based on the last few years of experience of CMP and is in final draft form. (See attachment 1 for a draft of Conservation Audit Protocol document.) The audit guide will be available for download from the CMP website (<http://www.conservationmeasures.org>). In addition, a Scope of Work and an outline of another compilation related to conservation audits are underway. This second article is about lessons learned on both the process of conducting audits and the results of those audits.

WWF, like other organizations, is committed to adoption of the Standards and yet we also know our greatest challenge by far is building and retaining the skills and capacity to put these standards into practice. Our focus for collaboration is now on how to harvest best practices in mainstreaming the Standards. This is through use of them in our conservation audits and evaluations that help set the bar for best practice and in capacity-building support to meet the Standards. This includes exchanging materials and participating in cross-organization trainings and an explicit effort to hybridize content and training between WWF and TNC. Together with other CMP members, this kind of exchange and cross-pollination will enable us to tackle the greater challenge of meeting the demand for ongoing capacity-building in practicing adaptive management.

WWF has now mainstreamed formal audits on a small scale (limited by funding) and increasingly WWF field staff are using the standards to self-audit now that the standards are becoming a requirement of practice (e.g. a new internal funding mechanism called a 'program implementation agreement' seeks to coordinate internal WWF donor funds and many now require that programs meet the WWF Standards).

**Standard Taxonomies of Threats and Actions** – One of the foundations of any science is a common nomenclature that practitioners can use to describe the problems they are facing and the solutions they are using in a mutually intelligible way. CMP and IUCN's Red List had each independently developed their own classification systems. These two groups collaborated to merge their separate systems into unified classifications and final versions of both a threats and conservation actions taxonomy have been produced. An agreement has been drawn up that gives IUCN the “ownership” and responsibility for managing these taxonomies. Many of the organizations involved in CMP and associated with IUCN are already using the taxonomies or have plans to do so in the near future. Practitioners can use the unified classification system to better understand their site, roll-up data across sites, and to accurately compare notes with others in similar situations.

More information and an interactive version of the taxonomies are available at [http://www.conservationmeasures.org/CMP/Site\\_Page.cfm?PageID=17](http://www.conservationmeasures.org/CMP/Site_Page.cfm?PageID=17).

**Strategic Indicator Selection Software (StratISS)** – Often the first question that opens the door to adaptive management is ‘How do I select my indicators?’ To do this, it becomes clear that in order to select indicators, you have to have a clear articulation of measurable objectives. Good objectives will depend on how well strategies are articulated, which hinge on how clearly you understand your context. Focusing your understanding of the context will be informed by clearly defined goals and prioritized targets. One promising tool that helps practitioners move from these planning steps to practical results is “results chains”. A “results chain” is a series of boxes and arrows that represent your theory of change through a chain of results that link your actions to your desired impact. Once this results chain is defined, identifying indicators becomes (almost!) easy. Results chains represent a concise model of how practitioners conceive of actions and measure their progress.

CMP is exploring how to develop software that can electronically capture results chains in a globally accessible web-based format. When combined with the taxonomies (above), StratISS will provide a platform for practitioners to upload their results chains (with associated indicators), as well as access others. For example, a practitioner who has chosen sustainable agriculture as a strategy for reducing erosion that is threatening a coastal wetland can develop a results chain and look to StratISS to understand how other practitioners who share any of the same factors (activity, threat and target), have defined their theory of change and are measuring their progress. Given the complexity of the places we work, not everything can be captured in a results chain. However, the ability to access this bank of knowledge with practical information on how others have thought through their theory of change and their experience in using different types of indicators (e.g. unit, periodicity, cost, etc.), will be a leap in knowledge management for the conservation community. Given USAID’s high level of investment in biodiversity conservation, StratISS may be a potentially revolutionary tool for capturing the lessons, knowledge and experience across the USAID biodiversity portfolio.

## **Activity 2. Practical Tools for Using Hydrological Information and Analyses in Conservation**

A team of scientists from World Wildlife Fund (WWF) has developed data and created maps of the world's rivers that provide researchers with a host of valuable information about where streams and watersheds occur on the earth's landscape and how water drains the land surface. The new product, known as HydroSHEDS, provides this information globally at a resolution and quality never before available. The product is based on newly available high-resolution elevation data obtained during NASA's Shuttle Radar Topography Mission (SRTM). HydroSHEDS stands for "Hydrological data and maps based on SHuttle Elevation Derivatives at multiple Scales."

Although high-quality river maps exist for individual rivers and even entire nations, there is a lack of seamless high-quality data on global and continental scales. Data for many international river basins are patchy, and remote areas are often poorly mapped. For some regions of the world, such as the Congo Basin in Africa and parts of the Amazon Basin in South America, HydroSHEDS will provide the first high-resolution digital river maps produced for these large areas. Importantly, these previously poorly mapped systems are often those of exceptionally high conservation interest.

At the most basic level, HydroSHEDS allows scientists to create digital river and watershed maps. These maps can then be coupled with a variety of other datasets or applied in computer simulations, such as hydrologic models that estimate flow regimes. The kind of hydrographic information provided by HydroSHEDS allows scientists and managers to perform analyses ranging from basic watershed delineation to sophisticated flow modeling.

A wide range of scientists are expected to use the data. For instance, taxonomists will ultimately be able to link their field site locations directly to digital river maps. In the future, WWF researchers also hope to use HydroSHEDS to assess the possible impacts of climate change on freshwater ecosystems.

Many potential users of HydroSHEDS are not hydrologists, yet using the HydroSHEDS dataset on its own has until recently required hydrologic expertise or extensive training. Importantly, USAID funds have permitted the development and dissemination of essential HydroSHEDS components that expand the audience to include users from a variety of backgrounds. These components include:

- **Enhanced HydroSHEDS GIS tools and user interface** (See Annex 2):

Working with consultants, we have developed an interactive GIS toolkit in a user-friendly interface that works on top of HydroSHEDS data. In addition to standard tools for digital elevation modeling, there are specialized tools focused on digital stream networking and classification. Together, these provide increased accessibility to HydroSHEDS data for a range of users. An interactive help function that explains the specific application forms part of the toolkit.

- **HydroSHEDS user guide:**

Based on the interactive toolkit, a stand-alone user guide is under development that identified and explains the broader application of HydroSHEDS and provides graphic examples. It discusses the technical characteristics of the data and introduces users to the broader subject of digital river network modeling, with a specific focus on WWF methodologies.

- **Aquatic habitats classification map of the Forests of Lower Mekong** (See maps Annexes 3 & 4)

Although the HydroSHEDS data are currently only available publicly for South America, we were able to produce the data for South-east Asia to support development of a classification of aquatic habitats in the region, with a focus on the Mekong Basin. This project was the first-ever attempt to produce a seamless classification for the entire basin, as well as surrounding basins, in order to inform region-wide energy policy and conservation planning. Importantly, in conjunction with the expert workshop held to develop the classification, we also held a HydroSHEDS training workshop for WWF staff and partner organizations. We expect to replicate this type of training in other regions, using the above-mentioned GIS tools, user interface, and user guide to facilitate use of HydroSHEDS within the field.

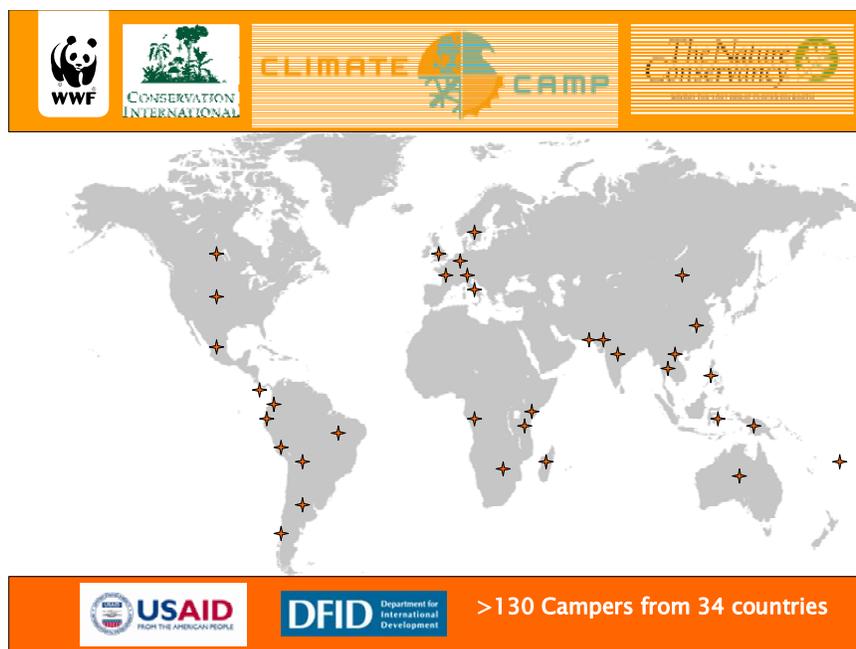
- **Improved capacity of field staff from pilot training sites as evidenced by project planning products that integrate hydrological information:**

Within the past year there has been a surge of interest from field staff in hydrologic and hydrographic information. In addition to work in the Mekong, WWF-US priority field programs in the Amazon, Meso-American Reef, Amur-Heilong, Congo, and Eastern Himalayas have begun to integrate hydrologic information -- or strategies for obtaining that information -- into their planning efforts. Furthermore, we produced an early version of HydroSHEDS for the Yangtze, which we provided to The Nature Conservancy for their planning efforts there. The incorporation of hydrology into conservation planning for freshwater, terrestrial, and even marine systems is guaranteed to grow markedly in coming years, and HydroSHEDS will be an especially important input to that work in data-poor, developing regions.

### **Activity 3. Climate Change Camp**

Throughout the global conservation landscape, practitioners and policy-makers have identified global climate change as an existing and impending threat to biodiversity. While deemed a 'killer' threat, practitioners often lack the technical input and/or capacity to integrate actions to address climate change in their planning and management. As a starting point, WWF produced with the input of experts and colleagues (including GCP partners), "BUYING TIME: A User's Manual for Building Resistance and Resilience in Natural Systems" (Download the document at: [www.panda.org/climate/pa\\_manual](http://www.panda.org/climate/pa_manual)). With this resource, there is a growing demand for more hands-on support for applying these ideas and strategies to projects in the field.

As a next step, WWF initiated the idea of providing training and support that links field managers with the technical expertise and peer review to support finding practical help in integrating strategies for mitigating the effects of climate change. Now known as 'Climate Camp', this has evolved from a WWF effort to a joint collaboration with CI and TNC (and others such as NOAA).



Over 130 campers from 34 countries participated in the five-day Climate Camp in April 2006 led by WWF with TNC and CI as co-organizers. In addition to WWF participants, campers included 20 participants from TNC and 13 from CI. The Pew Center, the MacArthur Foundation, Defenders of Wildlife, Conservation Value, National Parks of Madagascar, American Red Cross, USEPA, NOAA and some other organizations were also represented. Camp began with two days of overview training on basic climate change science, tools, climate-informed conservation design and communications. During the remaining time, participants worked in breakout groups divided by habitat type (freshwater, tropical forests, temperate forests, tropical marine, temperate marine, and montane/grasslands). Each group had a climate conservation expert who acted as a facilitator and at least one participant leader who was already engaging in a field-based climate project and could serve as a peer mentor. In these groups participants shared ideas and each developed a project design for a climate-informed conservation project to initiate their action on this important new conservation challenge. A booklet containing the concept note for each of the WWF projects designed at the Camp is in the final stages of preparation. (See Annex 6 for the table of contents of this booklet).

As a result of Climate Camp, the majority of the participants are now moving ahead on integrating this work into their conservation programs. Many WWF ecoregions (including Baltic Sea, Bering Sea, SE Rivers and Streams, Sundarbans, Sulu Sulawesi Seas, East Africa Coastal, Amazon, Madagascar, Valdivian Forest, Western Australia) have initiated climate change resilience building projects. The Bering Sea Program has begun its Salmon Watch program (see Annex 5). They are also starting a project to develop fisheries adaptation plans and an expanded Climate Witness program. This will kick off at a regional Climate Camp they are convening the last week of October 2006. The Baltic and Southwest Australia Programs have begun fundraising for their vulnerability assessment and adaptation planning. The Madagascar program is applying for a MacArthur grant, and the Himalaya Program will be doing so soon. The Andes, Galapagos, Southeastern Rivers and Streams, and Gulf of California are all developing projects, many in collaboration with TNC and CI. One of these collaborations is a global biodiversity adaptation vision with pilot projects, to be completed for the GEF. WWF, TNC, and CI are

working on joint proposals for projects in Indonesia, India/Nepal, Peru/Ecuador, while WWF and CI have developed a joint proposal for Madagascar.

Participants found the approach used at Climate Camp very useful. After the Camp, all of the training modules, prepared by biome (marine, freshwater, forest, alpine) were made available on the web and are already being used by various entities. The marine module will be used at Climate Camp for the Bering Sea Program in October 2006. The marine and forest modules will be used in Madagascar. Planning has already begun for another joint, either global or regional, Camp in FY07.

#### **Activity 4. Effective Design and Management of Tropical Marine Protected Area Networks through Cross-Institutional Learning (MPA Learning Initiative)**

The overarching vision of this partnership is to increase knowledge across the four GCP partner organizations, Conservation International (CI), The Nature Conservancy (TNC), the Wildlife Conservation Society (WCS), and the World Wildlife Fund (WWF), and their partners, in an effort to increase speed and efficiency toward the 2012 target of a global system of marine protected areas (MPAs).

**Project Goals** - We have developed the following goals for the marine protected area networks learning partnership:

- A. *Improve conservation practice on the ground in 6 – 10 sites.*
- B. *Scale up from MPA sites to ecological networks.*
- C. *Generate and disseminate increased knowledge of MPA networks through inter-organizational collaboration.*

#### **WWF Component Results:**

##### **Background:**

In FY 2005, three regional learning activities and one global workshop were held. The regional learning activities provided participants an opportunity to engage with an active or developing MPA network, explore questions and actions required to implement effective MPA networks, and share personal marine conservation experiences as the basis for a discussion on challenges, successes, and enabling factors. At the global meeting, the group refined three specific learning issues based on their field experience and group deliberations. These themes became the foundation of the FY06 Action Plan:

1. Social Resilience of Human Marine Communities
2. Biophysical Aspects of Design
3. Economic Valuation and Sustainable Finance

In revising the FY 06 work plan to respond to capacity constraints, we decided to focus our learning activities this year on the first two of these topics.

**WWF and the Biophysical Aspects Team:**

The FY06 implementation strategy was structured around the development and completion of a learning workshop scheduled for October 2006 that is designed to produce MPA Network Design Guidance tools. The Biophysical Aspects and Social Resilience Working Groups have been working separately to explore their learning topics and questions and create the detailed information needed to provide that guidance.

Within the Learning Team, we defined a lead group of NGO Program Advisors (at least one key advisor per learning question) to work with the Learning Facilitator, TNC's Colleen Corrigan, to develop the program of work for the year, including workshops, strategic involvement of learning group members, data gathering, and defining the terms of reference for the outside experts. WWF's Conservation Science Program (CSP) took the lead in supporting the group working on the Biophysical Aspects of MPA Network Design. The CSP team is led by Dr. Helen Fox and supported by program officer Al Lombana and intern Jennifer Skilbred.

WWF completed a review of literature on designing and implementing MPA networks to glean available knowledge and determine where gaps in understanding exist. The review should prove helpful not only to the Learning Group but also to the marine conservation community involved in the design of MPA networks that are resilient to anthropogenic and environmental threats. The literature review is organized around the elements crucial to designing ecologically-functional and socially-sustainable MPA networks including: representation, replication, connectivity, MPA design (e.g., size, shape, and spacing), and inclusion of critical areas that protect the source and sink of fishery and biodiversity target species. WWF also assisted in developing discussion and "homework" topics as well as design of a preliminary survey of biophysical aspects for the Learning Group that fed into the comprehensive framework (see below).

Al Lombana began a complementary and preliminary analysis of several of these design principles using the Global Database of MPAs ([www.mpaglobal.org](http://www.mpaglobal.org)) in two areas of high biodiversity: the Coral Triangle (incl. Philippines, Indonesia, and Malaysia) and Coastal East Africa (incl. Somalia, Kenya, Tanzania, and Mozambique). Results indicate that in these regions, the amount of protected habitat, as measured by area in no-take MPAs, is less than 1% of total area. Also, fewer than 5% of MPAs had another MPA within 10km and only one third of MPAs in the Coral Triangle and one quarter of MPAs in East Africa had a neighbor MPA within 50km. These early findings reinforce the belief that few functional MPA networks exist today. Considering the sheer number of MPAs in existence, approximately 5,000, one approach to scaling up from single-site MPAs to ecological networks of MPAs could involve filling in the spaces with additional protected areas that serve as stepping stones for dispersing organisms.

**WWF's role in developing the Analytical Framework:**

During a planning retreat in July 2006 of key members of the Learning Group, it was determined that in addition to these separate avenues of study, we needed an overarching analytical framework for MPA network implementation that would allow us to better integrate the findings from these two groups, in particular responding to the practical needs of field staff who must work in all sectors simultaneously on the ground.

WWF's CSP team offered the use of an existing framework that they had been developing through ongoing research by Drs. Mike Mascia and Helen Fox. This was seen by WWF as a

win-win situation. The Learning Group determined that the framework could be readily adapted from the MPA to the MPA Network level through the Learning Partnership program and it was a big help to the program, allowing us to move forward more quickly by not needing to design a new framework from scratch. At the same time, it is helping CSP test their framework through its eventual application in Learning Partnership field sites. CSP staff, including Helen Fox, Al Lombana, and intern Jennifer Skilbred, as well as social scientists Mike Mascia and Annie Claus, have all spent time translating the framework into a comprehensive questionnaire that is now being tested by the Learning Group question leads.

The purpose of the framework is to provide the context for integrating biophysical, social, and economic aspects of MPA networks into one comprehensive assessment and tool package. We expect that the results of our next workshop in October 2006 will provide data, tools, case studies, and resources that can populate this framework and offer an excellent learning opportunity for members of the Learning Group and anyone working on MPA network design, implementation, and management.

### **Activity 5. Changemakers**

Funding for this activity was originally allocated from FY04 GCP funds for a “Community of Practice”. That activity did not go forward; thus funding was shifted to a similar activity with a different name – *Changemakers* that was carried out as a joint effort of the WWF Asia Pacific Program and the GCP and completed in January 2006. The approach was designed to help ecoregion action program (EAP) teams identify and deliver “Big Conservation Wins” that will stimulate and leverage achievement of ecoregion targets and milestones. Changemaker teams were established for 7 ecoregions in the Asia Pacific Region as a kind of “community of practice” connecting WWF field staff with resource staff across the WWF network and partners through training and meetings. The approach aimed to help teams integrate efforts and collaborate both within and without WWF to achieve significant progress toward their shared EAP targets within a limited time frame. The practitioners built specific chains of actions designed to leverage the greatest amount of change over an 18-month period.

Staff from the Lower Mekong Dry Forests (LMDF) Ecoregion benefited from this program to leverage significant advancement toward their target: *Protection and effective management of 15% of LMDF ecoregion so as to ensure that viable populations of three iconic species (tiger, Asian elephant and wild water buffalo) are maintained* with the following results:

- A Tri-agency MOU (Agriculture and Forests, Environment and Tourism) to align and coordinate management of a 1 million hectare “Green Triangle” protected area network.
- The Eastern Plains (Green Triangle) was selected as a priority pilot site for the Asian Development Bank Biodiversity Corridors initiative.
- Big Win Celebration: WWF International Program Director participated in a celebration of effective Green Triangle Management co-hosted with the Cambodia Government Ministers of MAFF and Environment in December 2005.
- Key Partnerships: Ministries of Agriculture, Environment, Forestry and Tourism; Dry Forest Coalition; Asia Development Bank.
- Traction generated for the Ecoregion Action Plan through the Big Win: (1) WWF image raised and credibility established among public and government audiences (through the

visit of the WWF Director General and events); (2) CITES sub-decree and Protected Area Law expedited; (4) The political and financial commitment of donors to large scale conservation initiatives leveraged (e.g. with ADB, USAID and JICA).

The positive experience of Changemakers, and the success it has had in delivering ambitious conservation results, has generated much interest across the WWF network. Already the Changemakers approach is being used in other regional programs to focus and accelerate Big Win achievements. These initiatives reflect the appeal that an approach like Changemakers – to take bite size chunks out of an ambitious agenda and stimulate progress and support through achievement of high profile goals – has to programs that are working at large scales and with complex combinations of stakeholder interests. In personal statements and responses to survey to evaluate the process, Changemaker participants have consistently argued that despite being under-resourced, intensive, challenging and exhausting, Changemakers was an experience that changed the way they think about what they do, changed the way they feel about working with their colleagues, and gave them the confidence and motivation to advocate for significant actions by government and partners. And on top of all that they achieved unimagined conservation success.

## **6. Population Health, Gender and Environment**

### **Migration:**

In FY04 two consultancies were undertaken on migration: one by Professor Dick Bilborrow (University of North Carolina) with WWF GCP funding to review opportunities to reduce impacts of migration, and the other by Jenny Ericson (former WWF Population-Environment Fellow in Mexico) for CI to undertake a series of mini-case studies in Asia, Latin America and Africa on migration impacts and interventions by conservation organizations. The Africa Biodiversity Collaborative Group and Community Conservation Coalition then held an exploratory meeting on migration and biodiversity ([www.abcg.org](http://www.abcg.org)).

This work reaffirmed the huge impacts that migration is having on biodiversity around the world. CI and WWF determined to follow up, intending to undertake piloting of innovative approaches, and development of migration tools for the conservation sector. However, funding efforts were unsuccessful; so we decided to document current state of knowledge in an interim document. We integrated both consultancy reports into a more generalized draft document on the nature and causes of migration, its impacts on conservation, and interventions the conservation sector can take to reduce impacts. The document has expanded greatly from the original consultancies, focusing on ways to prevent or influence the course of migrations to reduce biodiversity impacts, and ways to mitigate the impacts when migrations do occur. Interventions can be at policy level, in the area of origin, and/or in the area of destination. Types of migration covered include migrations for economic opportunity, because of environmental degradation, and politically forced migration. The document is illustrated throughout with experiences drawn from conservation programs, including the case studies.

During the last few months it has been extensively peer reviewed by leading conservation-migration experts, and we are currently completing revisions. It will be published jointly with CI in the next few months. WWF will contribute some remaining GCP funds allocated for migration to the publication, and CI will provide funding from the Packard Foundation. The publication is

intended as an interim document; its two main aims are to provide conservation practitioners with existing information on impacts and interventions that have been tried in various places round the world to date, and to draw attention in the conservation sector and beyond to the considerable biodiversity impacts of this little studied and under-funded but potentially devastating phenomenon. Ultimately we hope to use the document to raise funds to do further work on migration, including piloting of various approaches, and for a tool kit for conservation practitioners that will help them analyze existing and potential migration situations, review possible interventions, and identify key leverage points where they can intervene effectively.

Also this fiscal year, we presented results of this work on two occasions:

- in a workshop at the Society for Conservation Biology in San Jose, California on demographic change and biodiversity
- in a population-poverty-environment workshop during the Beahrs Environmental Leadership Program, University of California, Berkeley.

We will continue to look for further outreach opportunities. The powerpoint of the presentation is included as Annex 7 of this report.

### **Reproductive Health:**

(This activity is not funded by GCP but is included for information, because it ties closely to GCP-funded activities in Kiunga, Kenya.)

During the last year the reproductive health/environment project “Successful Communities from Ridge to Reef” continued with funding from GH/PRH (\$450,000 from June 05 to September 06). The project works in East Africa Marine Ecoregion (Kiunga, Kenya), the Spiny Forest in Madagascar, and the Coral Triangle (Philippines). The project provides family planning and reproductive health services to remote communities living in areas of high biodiversity where there is heavy pressure on natural resources, high human fertility, and unmet need for these services. It also integrates environmental education and promotes sound natural resource management in this work. Activities under this cooperative agreement have several close linkages with GCP.

In Kiunga, Kenya there continues to be good synergy among different funding sources to provide an integrated approach to conservation through community health and development. Thus while there is a high demand for family planning and reproductive health services that the project is helping to meet through mobile clinics and other means, Johnson & Johnson provides general health funds which allow the project (through the health partner African Medical Research Foundation, AMREF) to undertake broader health activities as well. The GCP funds supporting improved fisheries and environmental management complement this well: the health support and scholarships (see below) greatly improve community relations and help to facilitate buy-in to the natural resource management components. At the same time, established relationships with fishermen facilitate access for health workers to this demographic group which is more difficult to reach in the deeply traditional Muslim society, in order to discuss and promote HIV/AIDS awareness and prevention, and family planning. It is well recognized that fishermen are a high-risk group for HIV transmission when they travel and sell their catch away from home.

The project also contains a population analysis component that aims to identify the added value of the integrated population-health-environment (PHE) approach, examine the factors that make health-environment partnerships work best, and look at ways to scale up population-environment

approaches. In the last year we have undertaken interviews for the first two components, the results of which are currently being analyzed. We have commissioned two country case studies on scaling up PHE efforts, in Madagascar and the Philippines. In addition we are working with WWF's Conservation Science Program to analyze population growth (due to migration and fertility) in ecoregions around the world, to help identify where we should prioritize population interventions in the future.

We are hoping to get a two-year extension to continue this work in the three ecoregions. In addition we have recently heard that we will receive funds from the USAID Nepal Mission for PHE work in Khata, Terai Arc where we are already undertaking health work with support from Johnson and Johnson. The new funding (\$70,000 for FY07-08) will enable family planning, HIV/AIDS awareness and prevention, and promotion of fuel-efficient stoves to reduce pressure on forests and respiratory disease.

**HIV/AIDS and Conservation:**

(The following section is included for information as it was requested in previous annual reports.)

A major breakthrough in scaling up our cutting-edge HIV/AIDS and conservation work has come through the resolution on HIV/AIDS and conservation passed at the last World Conservation Congress in Bangkok that mandates IUCN to take action on this urgent issue, and encourage its partners to do likewise. IUCN has asked WWF and the Africa Biodiversity Collaborative Group (ABCG) to partner with it and provide technical assistance in rolling out the resolution. IUCN has submitted a joint proposal to the Swiss Agency for Development Cooperation for seed funding for mini-case studies and a workshop in South Africa early next year, to develop a strategy. The Swiss Agency for Development Cooperation in turn has expressed great interest as it has mainstreamed HIV/AIDS into all sectors it supports except natural resources, and is keen to learn from our experiences.

We have continued to seek outreach opportunities, including many sessions with individual conservation organizations/offices and individuals, the Society for Conservation Biology workshop in San Jose, and the Second National Population, Health and Environment Conference in the Philippines in March 2006.

We are in the process of writing a draft manual on HIV/AIDS for the conservation sector that outlines impacts of HIV/AIDS on conservation and lays out actions that can be taken to help to maintain conservation capacity, reduce impacts on natural resources, and assist AIDS-affected families and communities through sustainable use of natural resources. We are drawing on experiences across Africa, including the GCP-funded PEACE Project in Tanzania, and the mainstreaming of HIV/AIDS into the communal conservancy program in Namibia. The draft manual will be used for the IUCN workshop, after which we envision publishing it jointly with IUCN as a key tool for the roll-out of the HIV/AIDS and conservation resolution.

**Girls' Education:**

Following GCP support a few years ago for a workshop to review progress and results from the Girls' Scholarship Program, this year the program continued to support girls' education in Kenya, Tanzania, Nepal and Bhutan. Building on lessons from the workshop, WWF site-based program managers honed monitoring and evaluation plans that link girls education initiatives to conservation outcomes.

Since 2004, each of the programs has continued to become more sustainable. The Philippines program has now achieved financial sustainability and graduated from the WWF-US program. The Tanzania program has continued to help community members and park staff channel a portion of park entrance fees to additional scholarships. The Nepal program is poised to expand the scholarship program model to a new site. Finally, the Bhutan program is learning from the other country programs how to refine its approach: the program took its girl scholars on their first-ever environmental exposure and leadership training field trip, and has adopted the successful approach of WWF Madagascar-- bringing sustainable livelihoods education to out-of-school girls in communities that lack schools.

We are now keen to conduct a global evaluation of the program to determine its impact and how it might be scaled up, and are seeking funds for this.

### **Subgrantees**

A subgrant was issued to Conservation Measures Partnership (CMP) to conduct the work described above under activity 1.

### **List of Annexes**

1. Draft *Conservation Audit Protocol*
2. *HydroSHEDS tools* – Summary
3. Map – *HydroSHEDS sub-basin classification*
4. Map – *HydroSHEDS stream classification*
5. Information sheet - *Bering Sea & Northeast Pacific Coast Salmon Watch: A Coastal Community Climate Witness Network for Salmon*
6. Table of Contents for booklet (in preparation) of concept notes for projects designed during Climate Camp
7. Powerpoint presentation - *Human Migration and Conservation*. Edmond & Oglethorpe, Cebu, 2006.