

Darwin Initiative for the Survival of Species

Final Report

1. Darwin Project Information

Project Reference No.	13-012
Project Title	Integrated River Basin Management in the Sepik
Country	Papua New Guinea (PNG)
UK Contractor	WWF-UK
Partner Organisation	WWF Western Melanesia Programme Office (formerly WWF Papua New Guinea); plus wider partners including the PNG Department of Environment & Conservation, Sepik Wetlands Management Initiative (SWMI), HELP Resources Incorporated, Bauabau Theatre Group, East Sepik Provincial Government, Ambunti Local Level Government
Darwin Grant Value	£120,000
Start/End date	01 April 2004 to 31 March 2008
Project website	http://tinyurl.com/69dy37
Author(s), date	Dr David Tickner, WWF-UK and David Peter, WWF PNG, July 2008

2. Project Background/Rationale

- Describe the location and circumstances of the project

The Sepik River Basin covers about 72,700 km² mostly in the north-west of Papua New Guinea (PNG) and includes all or part of three highland provinces and two coastal provinces. The Sepik River Basin has a population of about 430,000 people and is located in one of the least developed regions in a very poor country. Communities in the area rely almost entirely on the environment for subsistence resources.

The Sepik is one of the most ecologically valuable rivers in the Asia Pacific region and one of the biggest rivers systems in the world with no industrial development. The river also provides food, drinking water and a transport route for hundreds of thousands of people who live in the basin.

- What was the problem that the project aimed to address?

Specific environmental threats to biodiversity and the values of the Sepik basin include increased sedimentation due to logging; invasive species including paku (*Piaractus briachypumus*), salvinia (*Salvinia molesta*) and water hyacinth (*Eichhornia crassipes*); grassland and wetland fires; clearing of riparian vegetation for gardening and building houses; and over-harvesting of crocodiles and eaglewood. Future threats may arise from mining, oil and gas explorations, more logging, hydropower development, social infrastructure developments and oil palm plantations.

There is no legislative framework in PNG for good river basin management and the enduring

weakness and/or absence of governance mechanisms and key institutions meant that existing policy mechanisms that should facilitate better management of the Sepik basin, such as the PNG Department of Environment and Conservation's Total Catchment Environmental Management (TCEM) policy, have not been implemented. Stakeholder awareness of the values and threats of the Sepik basin are low.

- Who identified the need for this project and what evidence is there for a demand for this work and a commitment from the local partner?

The PNG Conservation Needs Assessment Report (1993) was led by the PNG Department of Environment and Conservation and involved several different conservation organisations, including WWF PNG. The Report identified seven major catchments in the country, including the Sepik, as areas of high biological diversity. The report particularly focused on the Sepik River as the location of the most important and commercially significant crocodile population in New Guinea; home to important waterfowl populations including stopover points for migratory waders; a significant habitat for nationally listed threatened species such as the Victoria Crowned Pigeon, the Harpy Eagle and the Cassowary; and location of the largest lowland rainforest protected area in PNG. In addition, the basin was recognised as globally significant on the basis that the Sepik River is one of the largest near-pristine freshwater systems in the Asia Pacific region and the largest near-unpolluted river in New Guinea. The Sepik River outflow was identified as one of the four globally significant marine areas in PNG's coastal waters (Bismark Solomon Seas ecoregion biological visioning workshop 2003). In 2004 DEC entered into an agreement with WWF PNG to develop an IRBM plan for the Sepik which would be used and at the same time operationalising the TCEM concept left idle at DEC for almost a decade.

In 1996, a logging concession was issued for April/Salume area the in upper Sepik region covering an area of 521,506 ha. Many communities that objected to the logging concession worked with WWF PNG and its partners to successfully establish the Hunstein Range Wildlife Management Area (WMA) thereby limiting the logging concession by 220,000 ha. This co-operation led to the idea of developing more protected areas in the upper Sepik region.

3. Project Summary

- What were the purpose and objectives (or outputs) of the project? Please include the project logical framework as an appendix if this formed part of the original project proposal/schedule and report against it. If the log frame has been changed in the meantime, please indicate against which version you are reporting and include it with your report.

Refer to the log frame attached. This is an amended version dating from 2007 (see below for an explanation).

The amended purpose of the project was:

To assist government and local stakeholders to designing a sub-catchment management framework that will protect biological and cultural diversity and ecological processes while promoting sustainable and equitable use of the natural resources through properly implemented catchment management policy.

The objectives of the project were:

1. A sub-catchment management framework for the Niksek/Frieda catchment (amended)
 2. Strong stakeholder awareness of and commitment to effective river basin management
 3. Mechanisms to ensure stronger protection of areas of ecological importance
- Were the original objectives or operational plan modified during the project period? If significant changes were made, for what reason, and when were

they approved by the Darwin Secretariat?

The attached log frame is a revised version, submitted to the Darwin Secretariat for approval in June 2007. The purpose of the project had been changed only slightly (to include the word “equitable”) in this revision; two of the objectives remained exactly the same as in the original version. However, in the light of the comments from the Darwin Secretariat’s reviewer in 2007, one objective in the log frame was amended to focus on development of an IRBM framework for a sub-catchment of the Sepik, the Niksek/Freida sub-catchment, rather than on the entire Sepik basin. The Niksek subcatchment is the location of many biologically significant species, Wildlife Management Areas (WMAs) and particular threats from logging and mining. This change reflected a more realistic assessment of an optimistic assumption in the original log frame that DEC and provincial governments could allocate funds to maintain catchment management systems across the entire Sepik catchment.

- Which of the Articles under the Convention on Biological Diversity (CBD) best describe the project? Summaries of the most relevant Articles to Darwin Projects are presented in Appendix I.

Articles 6, 7, 8, 10 and 13

- Briefly discuss how successful the project was in terms of meeting its objectives. What objectives were not or only partly achieved, and have there been significant additional accomplishments?

Objective 1: A sub-catchment management framework for the Niksek/Frieda catchment
Mostly achieved.

The catchment management framework has been drafted and circulated for final comments and inputs from stakeholders and experts. After the plan has been finalised it will be submitted to either the provincial or the national government for endorsement for implementation. Once endorsed it will be a policy document which will have the backing and support of the government.

Objective 2: Strong stakeholder awareness of and commitment to effective river basin management

Achieved (probably – see note below on measuring awareness).

Many people have been exposed to communications about the values of, and threats to, the Sepik basin’s biodiversity through coverage in the PNG media, many workshops and meetings, outreach by partner organisations and, especially, events such as the annual Sepik River Crocodile Festival and World Wetlands Day.

Thousands of brochures entitled ‘Sepik River Nature and Tourism’ were printed and widely distributed and a documentary on the Sepik River Crocodile Festival has been produced and televised several times on local television. The television story won a runner-up award for best television documentary of the year (2007) at the Pacific Island News Association conference in Solomon Islands in June 2007 and top award for best television pictures of the year (2007) in the same conference.

There has been a strong support from stakeholder organisations as demonstrated through the provision of human resources and resources to support the project. There is now a partners’ joint workplan, the Sepik River Network Plan, which was developed in August 2005 and reviewed bi-annually by all parties. The last review was conducted in December, 2007.

NB: Although we strongly suspect that awareness of conservation issues in the Sepik basin is much higher now than in the past, one of the lessons for WWF and the Darwin Secretariat from this project is that it is critical to build in resources at the project design stage if public

awareness is to be measured before, during and after projects. Moreover, in locations such as PNG, measuring awareness can be very difficult due to logistical and cultural constraints.

Objective 3: Mechanisms to ensure stronger protection for areas of ecological importance
Mostly achieved.

During the 2005 Pacific Island Forums in Port Moresby, three new WMAs were jointly announced by former PNG minister for Environment & Conservation Hon. William Duma, WWF International Director General Jim Leape and British High Commissioner to PNG David McLeod. At the end of the project the gazettal of these WMAs had yet to be finalised due to a lack of human resources within DEC. The head of the DEC Parks and Wildlife Branch has given assurances that the WMAs will be gazetted before the end of this calendar year.

Currently discussions are underway between relevant organisation and experts to conduct a legislative review to ensure the establishment of Eaglewood Management Areas (EMAs) in the country. It is noted that there is no legislation under which EMAs can be established. However, to comply with the CITES requirement there has to be a national legislation on the management, use and trade of eaglewood. This issue will be followed-up by WWF under the auspices of the follow-up project in the Sepik, funded by the European Commission.

- **Research** - this should include details of staff, methodology, findings and the extent to which research findings have been subject to peer review.

One of the project partners, the Sepik Wetlands Management Initiative (SWMI), has conducted crocodile surveys and monitoring using participatory rural appraisal techniques. DEC also conducts an aerial survey of crocodile nests in the upper Sepik region to determine the change of crocodile population. Both surveys have shown that the population of crocodile is steadily increasing. This increase in crocodile population is a result of 1) the awareness-raising activities conducted by SWMI on crocodile habitat protection; and 2) sustainable crocodile egg harvesting technique used by Mainland Holdings Limited, the major company involved in the buying of crocodile eggs and skins in the Upper Sepik Region. The work of the crocodile survey results has not been peer reviewed as such, but it has been presented in various national and international meetings.

Two trainee students from the University of Papua New Guinea were engaged by WWF PNG for three month work experience placements. As part of their placements the students conducted socio-economic surveys of the communities in the Niksek sub-catchment area. A third student helped to compile a report on "The State of the Sepik". Their reports, together with the Project Manager's assessment of their performance, were submitted to the University for reviewing and grading.

- **Training and capacity building activities** – this should include information on selection criteria, content, assessment and accreditation.

Two training sessions on River Basin Management were conducted for partner organisations, including DEC. The first of these was aimed at partners based in Port Moresby and was conducted by Dave Tickner from WWF-UK. The second, held in Ambunti, was primarily aimed at local stakeholders in the Sepik basin and was conducted by David Peter. Key partners in the Sepik IRBM were identified through a partners capacity assessment survey by a consultant (Ted Mamu).

The project has conducted a number of training sessions for local communities in the upper Sepik basin on how to establish Eaglewood Management Areas. The participants were primarily the owners of land and were able to identify Eaglewood trees and so consider where EMAs should be located. Assessment and accreditation were not appropriate for these courses.

As mentioned above, two trainee students from the University of Papua New Guinea were engaged by WWF PNG for three month work experience placements. As part of their placements the students conducted socio-economic surveys of the communities in the Niksek sub-catchment area. A third student helped to compile a report on “The State of the Sepik”. Their reports, together with the Project Manager’s assessment of their performance, were submitted to the University for reviewing and grading.

4. Project Impacts

- What evidence is there that project achievements have led to the accomplishment of the project purpose? Has achievement of objectives/outputs resulted in other, unexpected impacts?

The purpose of the project was to help government and communities establish a framework for managing natural resources in the Sepik basin and, in particular, the Niksek sub-catchment. The framework requires strong awareness and support from communities, joint activity planning and support from central government.

Awareness raising activities and community workshops have helped to develop very strong support now amongst the communities in the upper Sepik for sustainable natural resources management. Evidence for this includes the fact that landowners have been mobilising to stop the issuing of the mining concession in the headwaters of the Sepik (Frieda River). Moreover, the crocodile surveys by DEC have indicated that the crocodile population has increased significantly as people have begun to harvest crocodile eggs sustainably.

There is also strong stakeholder support in the promoting activities related to the protection of the Sepik River. Stakeholders have provided in-kind contributions and cash towards the launching of the Sepik River Tourism Brochure and the Sepik River Crocodile Festival. The Festival has been a remarkable success in terms of drawing community and media attention to the values of the Sepik basin and, as such, has exceeded our expectations. It was the first of its kind in any WWF managed project. The Festival has now been endorsed by both the national and the local level government and as a result most of the cost for hosting the event in the successive years will be met by the Ambunti Local Level Government through its internal budget. This will help to sustain support for better management of natural resources in the long-term.

Completion of the written catchment management framework for the Niksek has been slower than hoped, but the framework now has the support of most community groups in the area. Further effort will be needed from WWF to support implementation of elements of the framework. The funding we have received from the European Union for a follow-up project in the Sepik basin will be of great help in this.

Full implementation of the catchment management framework will require resources from central government in PNG. Mobilising the government has been difficult, mostly due to capacity issues within DEC. However, the government is now encouraging a catchment management approach in conservation and DEC is trying hard to find resources to operationalise the TCEM, including in the Sepik basin. The government has also committed to finalising the gazzetal of the proposed new WMAs in the Sepik basin.

A signal of government support for better catchment management came towards the end of the project when ten government organisations gave their support for the ratification of the UN Watercourses Convention. This Convention sets out basic principles for good management of transboundary rivers and lakes and is therefore relevant to the Sepik, the headwaters of which partly lie in Indonesia. Government support for it is an unexpected by-product from the work of the Darwin project.

WWF PNG will continue to press the government, and to support it, in order to ensure that commitments to the Niksek management framework, the TCEM policy, the Watercourses Convention and the WMAs are honoured. This will require a long-term effort.

- To what extent has the project achieved its purpose, i.e. how has it helped the host country to meet its obligations under the Biodiversity Convention (CBD), or what indication is there that it is likely to do so in the future? Information should be provided on plans, actions or policies by the host institution and government resulting directly from the project that building on new skills and research findings.

The Niksek catchment management framework, in as much as it helps to demonstrate how to operationalise the TCEM policy, may help it to meet its obligations under Article 6 of the CBD (General Measures for Conservation and Sustainable Use); the surveys of, and increase in, crocodile populations supports the achievement of Article 7 (Monitoring); the whole project, and in particular the three new WMAs awaiting gazzetal at the office of DEC support achievement of Article 8 (In-situ Conservation); the work on crocodiles and eaglewood support Article 10 (Sustainable Use); and the government's ongoing support to the Crocodile Festival will help it maintain its commitments under Article 13 (Public Education and Awareness).

- If there were training or capacity building elements to the project, to what extent has this improved local capacity to further biodiversity work in the host country and what is the evidence for this? Where possible, please provide information on what each student / trainee is now doing (or what they expect to be doing in the longer term).

Through the project, WWF PNG has helped local partners to build capacity. For instance, support was provided to the preparation of project proposals by the Sepik Wetlands Management Initiative (SWMI) for USD 40,000 from the UN Development Programme (proposal still awaiting approval). WWF also assisted SWMI with the preparation of work plans and budgets for and financial reporting and with the preparation of presentations of their work on crocodile conservation in advance of an international meeting in Germany in early 2008.

As discussed above, three students from the University of Papua New Guinea benefited from placements within WWF PNG to support the project. In doing so, they learned about catchment management. Each student obtained good results in their assessment from WWF and from their lecturers. Two of the students are continuing with the Honours programme while one of them is working with WWF on a casual basis whilst awaiting permanent appointment under the Sepik EU project.

- Discuss the impact of the project in terms of collaboration to date between UK and local partner. What impact has the project made on local collaboration such as improved links between Governmental and civil society groups?

WWF-UK and WWF PNG have enjoyed a mutually supportive relationship despite the unavoidable logistical difficulties of operating on different sides of the planet. WWF-UK has provided technical assistance and experience of catchment management efforts from other countries. WWF PNG has led the management of the project and has brought key issues and lessons to WWF-UK's attention. This has been useful as WWF-UK tries to build its knowledge of the benefits and limitations of river basin management approaches.

Mostly this mutual support has been through regular email correspondence, quarterly phone

link ups and a visit to PNG by Dave Tickner. During the visit, Dave provided trainings on river basin management in Port Moresby for the WWF PNG team and major project partners. In addition, an ex-staff member of WWF-UK now based in WWF Australia, Peter Ramshaw, has also provided technical and project management support to the project and to WWF PNG's other work on freshwater ecosystems. More recently, another colleague in WWF-UK, Susanne Schmitt, has taken on a lead role in supporting WWF's wider work in PNG. Susanne has particularly helped in the start-up of the EU-funded project in the Sepik basin that will follow the Darwin project.

As a result of this joint working, most of the partners are keen to work with WWF on catchment management. Specific actions have included the identification of key cross-cutting issues by government departments and the incorporation of them into the stakeholder-led Sepik River Action Plan and other instruments such as the Ambunti District five-year development plan.

- In terms of social impact, who has benefited from the project? Has the project had (or is likely to result in) an unexpected positive or negative impact on individuals or local communities? What are the indicators for this and how were they measured?

The project design did not include specific monitoring measures for social impacts. However, one of WWF's key local partners on the project was HELP Resources, an NGO that works on addressing social issues in the Sepik. The project helped HELP Resources to establish an office in Ambunti which provides telephone, internet/email, printing and photocopying services to local people. HELP Resources also runs workshops on HIV/AIDs, gender and equality, drug and alcohol abuse and good governance. About 40 young people that had previously been involved in drug-related and other criminal activities in the area are now working with HELP Resources as volunteers. The HELP Resources Ambunti office also provides distance learning programmes for Grade 10-12 students. Partly as a result of this facility, many young people have graduated with very impressive results from the programmes and have gone on to study in some of the tertiary schools in the country.

5. Project Outputs

- Quantify all project outputs in the table in Appendix II using the coding and format of the Darwin Initiative Standard Output Measures.

Refer to Appendix II

- Explain differences in actual outputs against those in the agreed schedule, i.e. what outputs were not achieved or only partly achieved? Were additional outputs achieved? Give details in the table in Appendix II.

Refer to Appendix II for a comprehensive list. All outputs in the original project plan were at least partially achieved. Those that were not fully achieved included:

- the preparation of three management plans for community-managed protected areas (output category 9) which have been delayed as we await finalisation of the WMA gazzetal;
- five press releases were prepared, rather than the ten in the original project plan (category 15A); and
- the original output (category: Other) of five significant actions from the catchment management plan being implemented was not possible due to the delay in finalising the plan.

Some additional outputs were achieved including:

- three undergraduate students receiving training (categories 4a and 4b);
- the project manager, David Peter, receiving substantial additional training (categories

- 5, 6a and 6b);
 - presentation of the Darwin project at an international symposium in Australia (category 14b); and
 - the project being featured on 5 television programmes (category 18a).
- Provide full details in Appendix III of all publications and material that can be publicly accessed, e.g. title, name of publisher, contact details, cost. Details will be recorded on the Darwin Monitoring Website database.

Refer to Appendix III

- How has information relating to project outputs and outcomes been disseminated, and who was/is the target audience? Will this continue or develop after project completion and, if so, who will be responsible and bear the cost of further information dissemination?

The primary target audiences have been local communities and stakeholders groups, local government and central government.

In terms of local communities and stakeholders and local government, it is important to realise that access to the project area is a significant logistical challenge. The Sepik basin is very difficult to reach and telecommunications systems are almost non-existent. Therefore information has mainly been disseminated through the WWF PNG staff travelling to project sites and to Ambunti District government meetings. WWF PNG has also relied on partners such as HELP Resources, the Sepik Wetlands Management Initiative and the Bauabaua Theatre Group to disseminate information through their contacts and activities.

In Port Moresby, communications is somewhat easier. WWF PNG enjoys a good working relationship with DEC and has held regular formal and informal meetings to discuss the project and related issues.

WWF PNG will continue to make use of these communication channels during the follow-up EU-funded project in the Sepik basin. In particular, the partnerships with Ambunti District government and HELP Resources Centre are strong. WWF also plans to develop a tourism website for the Sepik in early 2009.

6. Project Expenditure

- Tabulate grant expenditure using the categories in the original application/schedule

Project expenditure (Darwin grant funding only)

Item	Original Budget	Expenditure	Balance
Rent, rates, heating, overheads etc			
Office costs (eg postage, telephone, stationery)			
Travel and subsistence			
Printing			
Conferences, seminars, etc			
Capital items/equipment			
Others			
Consultancies			
External audit			
Salaries (specify)			
PNG Country Manager			
Conservation Manager			
Freshwater Co-ordinator			
DEC Catchment Officer			
Field Co-ordinator			
SRU Trainer			
PA Officer			
Comms Manager			
Finance & Admin Manager			
GIS Officer			
Casual Labour			
TOTAL			

- Highlight agreed changes to the budget.

The major change to the budget agreed with the Darwin Secretariat was a no-cost extension for one year. This agreed after the first year of the project when start-up had been severely delayed by the difficulty in recruiting a suitably-qualified project manager in PNG.

- Explain any variation in expenditure where this is +/- 10% of the budget.

All project lines varied by +/- 10% or more, except for the external audit. This variability reflects the difficulty in accurately budgeting for projects in locations such as PNG, especially for a project such as this which was starting almost from scratch.

In some cases, such as printing, capital items and some additional staff costs, the quantity of money affected by variations was relatively small. The areas of major change were:

- Office costs and overheads: this reflects the unforeseen need to work with HELP Resources to establish a dedicated Sepik basin office which could be the focal point

- for contact with local communities and stakeholders;
- Travel and subsistence: this reflects the need of the WWF PNG Freshwater Co-ordinator to travel from Port Moresby to the project location far more often than originally envisaged in order to build partnerships and drive the project. To some extent it also reflects the high cost of travel in PNG where most journeys across the island need to be made by small aircraft. These costs were also affected by the unavoidable rising price of fuel during the project lifetime;
- Consultancies: the lack of spend reflected the success of the project in a) building partnerships with other organisations which could provide skills; and b) in attracting students from the University of PNG who could provide some services gratis; and
- Staff costs: on the whole, these costs were higher than budgeted. The changes were due to a) the departure of WWF PNG's Country Manager and a delay in recruiting his replacement, which allowed for the diversion of resources from that post into this project; b) the higher than anticipated time allocation from the WWF PNG Conservation Manager and Freshwater Co-ordinator to the project and a salary review which led to an increase in the cost of their time; c) the decision not to fund a DEC catchment management officer for the Sepik and field co-ordinator and, instead, to invest in the partnership with HELP Resources.

These changes were highlighted in previous reports to the Darwin Secretariat.

7. Project Operation and Partnerships

- How many local partners worked on project activities and how does this differ from initial plans for partnerships? Who were the main partners and the most active partners, and what is their role in biodiversity issues? How were partners involved in project planning and implementation? Were plans modified significantly in response to local consultation?

The original project plan set out three main partners: DEC, Ambunti District government and the Ambunti District Land & Environment Foundation (ADLEF). ADLEF subsequently went out of business, so a partnership was developed with HELP Resources instead. In addition, new partnerships were formed with East Sepik Provincial Government, the Sepik Wetlands Management Initiative (SWMI) and the Bauabaua Theatre Group. Each of these partners was involved in preparation of plans, especially the Sepik River Network Plan which is jointly owned and implemented by the partners and other local stakeholders.

The roles of each partner was as follows:

- DEC: the central government department responsible for environment protection and conservation and, in this capacity, responsible for both the gazzetal of new protected areas and the implementation of the TCEM policy.
 - Ambunti District government: responsible for developing district development plans which including conservation plans.
 - East Sepik Provincial Government: responsible for the development of provincial plans including the protection and conservation of the environment.
 - SWMI: responsible for awareness raising, education and community mobilisation for crocodile protection and eradication of invasive species long the Sepik River
 - Bauabaua Theatre Group: responsible for community awareness-raising through drama and music.
 - HELP Resources: responsible for addressing social issues through awareness raising, education and training.
- During the project lifetime, what collaboration existed with similar projects (Darwin or other) elsewhere in the host country? Was there

consultation with the host country Biodiversity Strategy (BS) Office?

There was extensive collaboration and knowledge sharing within the WWF PNG office, particularly with the Kikori and Transfly Ecoregion projects. In addition, the WWF PNG staff members from the Darwin project and WWF's Kikori project, together with Dave Tickner from WWF-UK, attended a workshop of WWF staff from across the Asia Pacific region focusing on river basin management in Bangkok in late 2004.

There were also frequent discussions between WWF PNG and the DEC which has the central government mandate for biodiversity strategies and/or plans.

- How many international partners participated in project activities? Provide names of main international partners.

Although not formally partners in the project, the following organisations collaborated with WWF PNG on elements of the work and/or on related issues:

- Oxfam Australia helped to develop the Sepik River Network Work plan;
 - Wetlands International exchanged experience with WWF PNG and held discussions regarding intercoastal zone management in the Madang lagoons which link the Sepik and the Ramu Rivers;
 - Volunteers from the Australian Youth Ambassadors Development helped to produce GIS maps for the Sepik and reviewed the TCEM concept in light of the emerging outcomes from the Darwin project; and
 - WWF Australia provided technical support and guidance through Peter Ramshaw, and ex-WWF-UK staff member now located in Canberra.
- To your knowledge, have the local partnerships been active after the end of the Darwin Project and what is the level of their participation with the local biodiversity strategy process and other local Government activities? Is more community participation needed and is there a role for the private sector?

The local partnership remains active as evident in the continuing support from DEC, Ambunti District government and local NGOs to the Sepik River Network Plan and the Sepik Crocodile Festival. Moreover, unlike most other conservation projects in the country, many local private companies (car dealers, hotels/guest houses, shops, crocodile buyers and communications companies) have helped with the Sepik River Crocodile Festival last year. It is anticipated that more companies will come on board in future years to support the event.

8. Monitoring and Evaluation, Lesson learning

- Please explain your strategy for monitoring and evaluation (M&E) and give an outline of results. How does this **demonstrate** the value of the project? E.g. what baseline information was collected (e.g. scientific, social, economic), milestones in the project design, and indicators to identify your achievements (at purpose and goal level).

A clear lesson from the project is the need to invest more at the outset in designing a more robust M&E framework and in gathering good baseline data. The M&E conducted focused mainly on the three log frame objectives (see attached log frame at Appendix V) with periodic evaluation of progress against the indicators established for each. A recommendation from the project would be for the Darwin Initiative to require, and to resource, better M&E if necessary providing seed funds during a start period to help ensure that this is built into project design. Since the start of this project WWF-UK has begun to strengthen its own procedures along these lines.

- What were the main problems and what steps were taken to overcome

them?

Recruitment of a suitably qualified Freshwater Co-ordinator was initially a significant challenge and delayed the start of the project by almost a year.

River basin management was a fairly new concept in PNG and it took time for stakeholders to understand, accept and begin to implement the key concepts. Training workshops were conducted to address this.

Transport and telecommunications infrastructure is very poor in PNG. This hampered the mobility and access of the Freshwater Co-ordinator to the project area. To help overcome this, WWF shifted resources to allow for more travel, developed partnerships with local NGOs and shared resources and costs with these partner organisations. Specifically, WWF PNG established an office in Ambunti to provide a focus for communications in the area.

Governance is also an issue in PNG. Initially Ambunti District government and the local MP did not support conservation in the area. However, as a result of continuous awareness-raising through the project the local MP and the Ambunti District Administrator both made public commitments to support conservation efforts in the Sepik basin. The MP even donated a 40 HP outboard motor for conservation work as a token of his support.

- During the project period, has there been an internal or external evaluation of the work or are there any plans for this?

There was no external evaluation of the project except the desk-based reviews provided by the Darwin Initiative on the basis of WWF's submitted annual reports. A lesson for future projects is that a budget should have been included for an independent field-based mid-term review.

The project was informally reviewed by internal colleagues in WWF, notably Peter Ramshaw in WWF Australia and Susanne Schmitt in WWF-UK. This review helped to develop the proposals for follow-up work in the Sepik which eventually attracted funding from the European Union.

- What are the key lessons to be drawn from the experience of this project? We would welcome your comments on any broader lessons for Darwin Initiative as a programme or practical lessons that could be valuable to other projects, as we would like to present this information on a website page.

There are two key lessons to draw from this project:

- While the project achieved much in terms of increased awareness and more protection/better management for biological resources in the Sepik basin, the original level of ambition of the project was too high, particularly in terms of developing a river basin management framework for the entire basin. PNG is a country with very high levels of biodiversity and it is critical that organisations such as WWF and the Darwin Initiative continue to work there. However, it is also a country which presents significant logistical, political and cultural challenges. Furthermore, capacity in the country to undertake difficult conservation work is limited, as illustrated by the time it took to recruit the Freshwater Co-ordinator. Further projects need to explicitly recognise these challenges and if necessary, scale down levels of ambition. This will be for both donors and recipients to implement.
- In retrospect there was also substantial scope to improve on the original design of the project in terms of allocating resources for a robust M&E framework that is built into the project workplan. Key elements of this might include a stronger emphasis on reviewing project indicators and collecting baseline information in the first year (or even in a pre-implementation period); allocation of specific resources for external evaluation at an appropriate point in the project; clearer exposition in project design of an exit/continuation strategy once Darwin funding has expired; and more

resources for knowledge exchange with selected other projects. There is a danger of over-engineering this, especially with a short-term (ie. three year) project with limited funds. Nevertheless, this project would have benefited from more resources devoted to those issues.

9. Actions taken in response to annual report reviews (if applicable)

- Have you responded to issues raised in the reviews of your annual reports? Have you discussed the reviews with your collaborators? Briefly summarise what actions have been taken over the lifetime of the project as a result of recommendations from previous reviews (if applicable).

The reviews from the Darwin Initiative have been very helpful, especially during the second half of the project. Staff from WWF PNG, WWF-UK and WWF Australia spoke at length about how to amend the project in the light of these reviews.

As result the following actions were taken:

- The objective regarding preparation of a catchment management framework was scaled down to focus on a single sub-catchment (Niksek) rather than the whole project area;
- More resources were allocated to providing grants to partner organisations;
- Despite cultural complexities, efforts were made to involve more women in the development of the catchment management framework through participation in workshops; and
- Many activities suggested by the reviewer that we were not able to incorporate into the Darwin project were incorporated in the design of WWF's follow-up EU-funded project in the Sepik.

10. Darwin Identity

- What effort has the project made to publicise the Darwin Initiative, e.g. where did the project use the Darwin Initiative logo, promote Darwin funding opportunities or projects? Was there evidence that Darwin Fellows or Darwin Scholars/Students used these titles?

The project has been consistent in acknowledging the assistance of the Darwin Initiative during workshops and other communications with stakeholders, government and communities. Similarly, written reports have included an acknowledgment. The project did not purchase significant capital assets (such as a vehicle) on which the Darwin logo could be displayed but the Sepik Wetlands Management Initiative agreed to place Darwin stickers on notice boards erected within crocodile habitat areas.

- What is the understanding of Darwin Identity in the host country? Who, within the host country, is likely to be familiar with the Darwin Initiative and what evidence is there to show that people are aware of this project and the aims of the Darwin Initiative?

The project area is very remote and communities involved have limited contact with western organisations. As a result, find it hard to differentiate between donors and WWF because of low literacy and lack of understanding on how donor agencies fund projects. Despite the efforts mentioned above, some stakeholders are aware of the Darwin Sepik project but do not necessarily understand the role of the Darwin Initiative, as distinct from that of WWF. Most of the organisations to which WWF has given grants understand that the primary donor is the Darwin Initiative.

- Considering the project in the context of biodiversity conservation in the host country, did it form part of a larger programme or was it recognised as a distinct project with a clear identity?

The recognition of the project varies from audience to audience. Local stakeholders in the Sepik basin primarily view the project as stand-alone entity, or perhaps understand it as part of WWF's wider work in PNG. Among government, especially central government, and larger project partners such as HELP Resources understanding is a little broader. These partners view the project as one part of the efforts of WWF and other conservation organisations to address the priorities set out in the PNG Conservation Needs Assessment. The specific remit of the project to establish a catchment management framework distinguishes it somewhat from most other projects though.

From WWF's perspective, the project is very definitely part of a larger programme. Indeed it is part of both our broad programme of work in PNG (which includes work in the Kikori basin and the Transfly ecoregion) and part of WWF-UK's broader portfolio of freshwater conservation programmes around the world.

11. Leverage

- During the lifetime of the project, what additional funds were attracted to biodiversity work associated with the project, including additional investment by partners?

Main sources of leverage for the project included:

- additional funds from the WWF network for work with DEC on the UN Watercourses Convention and on crocodile conservation and the Sepik Crocodile Festival;
 - Funds and in-kind contributions from local organisations, including Ambunti District government, central government, the local MP and the local private sector towards the Crocodile Festival;
 - In-kind contributions from informal partners such as Oxfam Australia and the Australian Youth Ambassadors Development organisation; and
 - Ultimately, significant leverage from the European Union for a follow-up project in the Sepik (Euro 886,000 including WWF-UK match funds).
- What efforts were made by UK project staff to strengthen the capacity of partners to secure further funds for similar work in the host country and were attempts made to capture funds from international donors?

Programme staff and fundraisers from the Government and Aid Agencies (GAA) team in WWF-UK staff worked very closely with the WWF PNG office to put together the application to the EU for funding. The EU funding is being directed through WWF-UK so this close working and capacity building will continue.

12. Sustainability and Legacy

- What project achievements are most likely to endure? What will happen to project staff and resources after the project ends? Are partners likely to keep in touch?

The WMAs, once gazetted, will in principle be sustainable as long as government support is rendered. A key challenge will be to empower local communities to manage the WMAs.

The Sepik River Crocodile Festival will also continue annually now it has been endorsed by the government and budget has been allocated to it. The Festival also has considerable support from local stakeholders and the local private sector which sees it as a means of attracting tourism to the area.

The Sepik River Action Plan is likely to continue to bind the project partners in efforts to implement the catchment management framework for the Niksek. The likelihood of these management actions being implemented has been increased by WWF's success in attracting EU funds. The major activities required to follow-up from the Darwin project are included within the strategy and workplan for the EU project, which commenced in July 2008.

- Have the project's conclusions and outputs been widely applied? How could legacy have been improved?

Most of the lessons learnt from the project will be used in the implementation of the follow-up EU project, in terms of helping communities develop management plans for WMAs and supporting stakeholders to implement elements of the catchment management framework. To that extent, the conclusions and outputs will be further applied within the project area. This will help to ensure that there is a sustainable legacy from the project.

- Are additional funds being sought to continue aspects of the project (funds from where and for which aspects)?

Funds have been obtained from the EU to continue the following aspects of the project:

- Establishment of 10 eaglewood management areas covering 50,000 hectares, preparation of eaglewood management plans and establishment of eaglewood management committees;
- Further awareness raising activities on crocodile management and business enterprise, establishment of five crocodile management areas, development of a Sepik River Crocodile Monitoring plan and provision of seminars on crocodile monitoring;
- Establishment of tourism and support for a tourism council, identification of tourism products, development of a tourism strategy for the Sepik River Basin and development and dissemination of an updated tourism brochure;
- Awareness raising on natural resource use and management over 20 communities representing 12,000 people within the Upper Sepik River area;
- Further training for project stakeholders on the catchment management approach, identification of threats and development of action plans; and
- Streamlining and integrating community needs into government plans and establishment of a catchment committee.

13. Value for money

- Considering the costs and benefits of the project, how do you rate the project in terms of value for money and what evidence do you have to support these conclusions?

Given the lack of infrastructure and capacity in PNG, the distance between the UK and PNG and the remoteness of the area, this has been a challenging project for WWF. With hindsight, project design could have been stronger.

However, although progress on development of the catchment management plan and gazzetal of the WMAs has been slower than originally hoped for, the project objectives have mostly been achieved. The Sepik Crocodile Festival exceeded all expectations and has a major success in establishing better management of the basin as a priority in the minds of local stakeholders. The project also enabled WWF PNG to put in place capacity that was key to the raising of a substantial sum of money from the EU that will greatly increase the chances of a sustainable and magnified legacy for the project. Similar WWF-UK supported projects in other parts of the world have achieved similar, and sometimes greater, impact but have cost substantially more (e.g. our catchment management project for the Ruaha river in Tanzania is supported to the tune of £400,000 per annum). So, on balance, it has been good value for money.

14. Appendix I: Project Contribution to Articles under the Convention on Biological Diversity (CBD)

Please complete the table below to show the extent of project contribution to the different measures for biodiversity conservation defined in the CBD Articles. This will enable us to tie Darwin projects more directly into CBD areas and to see if the underlying objective of the Darwin Initiative has been met. We have focused on CBD Articles that are most relevant to biodiversity conservation initiatives by small projects in developing countries. However, certain Articles have been omitted where they apply across the board. Where there is overlap between measures described by two different Articles, allocate the % to the most appropriate one.

Project Contribution to Articles under the Convention on Biological Diversity		
Article No./Title	Project %	Article Description
6. General Measures for Conservation & Sustainable Use	10	Develop national strategies that integrate conservation and sustainable use.
7. Identification and Monitoring	10	Identify and monitor components of biological diversity, particularly those requiring urgent conservation; identify processes and activities that have adverse effects; maintain and organise relevant data.
8. In-situ Conservation	30	Establish systems of protected areas with guidelines for selection and management; regulate biological resources, promote protection of habitats; manage areas adjacent to protected areas; restore degraded ecosystems and recovery of threatened species; control risks associated with organisms modified by biotechnology; control spread of alien species; ensure compatibility between sustainable use of resources and their conservation; protect traditional lifestyles and knowledge on biological resources.
9. Ex-situ Conservation		Adopt ex-situ measures to conserve and research components of biological diversity, preferably in country of origin; facilitate recovery of threatened species; regulate and manage collection of biological resources.
10. Sustainable Use of Components of Biological Diversity	20	Integrate conservation and sustainable use in national decisions; protect sustainable customary uses; support local populations to implement remedial actions; encourage co-operation between governments and the private sector.
11. Incentive Measures		Establish economically and socially sound incentives to conserve and promote sustainable use of biological diversity.
12. Research and Training		Establish programmes for scientific and technical education in identification, conservation and sustainable use of biodiversity components; promote research contributing to the conservation and sustainable use of biological diversity, particularly in developing countries (in accordance with SBSTTA recommendations).

13. Public Education and Awareness	30	Promote understanding of the importance of measures to conserve biological diversity and propagate these measures through the media; cooperate with other states and organisations in developing awareness programmes.
14. Impact Assessment and Minimizing Adverse Impacts		Introduce EIAs of appropriate projects and allow public participation; take into account environmental consequences of policies; exchange information on impacts beyond State boundaries and work to reduce hazards; promote emergency responses to hazards; examine mechanisms for re-dress of international damage.
15. Access to Genetic Resources		Whilst governments control access to their genetic resources they should also facilitate access of environmentally sound uses on mutually agreed terms; scientific research based on a country's genetic resources should ensure sharing in a fair and equitable way of results and benefits.
16. Access to and Transfer of Technology		Countries shall ensure access to technologies relevant to conservation and sustainable use of biodiversity under fair and most favourable terms to the source countries (subject to patents and intellectual property rights) and ensure the private sector facilitates such assess and joint development of technologies.
17. Exchange of Information		Countries shall facilitate information exchange and repatriation including technical scientific and socio-economic research, information on training and surveying programmes and local knowledge
19. Bio-safety Protocol		Countries shall take legislative, administrative or policy measures to provide for the effective participation in biotechnological research activities and to ensure all practicable measures to promote and advance priority access on a fair and equitable basis, especially where they provide the genetic resources for such research.
Total %	100%	Check % = total 100

15. Appendix II Outputs

Please quantify and briefly describe all project outputs using the coding and format of the Darwin Initiative Standard Output Measures.

Code	Total to date (reduce box)	Detail (←expand box)
Training Outputs		
1a	Number of people to submit PhD thesis	
1b	Number of PhD qualifications obtained	
2	Number of Masters qualifications obtained	
3	Number of other qualifications obtained	
4a	Number of undergraduate students receiving training	4 environmental science students
4b	Number of training weeks provided to undergraduate students	6 weeks each for 4 students for 2 years
4c	Number of postgraduate students receiving training (not 1-3 above)	
4d	Number of training weeks for postgraduate students	
5	Number of people receiving other forms of long-term (>1yr) training not leading to formal qualification(i.e not categories 1-4 above)	1 person (the project leader received two years training in WWF conservation leaders)
6a	Number of people receiving other forms of short-term education/training (i.e not categories 1-5 above)	1 person (the project leader receiving training on IRBM from UNESCO-IHE)
6b	Number of training weeks not leading to formal qualification	15 weeks (International River Symposium, Trainings on IRBM, Murray/Darling catchment tour)
7	Number of types of training materials produced for use by host country(s)	
Research Outputs		
8	Number of weeks spent by UK project staff on project work in host country(s)	2 weeks
9	Number of species/habitat management plans (or action plans) produced for Governments, public authorities or other implementing agencies in the host country (s)	1 Niksek subcatchment management plans and assisted with the development of Ambunti LLG five year development plan
10	Number of formal documents produced to assist work related to species identification, classification and recording.	
11a	Number of papers published or accepted for publication in peer reviewed journals	
11b	Number of papers published or accepted for publication elsewhere	
12a	Number of computer-based databases established (containing species/generic information) and handed over to host country	
12b	Number of computer-based databases enhanced (containing species/genetic information) and handed over to host country	
13a	Number of species reference collections established and handed over to host country(s)	
13b	Number of species reference collections enhanced and handed over to host country(s)	

Dissemination Outputs		
14a	Number of conferences/seminars/workshops organised to present/disseminate findings from Darwin project work	2 stakeholder meetings (experience and findings in the Sepik have been presented in other meetings numerous times)
14b	Number of conferences/seminars/ workshops attended at which findings from Darwin project work will be presented/ disseminated.	2 international symposium in Australia (and through various stakeholder meetings in the country)
15a	Number of national press releases or publicity articles in host country(s)	5 press release either through WWF or through HELP Resources
15b	Number of local press releases or publicity articles in host country(s)	6 newspaper articles twice making it to the front page (included in number of radio and TV programmes)
15c	Number of national press releases or publicity articles in UK	
15d	Number of local press releases or publicity articles in UK	
16a	Number of issues of newsletters produced in the host country(s)	
16b	Estimated circulation of each newsletter in the host country(s)	
16c	Estimated circulation of each newsletter in the UK	
17a	Number of dissemination networks established	
17b	Number of dissemination networks enhanced or extended	
18a	Number of national TV programmes/features in host country(s)	5 televisions programmes (3 news and two TV documentaries)
18b	Number of national TV programme/features in the UK	
18c	Number of local TV programme/features in host country	
18d	Number of local TV programme features in the UK	
19a	Number of national radio interviews/features in host country(s)	4 Radio programmes feature in the country (including Radio Australia)
19b	Number of national radio interviews/features in the UK	
19c	Number of local radio interviews/features in host country (s)	2 Radio Interviews (Radio Australia and local radio)
19d	Number of local radio interviews/features in the UK	
Physical Outputs		
20	Estimated value (£s) of physical assets handed over to host country(s)	
21	Number of permanent educational/training/research facilities or organisation established	
22	Number of permanent field plots established	
23	Value of additional resources raised for project	

16. Appendix III: Publications

Provide full details of all publications and material that can be publicly accessed, e.g. title, name of publisher, contact details, cost. Details will be recorded on the Darwin Monitoring Website Publications Database that is currently being compiled.

Mark (*) all publications and other material that you have included with this report

Type *	Detail	Publishers	Available from	Cost £
(eg journals, manual, CDs)	(title, author, year)	(name, city)	(eg contact address, website)	
CDs*	TokPiksa, Kaprangi, 2007	EMTV, Port Moresby	WWF PNG	NIL
Brochure*	Sepik River Nature and Community Tourism, WWF/Divine University 2007	WWF and Divine Word University, Madang	WWF PNG	540



17. Appendix IV: Darwin Contacts

To assist us with future evaluation work and feedback on your report, please provide contact details below.

Project Title	Integrated River Basin Management in the Sepik
Ref. No.	13-012
UK Leader Details	
Name	Dave Tickner
Role within Darwin Project	WWF-UK Project Leader
Address	WWF-UK, Panda House Weyside Park, Godalming, GU7 1XR
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Email	
Other UK Contact (if relevant)	
Name	Rodrigo Mastbi
Role within Darwin Project	Programme Support Officer
Address	As above
Phone	
Fax	
Email	
Partner 1	
Name	David Peter
Organisation	WWF PNG (now WWF Western Melanesia Programme Office)
Role within Darwin Project	Freshwater Co-ordinator & project manager
Address	WWF Western Melanesia Programme Office, P.O. Box 8280 BOROKO, National Capital District Papua New Guinea
Fax	
Email	

Appendix V: Report of progress and achievements against logical framework (based on revised log frame submitted to Darwin Secretariat in October 2007 following comments from Darwin Initiative reviewer)

Project summary	Measurable Indicators	Project Achievements
<p>Goal: To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but constrained in resources to achieve</p> <ul style="list-style-type: none"> • The conservation of biological diversity, • The sustainable use of its components, and • - The fair and equitable sharing of the benefits arising out of the utilisation of genetic resources 		<ul style="list-style-type: none"> • Greater awareness of the value of sustainable management of crocodile eggs and skins and non-timber forest products such as eaglewood; • Surveys have indicated that the population of crocodiles have increased and at the same time the income of the local communities have increased through the sale of crocodile eggs and skins. • WWF training on identifying trees with the (resin) amongst other trees have reduced the chopping of non-eaglewood trees and helped increased the income base in the communities but there is a need to find suitable markets for the owners to sell this product at a competitive price. • The moneys obtained from the sale of crocodile and eaglewood products are used mostly for paying school fees and bride price.
<p>Purpose: To assist government and local stakeholders to design and integrated river basin management framework for the Sepik River Basin. This framework will protect biological diversity and ecological processes while promoting the sustainable management of natural resources supported by properly implemented catchment management policy.</p>	<ul style="list-style-type: none"> • Existence and use of a management framework in the form of databases, procedures and materials guiding catchment management in DEC and Department of East Sepik • Stronger policies for catchment protection • Increases in the levels of protection to areas of biological and ecological significance 	<ul style="list-style-type: none"> • Sepik River Action Network established and joint partners work plan established. • DEC is taking steps to activate the Total Catchment Environment Management (TCEM) concept which has remained idle for more than a decade • Ambunti District Five development plan developed and the Local Level Government endorsed the annual Sepik River Crocodile Festival Launch. • Three Wildlife Management Areas designated in Sepik River Basin (the gazzetals have been delayed but DEC gave the assurance that they will be gazzetted this year)

<p>Objective 1: A comprehensive integrated river basin management plan for the Niksek sub-catchment</p>	<ul style="list-style-type: none"> • An agreed catchment management plan for the Sepik basin 	<ul style="list-style-type: none"> • A sub-catchment management plan for Niksek River (tributary to the main Sepik River) available
<p>Activity 1.1: Complete background reviews of project site</p>		<ul style="list-style-type: none"> • Reviews completed during a number of site visits made to the project site (mostly the Upper Sepik Region)
<p>Activity 1.2: Monitoring databases established</p>		<ul style="list-style-type: none"> • A state of the Sepik Report is being compiled which will set out the state of knowledge about the basin
<p>Activity 1.3: Assist DEC in the preparation of a draft catchment management plan</p>		<ul style="list-style-type: none"> • After the end of the project the sub-catchment management plan will be endorsed by the national government and implemented as part of the government plan/policy
<p>Activity 1.4: Finalise catchment management plan</p>		<ul style="list-style-type: none"> • Plan Finalised
<p>Objective 2: Strong stakeholder awareness of and commitment to effective river basin management</p>	<ul style="list-style-type: none"> • Number of partnership agreements • Number of successful community initiatives • Number of management actions implemented from Sepik catchment and community PA management plans • Number of posters, press releases, media articles and radio stories • Number of LLG annual development plans showing commitment to effective IRBM 	<ul style="list-style-type: none"> • Agreements in place with Ambunti LLG for free use of 2 offices buildings and two staff houses • Sepik River Action Network in place with joint work plan and commitment by partners; inaugural Sepik River Crocodile Festival attended endorsed and co-funded by the Ambunti Local Level Government • IRBM and community PA management plans not in place yet, but habitat management actions and better crocodile farming already paying dividends with croc populations increasing • Three radio stories, six press articles and four stories on national television about the Sepik and more are expected to following with the upcoming annual Sepik River Crocodile Festival in August 2008 • Ambunti LLG five-year development plan in place with and the Sepik River Crocodile Festival endorsed by the Ambunti LLG (The five year contains section on conservation in the Sepik). The local Member for Parliament (MP) donated a boat for conservation work in the Sepik during the inaugural Sepik River Crocodile Festival last year
<p>Activity 2.1: Support LLG legislation and district development plans that reflect IRBM objectives</p>		<ul style="list-style-type: none"> • WWF initiated the idea of reviewing the Ambunti LLG development with the District Administration and local MP. WWF assisted with the development of the five year plan by initiating meetings, drafting budget and work plans and TOR for consultant to develop the plan

Activity 2.2: Continue awareness campaigns	<ul style="list-style-type: none"> • There have been number of media awareness, stakeholders and community awareness through work of partner NGO (Bauabaua Theatre Group, HELP Resources and Sepik Wetlands Management Initiative). The Sepik River Crocodile Festival is proving to be a major success every year.
Activity 2.3: Communications materials on the values of the Sepik River	<ul style="list-style-type: none"> • Numbers of posters, brochures and CDs on the Sepik River Festival have been developed. Essays and drawings have been developed by school children as part of the Sepik River Crocodile Festival celebrations
Activity 2.4: Confirm partnership agreements	<ul style="list-style-type: none"> • The Sepik River Action Network (stakeholder) plan forms the basis of networking/partnership. There is a very good partnership between WWF and other partners through the collaboration efforts in carrying out both conservation and other community development issues
Activity 2.5: Ensure ongoing funding for catchment management	<ul style="list-style-type: none"> • A proposal for almost €1m in funding from the EU for the Sepik Livelihoods project was submitted and has been approved and work will commence in July 2008. In addition, DEC will be providing a catchment officer for the Sepik and local level government. The Ambunti LLG donated banana boat and made commitment to fund the Sepik River Crocodile festival annually and the local MP announced over USD 30,000.00 for waterways management project. The local MP during the inaugural Sepik River crocodile festival last year made a public commitment to support conservation initiatives in the region
Objective 3: Mechanisms to ensure stronger protection for areas of ecological importance	<ul style="list-style-type: none"> • Management plans for community-managed protected areas • Policies that support the protection of ecologically important areas • Gazettal of protected areas established in priority wetland and forest areas <ul style="list-style-type: none"> • Following extensive meetings with experts and stakeholders, draft community PA management plan guidelines have been issued • Ongoing discussions with PNG government to ensure further PA designations and policies that support better natural resource management • Three Wildlife Management Areas, totalling 60,000 ha, submitted for gazettal within the Sepik River Basin • WWF is working with the relevant government agencies to develop policy framework for the establishment of eaglewood management areas (current legislation does not cater for the establishment of eaglewood management areas)
Activity 3.1: Begin management planning in protected areas	<ul style="list-style-type: none"> • Draft guidelines and templates for community PA management available

Activity 3.2: Support community management and enterprise initiatives	<ul style="list-style-type: none"> • To be integrated within guidance for community PA management. The IRBM plan for the Niksek/Frieda sub-catchment will set out plans for encouraging community enterprises
Activity 3.3: Monitoring changes to baseline conditions and achievement of planned activities	<ul style="list-style-type: none"> • Monitoring surveys of crocodile populations and stakeholder capacity and training needs undertaken. Baseline surveys of water quality and eaglewood will be implemented next year, supported by the EC Sepik Livelihoods project.
Activity 3.4: Assist communities to declare new wetland protected areas and complete management plans	<ul style="list-style-type: none"> • Three protected areas, Andep, Me'ha and Uma, awaiting gazettal.
Activity 3.5: Form catchment management institution	<ul style="list-style-type: none"> • To be for the entire Sepik as part of the EC Sepik Livelihoods project.

