



# MINUTES OF THE MPA MANAGEMENT FORUM 2009:



iSimangaliso Wetland Park: 15 - 18 November 2009

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# 1. Welcome and Purpose of meeting:

Peter Chadwick's welcomed everyone to the third MPA Forum, noting the growth over the past three years from an initial 40 delegates to 80 with international representatives from six countries. Delegates now also cover the full spectrum involved in MPAs from the managers themselves through to scientists, educators and social ecologists.

Dr Boyd welcomed and thanked all delegates for attending this year's Forum. He went on further to explain that the purpose of the meeting was to review progress, report back and share experience, raise issues and to make recommendations for the future. Further the Forum should:-

- Consider obtaining recognition from SADC, now that there is good representivity of international attendance.
- Ensure effective management, expansion of MPA's, socio economic benefits, communication, awareness, training and education.

# 2. Apologies Noted:

- 1) Nicolette de Kock
- 2) Risha Persad
- 3) Prof. Muacanhia
- 4) Lawrence Sisitka
- 5) Prof. Colin Atwood
- 6) Ms. T. Gumede

# 3. Acceptance of previous minutes and matters arising

- The minutes of the 2008 meeting were read and accepted by Jan Venter & Bruce Mann.
- Actions arising from the 2008 minutes were addressed and taken as having been undertaken apart from the holding of a Resource Use Workshop and the completion of a gazette clarifying and confirming MPA boundaries.

# 4. Report backs of major successes achieved in 2009

# Overview of the iSimangaliso Wetland Park Initiative (Andrew Zaloumis)

The MPA is an eastern seaboard tourism destination with 300km of MPA that is characterized by the natural environment and social poverty.

Progress made since the inception of the iSimangaliso Wetland Park:

- Developing tourism including improved roads and access, a fully stocked game reserve with multiple tourist resources and facilities, new land acquired, rehabilitated and fenced.
- A tourism route opened whereby Swaziland, South Africa and Mozambique can be visited in one day.
- Jobs created: 3500 pa.
- Training provided to 2507 persons

Development initiatives:

• This is driven by a strong Small Micro and Medium Enterprises (SMMEs) focus which aims at settling land claims & developing co-management; developing community based capacity & income sources; ensuring equitable access – school education and youth outreach.

- Catchment problems were outlined:
- Sedimentation and drought are major issues affecting the Wetland Park and in particular the St Lucia Estuary.
- Illegal developments in the Kosi Bay area are a major problem but are being addressed through a number of legal and court processes.
- Land claim agreements have been largely successful, with challenges being effective comanagement that meets expectations and considers internal dynamics.
- Top three threats to biodiversity: Global warming, people issues, development of park & surrounding area.
- Not many social research initiatives.

# WWF Honda Marine Parks Programme (Peter Chadwick)

Progress was described against the challenges outlined in the 2004 "State of MPA Report"

- Capacity training: The MPA management Certificate has become THETA accredited; Southern Cape and Wild Coast MPA Management Training has been completed and a Marine Field Guiding course has been developed. These two courses will now link to the IUCN endorsed WIO-Compas accreditation for MPA Professionals.
- Resources & equipment: Honda & Falcon provided three patrol boats during the course of 2009 to Robberg, Kogelberg and iSimangaliso.
- Lack of management planning: Integrated Management Plans (IMP's) are in the process of being finalized for the Garden Route and Kogelberg and management plans have been developed for Stilbaai and Bettys Bay.
- Lack of public awareness: There has been a huge increase in media articles produced with an additional focus on the Kogelberg and Garden Route. Also included in the awareness drive is the MPA forum and MPA dedicated website.
- MPA Network Representation: Offshore MPA work has progressed in collaboration with SANBI; Gazetting for public comment for the Prince Edward Island MPA (4<sup>th</sup> largest) has been completed and is now awaiting a process from Government to resolve issues and take it forward.
- Social & Network opportunities have been expanded upon during 2009 and there is a realization that these need to play a greater role in MPA decision making in the future.

Through the power of foresight, the investment provided by Honda Marine towards the MPA Programme has created financial leverage resulting in 21 large projects with an investment value of R10 million.

The LOTTO Coastal Monitors project has allocated R5.5 million, for the period from September 2009 through to September 2011. Creating monitors jobs, research info for future management, guiding possibilities and making MPA's meaningful.

# Honda Marine (Clinton Lambert)

Explained the following:-

- Honda Overview the brand, product range and market share (SA; European region)
- Honda marine engines were designed around the concept that "*motors running on water should not pollute the water*." Honda has produced 4-stroke outboard engines since 1964. Environmental issues drive product development in Honda. Honda is involved in environmental projects worldwide inclusive of a project in the USA project to clean rivers Living Waters.
- Advantages of Honda outboard engines
  - technology ahead of the field

- lighter and more fuel efficient engines
- highest customer satisfaction
- Growth opportunities

- A study undertaken in the USA showed that Personal watercraft. (PWC) showed no significant damage/impact to the environment from usage. Damage was rather caused by people's behavior.

- Satellite limitation tracking in 'red zone' is being explored.
- External MPA partnerships are welcomed and which can build on the current partnership.
- An invitation was made to allow procurement of all Honda products

# <u>Q&A</u>

- It was suggested that a Pilot site for testing of the PWC with satellite limitation be the Sundays River.

- For purchases, MPA personnel may approach Honda direct and cognizance would have to be made of government purchasing procedures.

# Cape Estuaries Programme (Pierre De Villiers)

Lessons learnt

- Fishing at estuaries is a problem.
- Flood plains need better definition.
- Assimilation of information included into management plans and through the training of managers.
- Estuary management plans must include strong stakeholder engagement, must be scientifically rigorous and include a situational assessment. Plans must be functional, have a vision and strategic objectives. The situational assessment must include socio-economic issues.
- Associated factors include freshwater allocation, ecosystem services, biodiversity targets, eco-tourism, monitoring and compliance
- Management of the programme demands integration, capacity building, and cooperative governance with stakeholders and linking estuary management to local conditions.
- Cooperative partnerships are key to integrating processes and products.
- There is a need for a method of evaluating goods and services and biodiversity conservation targets.

# Cape Nature MPA (Rhett Hiseman)

- Area includes 5 MPA's, estuaries and islands
- Highlights:-
  - A Mentorship Programme has been developed within CapeNature.
  - Scientific Services are assisting in guiding research & monitoring in MPAs.
  - Seagoing craft have been supplied and upgraded for a number of MPA's and the two islands.
  - A workshop directed at the CEO & executive assisted in raising the profile of MPA's within CapeNature.
  - There has seen improved law enforcement especially through boat patrolling.
  - A three year funding contract with MCM has been signed.
- Compliance. There have been increased foot, boat and vehicle patrols.

- Environmental education. Successful school field trips are regularly undertaken and an outreach programme is ongoing.
- Skills development & training. Sixteen different courses have been attended by MPA personnel.
- Marine biodiversity. Increased research and monitoring is envisaged with planned funding
- Ecological support. Coordination is being undertaken through the ecological coordinators to ensure a standardized protocol that is fully integrated. MPA expansion plans are being looked at in the Agulhas region
- Challenges:
  - Substantially increased funding
  - Operational and scientific staff needed
  - Dedicated coordinator needed
  - Updating MPA regulations
  - Judiciary support

# SANParks (Dr Ane Oosthuisen)

- Management agreement has been finalized with MCM for all SANParks MPAs and future MPAs.
- Management plans for Agulhas (April MCM) & Namaqua (July MCM).
- MPA expansion Addo MPA is in final stages and aiming for Oct.2010?
- Discussions for the Agulhas MPA are underway.
- New marine intern has been appointed.
- Working for the Coast & Linefish monitoring programme are being undertaken within SANParks MPA's.
- Park highlights:-
  - Agulhas: There has been extensive stakeholder engagement, info sharing, user profiling and identifying of conservation targets.
  - Addo: Port operations are negatively affecting the African penguins. Joint operations are being undertaken to curb abalone poaching.
  - Tsitsikamma: Poaching is being curbed through improved equipment and joint operations.
  - Knysna/Wilderness. High seas from storms have created damage requiring emergency bank repair. Knysna has employed 5 rangers
  - Table Mountain NP. There has been a recent Shark fin bust, SAEON is setting up scuba-diving monitors.
  - West Coast NP. The management plan is under review. There have been successful crime operations through the appointment of a dedicated marine team.
  - Namaqualand NP. The management plan is under review.

# Eastern Cape Parks Board (Zwai Kostauli)

Covers the Pondoland, Hluleka & Dwesa Cwebe MPA's and includes estuaries.

- Compliance. The type and number of convictions was reported on.
- Monitoring & Research. Studies are underway in the three MPA's, including line fish monitoring.
- Annual work plans have been developed.

- An estuary management plan is being developed.
- Research equipment has been acquired.
- A review of Pondoland MPA plan is underway.
- Skippers training & MPA management training has been undertaken.
- Co-management and community participation through outreach officers is ongoing.

#### Challenges:

- Capacity; Lack of dedicated staff;
- Long delays through internal processes

# Achievements:

- two 4x4 vehicles; quad bike, two boats, four kayaks have been purchased
- The Wild Coast MPA Management training course was completed and included community members.
- MPA annual report has been submitted to MCM.
- Ongoing environmental education.

# Aliwal Shoal MPA: KZN (Carl Bentley)

- Objective of KZN MPA's is to safeguard coral reefs and protect endemic fish.
- Compliance report. Feedback was given on the Inspections of launch sites and beach patrols. The lack of resources is a major problem and successful prosecutions are low.
- Liaison with the public. The staff plays a huge role in liaising with the public. Brochures, road shows and events are regularly undertaken.
- Challenges:
- The Aliwal MPA is only three nautical miles wide and there is often illegal trawling at night. It is extremely difficult to prove non-compliance.
- It was also reported that it is difficult to manage subsistence and commercial fishers
- Tourists arriving at night
- Achievements:
- The International coastal clean-up is well supported and undertaken on an annual basis.
- Staff attended three courses and there are 14 honorary officers which are dedicated and trained.

# iSimangaliso MPA (E. Mlaba)

Highlights:

- Priority turtle nesting areas are located within this MPA and monitoring is progressing.
- It has the largest true subsistence fisheries in South Africa.
- The countries best bill fishing occurs and there are excellent coral reefs which act as important dive site and protect 1200 species, inclusive of the Coelacanth.

Management functions:

- Compliance A summary of the inspections report was given showing beach/in & off shore patrols.
- Liaison 60 community meetings and educational events were held.
- Awareness & education 1000 brochures were distributed.
- Joint management Liaison meetings including local communities & subsistence fishers and other user groups were undertaken.
- Monitoring Catch effort, turtle monitoring, fish stock monitoring was undertaken.

Challenges: The MPA is only three nautical miles wide and illegal trawlers often operate at night within the MPA

Success: A number of arrests were made in the area and the international coastal clean-up was held.

Opportunities: Opportunities exist to extend area under MPA, Mozambique has applied for WH status & management capacity has increased in Mozambique and efforts are being made to improve cross border co-operation.

# MCM overview (Dr Alan Boyd)

Successes:

- Completed MCM concluded MoA's with SANParks, the City of Cape Town & SAHRA. 2x MPA management effectiveness assessments were concluded. MPA operational contracts with conservation agencies were now in place for all MPAs apart from Sardinia Bay The National Protected Areas Expansion plan was approved.
- Well on the Way The processes around the Prince Edward Island and Border region MPA is progressing well and needs finalization.
- On the way but unresolved –Linefish research monitoring, SANParks preparation for MPA's at Addo & Namaqualand.
- Lagging Review of MLRA Act and determining a way forward for offshore MPA's. Management effectiveness, transformation of eco-tourism, exploiting the synergies between protected areas & MPA; scuba diving – management (permit fee R75) MCM needs to finalise the bio-prospecting process urgently, improving compliance at sea & along the coast, secure long term funding.
- Issues going forward People & Parks, marine aquaculture, adaptive management proposal for Dwesa Cwebe, estuary management planning within MPAs, as well as outside.

# Marine Spatial Planning of Offshore MPA's (Dr Kerry Sink)

Aim: Develop a national offshore MPA plan in the area between 30 to 200 nautical miles (EEZ boundary). This will be achieved with full stakeholder involvement.

Challenges: There are different departmental interests which are difficult to resolve. Consideration needs to be made of the effects of MPAs on Industry and how industry restricts the options of offshore MPAs. The entire process has to be transparent and equitable.

All data layers and the methodology used in identifying possible areas were outlined. This information is then used to guide priorities such as no take areas, hotspots and low take areas, benthic areas of importance, seamounts and banks. An open day with stakeholders and industry will be held to table current information and proposals for offshore MPAs.

# Kenya Wildlife Services: MPA's in Kenya (Arthur Tuda)

The first MPA in Kenya was declared in 1968 and a total of 8.7% of coastline is protected under MPAs. The purpose of the MPAs is to ensure biodiversity and socio-economic governance. It has clearly been shown that coral is more resilient and fish biomass is higher within MPAs as opposed to outside of MPAs. MPAs provide a major tourism attraction and illegal beach-seine fisheries is increasing at 8-12% annual growth. Poor governance remains a problem due to different activities of management falling under different agencies and there is no formal mechanism to resolve this.

Threats to Kenya's MPAs: dynamite fishing, coral bleaching, dragnets, poaching, crown of thorns and bridge development.

Challenges: population increase, resource conflict, poverty levels, political uncertainties, drought – food shortage and poaching.

In Kenya, the following distinction is made between the different types of marine protected areas:

- Marine National Parks take allowed;
- Marine National Reserves no take.

# Seychelles (Dr Nirmal Shah)

- The Seychelles covers a land area of 444 sq. km; 1.3 million sq. km of maritime zones, has a shelf area of 50,000 km and a reef area covering 5443 sq. km.
- There are various strong environmental legislature with 42% of the land area under protection: There are three special reserves; six marine national parks; four shell reserves, three fisheries reserves
- Protection measures are in place for turtles, sea mammals, sea birds. In addition legislation exists to protect the exporting of shells, tuna seine licenses is capped at 50, shark fish netting is banned and there is a proposed shark management plan; trawling and spear-guns are banned; live fish export is prohibited; "mothership" ventures are prohibited and the number of licenses for seacumber and lobster fishing is capped at 25.
- Threats to the environment include siltation, sewage, reclamation, tourism, over fishing, trampling, climate change forefront bleached corals and risk to small islands

# Cousin Island Special Reserve (Dr Nirmal Shah)

The island was purchased by Birdlife International for Nature Seychelles and has enjoyed 40 years of success.

- As a Special Reserve it features nesting site for turtles, has a large biomass of fish, protects coastal forest, wetlands, communities of fauna, has a strong research ethic, is managed by local people, effort is placed on the rescue of endangered species, revenue is generated from tourism which also aids education for the community.
- In a Regional Management effectiveness assessment in 2004-06 it was stated that the Island had well trained staff; that the NGO managed with skill; the management plan was adequate; protected areas were well managed with the status and trends for birds, turtles and coral being well known.
- Problems: Sewage, capacity and skills of people and a high staff turnover.
- Conservation of Cousin Island: The island is the most important nesting site for the Hawksbill Turtle with the longest running species monitoring; It has the highest fish biomass; Coastal forest have been restored. It also has eight species of breeding seabirds and the highest density of lizards. There is zero poaching and the island aims to become carbon neutral during 2010
- Goals for the future: Increase the coverage of the MPA so as to protect spawning aggregations.

# West Indian Ocean Marine Science Association (Dr Nirmal Shah)

WIOMSA was established as an NGO in 1994. It acts as a funding mechanism for research, training, capacity building and communication. WIOMSA publishes a scientific journal and has its own website. Amongst others WIOMSA has developed MPA tools (WIO tool kit), developed

a training manual for MPA managers and through WIO-COMPAS has developed an accreditations system for MPA personal. WIOMSA hosts a Marine Science Symposium every two years.

# 5 Legislation, Compliance and Policy: (Dr Alan Boyd)

Dr. Boyd gave a presentation on current legislation, policy and compliance:-

- Legislative framework: The protection of MPAs is a core function of the Marine Living Resources Act while the Protected Areas Act also recognizes MPAs. The MLRA is under review and will be incorporating text promoting and regulating non-consumptive issues within MPAs. There is also a need to provide for zonation explicitly and there have been proposals to allow for buffer zones around MPA's. It will be necessary to clarify new MPA zones and ensure that the MLRA links to the ICM Act. The ICM Act is the driving force for Estuary Management and the act is explicit that each estuary must have its own Management Plan. The CAPE Estuaries programme has managed to finalize six Management Plans and is now busy with drafting two other management plans for Mtentu and Msikaba with ECParks.
- <u>Draft Proposed Zonation</u>: The following is proposed to standardize zonation within MPA's:
  - A Zone = Sanctuaries;
  - B1 = highly protected & restricted zone no take zone;
  - B2 = as per B1 but with fishing for particular species allowed;
  - C = Controlled most fishing activities allowed & tourism activity with control on high impact activities.
- <u>Compliance issues in MPA's:</u> Agency reporting on MPA management needs to undertake this with an integrated approach and there is a need for clearly adequate staffing and skills. Reports must indicate progress against targets which will thus ensure better implementation of plans. Signage and communication remain a key issue needing attention as does positive interaction and awareness with court staff. MPA support from stakeholders is vital and there is a need to ensure that forums and structures are in place to allow stakeholder engagement. Guidance is needed for a policy to show a clear way forward for inshore & offshore MPA's.
- <u>Marine Aquaculture:</u> There is funding and support from Government to expand this industry which to date has not taken off. Strong resistance was tabled by the forum against mariculture within MPA's. The forum (apart from Dr Boyd) put forward that aquaculture be totally prohibited within in MPAs and it was also proposed that a buffer zone against such activities be placed around MPAs. Currently there is no marine aquaculture in current MPAs. Dr Boyd mentioned that it would be necessary to look at the different types of mariculture and then assess the impacts against MPA's for example the ranching of mussels could be considered acceptable and rehabilitation of area also needed consideration. The Forum responded that rehabilitation of an area could not be considered as falling under mariculture and should be dealt with separately.
- <u>Policy for management of Coastal MPA's:</u> A Policy has existed but declarations, mandates and regulations require review. Dr Boyd then gave an overview of the new Draft policy focusing on Coastal MPAs. The need for representative protection &

fisheries expansion strategy was taken on board and would be linked to the National Protected Area Expansion Strategy (NPAES). Targets must allow for the reliance of coastal fishers and must include scientific strengthening. There is a need for equitable access and in future MPAs must consider coastal livelihoods. There are many different ways of addressing current issues within MPAs including allowing access to local communities but that these need to ensure overall increased protection. There was the need for caution towards comments relating to explicit exclusion as these could weaken the overall aim of increasing area under MPA protection.

- <u>Non consumptive use, benefits and zonation</u>: The MLRA needs to recognize the promotion of non consumptive use and the scale as well as the value and impact of different non-consumptive uses need to be ascertained. Zonation plans will need to become more explicit with the differing zones becoming standardized. The Forum raised the concern that allowing benefits should in no way compromise the MPA and that the term "benefits" needed better definition. Additional consumptive benefits needed to be approached with extreme caution.
- <u>Responsibilities and co-operation:</u> It is necessary to mandate agencies and individual MPA forums to involve stakeholders. A separate forum was needed to discuss offshore MPA's and more specific proposals on offshore MPA's

Questions & comments pertaining to the draft Policy:

- A guiding principal must be incorporated.
- Ensure definition of 'international collaboration' & 'equitable access.
- Concern with consultation not consistent across all issues.
- *The policy should be a guiding document broad & flexible at local level.*
- In its current form the draft policy is polarizing biodiversity & humans & sustainability (what was spirit of Act sustainability?).
- MPA on basis of sustainability? Biodiversity is key not sustainability.
- Equitable access to benefits must be determined per MPA.
- There is a need for stewardship around MPA's with a strong relationship with communities.
- The need to respond to social issues is important social economic benefits interpretations & consequences of MPA.
- Are we achieving 15/20% of XXX?
- Sustainable use is managing fisheries and this includes ensuring TOTAL no-take areas.
- Biodiversity conservation of marine resources.
- How can the MPA forum influence policy?
- Identify influencing factors across the entire conservation suite. It is not only about marine but also applies to the terrestrial context
- Do not need policy tough decisions are needed to address the issues. Be creative & use tools.
- Have a strategy with clear guiding principals. Look at agencies & a way forward to implementation.
- Conservation is required and this should include increased protection with targets affirmed.

- If there is no review of MPAs it will be very difficult to push forward with declaring further MPAs.

Planned way forward:

- Redraft the Draft MPA Policy Document.
- Resubmit based on the response received from the Forum, as well as other sources.
- Ensure that the revised document is published and widely circulated & a national workshop be held which also aims at setting up a MPA Advisory Group.

#### 6. State of MPA's in South Africa 2009 (Karen Tunley)

Karen Tunley gave a presentation on the recently completed 2009 report on the "State of Management of South Africa MPAs". Copies of the report were handed out to all present and further copies are available on request. It was noted that there had been a general improvement in MPA management since the previous 2004 report by Attwood and Lemm. A strong foundation has been created to support MPA management in South Africa since 2003 through the continued efforts of MCM, conservation agencies and the WWF Honda Marine Parks Programme. However there are numerous on-going challenges faced by MPA managers that require innovative solutions and support. Each conservation agency is encouraged to review their specific section and find means of addressing weaknesses and challenges.

#### 7. Ecosystem Services & MPA's in Kenya (Arthur Tuda)

Marine Conservation Planning identifying ecosystem services in Kenya showed that MPAs are necessary because they sustain human wellbeing and that communities derive direct benefits from well protected ecosystems. In Kenya no-take zones within MPAs only include a very small percentage of available ecosystem services. There has been a strong spatial correlation between the occurrence of turtles and a high density of ecosystem services. It is suggested that we motivate to use MPAs for the protection of ecosystem services. In Kenya the protection of ecosystem has two categories; 1) reserves where only traditional use and recreational is allowed and 2) parks where there is no- take and no fishing. This approach has helped gained support for MPAs by local communities.

# 8. Ecotourism and sustainable financing program on Cousin island Special Reserve (Kirsten Henri)

The presentation gave an overview of ecotourism on Cousin Island in the Seychelles. This is a private island run by NGOs and local people. Ecotourism activities are aligned with biodiversity objectives. Services that are provided by island are fresh water, economic growth and lots of tourist visits the island. The goals of the island are to 1) maintain and improve the island's biodiversity 2) Improve understanding of the island's ecology and 3) Visitors are to enjoy the unique island ecosystem.

The islands conservation strategy ensures a natural area focus with nature interpretation, environmental sustainability practice, contributions to conservation and benefits to local communities with cultural respect. This leads to customer satisfaction through responsible marketing. An ecosystem code of ethics and practices has been developed for the island that allows for the provision of a high quality ecotourism product that benefits local communities. One hundred percent of the ecotourism revenue goes into reserve management, conservation &

research activities, education & public awareness programmes, and training for wardens, practitioners and teachers. Forty percent of this income goes towards direct expenditure. In the future the island hopes to reduce dependency on tourism financing and introduce other sustainable financing mechanisms, such as donations, membership schemes, project funding, volunteer schemes.

#### 9. Garmin equipment overview and needs.

Garmin gave a presentation on their products and services that they can offer. Garmin has various products in the automobile, aviation, marine and GPS fields. Garmin is interested to support MPAs in any areas where their equipment can be beneficial and wants to ensure that any MPA data is usable by providing mapping products that recreational users may also have access to. An overview of the waterways product that has been developed with input from WWF and MCM and which shows the boundaries of current MPAs with additional relevant information was presented. It was suggested by the floor that these maps could also depict zonation and that these should be color coded according to restriction, control and no take areas. The floor requested the effort be placed by Garmin in developing an easy to use and cost effective land based radar system that could help detect illegal activities.

#### 10. Awareness Raising, Training & Equipment:

#### Report back of Year of the MPA (Esma Marnewick & Peter Chadwick)

WWF gave a progress report on the MPA awareness drive. Much media exposure has been given during 2009 towards supporting MPAs and this has covered a wide range of magazines, newspapers, radio and television. Getaway Magazine is running a six part story on South Africa's MPAs and Extreme Sports Angling magazine is providing space for a monthly MPA related story. It was reported that the MPA website is not sufficiently supported by new inputs. It was requested that MPA information and stories be regularly updated and everyone was urged to assist in providing interesting stories and with the updating of information.

#### Table 1: MEDIA HITS ANALYSIS. (Percentage of hits per media type)

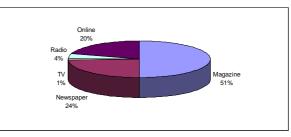
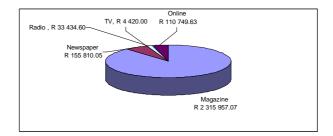


 Table 2: MEDIA HITS ANALYSIS. (Advertising equivalents costs per media type)



The following agreed on submitting a 1200 word article for the ESA Magazine:

- Anchor Environmental **Reaching Integrated Coastal Management Plans** Goukamma MPA benefits - Sven Kerwath - Anthony Bernard FIN (Fish & Invertebrate Network) - Karen Tunley The State of MPA Management in South Africa - Samantha Owen MPAs and Apex Predators - Prideel Majiedt **REEF** Atlas Project - Kerry Sink Offshore MPAs - Pierre De Villiers Estuaries and their importance - Anchor Environmental **Coastal Monitors** - Paul Cowley Sunday Estuary work - Russell Chalmers Addo MPA - Colin Attwood Langebaan Lagoon; Its importance to vulnerable fish species To be confirmed - Bruce Mann - Peter Fielding To be confirmed - Steve Lamberth To be confirmed

#### Marine Guides, MPA Management Certificate Training & WIO-Compas (Peter Chadwick)

It was reported that six certificate courses in MPA Management have been completed and 112 people have been trained. The course it undertaken during 6-9 months with 3-4 days contact sessions per month and then students are expected to submit additional assignments. The course has been a great success in terms of networking and a bridging course is needed. A pilot accredited marine guide course has also been developed and this is being run in partnership with FGASA. To date, guides have been trained for four southern Cape MPAs. Effort is now being placed on developing a train the trainer course for the guide training. The Western Indian Ocean Certification for Marine Protected Area Professionals (WIO-COMPAS) has recently been endorsed by the IUCN. Accreditation can be attained at three levels. Level 1 focuses on field rangers, while Level 2 is aimed at MPA management staff and Level 3 is aimed at high level decision making and policy making staff. The overall aim is to promote competencies that are based on internationally recognized good practices in MPA management.

<u>Moving forward</u>: It will be necessary to review THETA's accreditation system for the MPA management certificate and a review will also be undertaken of the current course and updating will take place were necessary. Effort will be placed on gaining further endorsement for WIO-COMPAS within South Africa and Dr Alan Boyd mentioned in-principal support for this.

#### Hardware needs requirements for 2010 (Peter Chadwick)

Good progress was made during 2009 in ensuring MPAs were properly equipped. The following requirements were tabled for 2010

Tuble 5. Equipment priorities for 2010			
MPA	Contact Person	REQUIREMENT	
Estuaries	Pierre de Villiers	Small boats – Honda to investigate	
		product range available	
Addo	Aanban Paddyache	2 x 60hp engines	
Stillbay	Jean Du Plessis	1 x 60hp engine	
Goukamma	Keith Spencer	1 x 250cc motorbike	

#### Table 3: Equipment priorities for 2010

Bettys Bay	Terrence Coller	2 x 50hp engines
Breede/Gouritz Estuary	Rhett Hiseman	1 x 50hp engine
Bhanga Nek	Eric Mlaba	2 x 50hp engines

# **11. Operational Management**

Dr Boyd gave a presentation on the Operational Framework. A key element of a management framework consists of objectives which is driven by legislation and based upon national policy. Mandates and capacity should be in line with legislation. It was stated that management plans are valid for a period of five years and that there is a need to standardize the format of management plans. The new Stillbay and Bettys Bay management plans are to be used to guide the format of future or revised management plans. This format would then guide the reporting formats and while it was recognized that each agency had their own reporting format, there would need to be a minimum set of standards so that the MPA and MCM contractual requirements for reporting were met.

Concern was raised over the differences between the requirements of the Protected Areas Act and the MLRA for management plans and this also impacted zonation definitions. It was agreed that a MPA/PAA technical group be lead by Sarel Yssel to develop a framework for management planning, work planning and reporting. Representatives from each conservation agency would need to be part of this group. <u>ACTION: SAREL YSSEL</u>

#### 12. Research & Monitoring

# Sundays River Estuary (Paul Cowley)

A research study within the Sundays River Estuary and coastal zone was undertaken and which would look at (1) fisheries resources and utilisation trends (2) the Sundays Estuary and Coastal Zone and 3) the movements of important fish species. The study area on the Sundays Estuary covered 12kms while the coastal surf zone covered 140kms. The total annual effort on the estuary was 67 499 hours, while in the surf zone it was 67 016 hours. The total annual catch for the estuary was 17 518 fish while for the surf zone it was 9 796 fish. 25% of fish were retained on the estuary while only 18% were retained from the surf zone. Sixty three percent of Kob kept was below the legal size limit and 100% of steenbras were below the legal size limit. Monitoring the movements of important fish species showed that local estuaries played an extremely important role in the lives of the fishes. The study concluded that resource utilisation is important in the area, that it is recreationally dominated, that there is low compliance with regulations, appropriate zoning of AENP MPA provides an opportunity to address the conservation of two important species and the Sundays Estuary is crucial to ensure maximum fishery benefits of the AENP MPA

#### Proposals for the re-alignment of Goukamma MPA boundaries (Dr A. Gotz)

Dr Gotz gave an overview of his studies and findings while undertaking research at the Goukamma MPA. His work has showed that large areas of reef lay adjacent to the current MPA and were therefore not protected. His work has also showed where boat-based fishing was at its greatest in the eastern side of the MPA and that fishers often crossed into the MPA to fish. Little or no boat-based fishing took place in the western area of the MPA where reefs were unprotected. Through re-aligning the boundaries to allow fishing in the currently utilised eastern side of the MPA and by expanding the western area of the MPA to include previously unprotected reefs, benefits to all could be achieved – conservation would win as the area under protection would increase, while fishers would be happy as they would have greater access to favored fishing

grounds. The opening up of the section to fishers would in return have minimal negative impacts to biodiversity conservation.

# Conservation and fishery benefits of a MPA in South Africa: A synopsis of 7 years of research (Dr Sven Kerwath)

There is much criticism of MPA research in that there is a general lack of empirical evidence to prove that (1) Fishing impact cannot be separated from natural variability (2) There is difficulty to detect and measure "spillover". Compliance problems are generally glossed over and there is often no measure of fishing pressure. Furthermore, there is a failure to consider impacts on fisheries from MPAs. Few studies have been undertaken on effects of displacement of effort and "before & after" information is seldom available. Goukamma MPA was selected as a suitable site to try and answer some of these questions. The research concluded that Goukamma MPA seems effective for *both* conservation and fishery management and that comprehensive scientific evidence are needed to deliver a verdict on MPA effects. This research did support the suggestions tabled by Gotz to alter the boundaries of the MPA so that both fisheries and biodiversity benefits could be achieved.

# The Table Mountain National Park Marine Protected Area long-term monitoring programmes (Anthony. Bernard)

Without sufficient planning, coordination and support, long-term monitoring programmes often don't succeed and rapidly lose momentum after their initial inception. Monitoring programmes don't place sufficient time and money in the development phase and as a result the programmes don't achieve their goals. Monitoring programmes are expensive to maintain, labour intensive and require the long-term commitment of the research organisations. With this in mind, volunteer based long-term monitoring programmes are gaining recognition around the world. The pilot study in the Table Mt Nat Park MPA aims to test and optimise a volunteer SCUBA diver monitoring protocol for quantitative long-term monitoring of the subtidal rocky reefs in the Table Mountain National Park Marine Protected Area. The objectives of this study are to (1) Assess the feasibility of the monitoring protocol and identify the core and subsidiary sampling sites, (2) Assess the volunteers ability to perform methods and collect the required data, (3) Assess the variability and improvement due to increased experience in the precision and accuracy of data collected by volunteer SCUBA divers and (4) Develop a data reporting and quality assurance framework for FIN. Great progress has been made to date with 48 fish counts having been undertaken by volunteers and five invertebrate surveys having been completed. The next steps will be to complete the volunteer pilot study through: Paired surveys, revaluating the volunteers, optimising methodologies and adjusting target species lists according to the results from the tests. Mapping will also be undertaken prior to handing over the project to SANParks to run and with the potential of SAEONs involvement continued for 2011.

# **Reef Atlas Project (Prideel Majiedt)**

This project aims to collate information to support improved reef management & conservation of reef biodiversity, to boost collaboration and capacity for reef biodiversity research & management, to raise diving tourism standards and increase awareness of South Africa's reef biodiversity & promote our diving destinations. It is a volunteer-based project that engages with recreational divers and dive businesses and other marine organisations. Landscape photographs are taken with corresponding images and sent via e-mail – reef@sanbi.org.za. A Reef Classification workshop has also been held and various awareness activities have helped promote the project. Online communication is possible with the public through a project website. Processing of historical data is currently underway. The project is building up a reef classification system for reefs in South Africa and will produce maps of reef types in South Africa. In addition

there will be a database of dive operators and dive sites in South Africa and of relevant reef literature.

# Assessment of offshore benthic biodiversity on the Agulhas Bank and the potential role of petroleum infrastructure in offshore spatial management (Lara Atkinson)

The project aims to undertake an assessment of offshore benthic biodiversity on the Agulhas Bank and determine the potential role of petroleum infrastructure in offshore spatial management. The objectives of the project are (1) determine what species (macro-invertebrates and fish) are associated with the petroleum infrastructure (baseline information) (2) Does the infrastructure and trawl exclusion zones include healthy representative benthic communities from the Agulhas Bank? (3) Are non-indigenous/invasive species a problem on petroleum infrastructure on the Agulhas Bank? (4) Are the benthic macrofauna communities in the trawl exclusion zone different from those in adjacent trawled areas? (5) Is there evidence of differences in fish communities within exclusion zones that may be linked to the exclusion of fishing? Much work has been undertaken regarding achieving the objectives and the next steps will focus on analyzing the data and compiling a report while it is also hoped that further ROV surveys can be undertaken.

# Monitoring and tagging inshore fish species within the iSimangaliso Wetland Park (Bruce Mann)

The aims of this study are to (1) compare catches of shore angling fish species within and adjacent to the St Lucia Marine Reserve Sanctuary (2) determine movement patterns of these species on a fine spatial scale by the tag-recapture method (3) obtain estimates of growth rates of fishes from tag-recapture for comparison with other methods (e.g. otolith ageing), (4) study the population dynamics of resident inshore species and make estimates of their natural mortality rates.

To date 9721 fish have been caught and released during 41 field trips, 4266 fish have been tagged and 500 (11.7%) have been recaptured from 87 species and 38 families. From the results of the research it can be concluded that there is no doubt – "no-take" MPAs work! Initially there was a big difference between fished and un-fished areas (more than double the catch rate); fish populations have recovered in the previously exploited area in terms of numbers and size; based on movement patterns of resident reef fish species, effective size of no-take MPAs need to be ~20 km of suitable habitat every 100 km. Yield is being enhanced in adjacent areas by spillover, even by fairly resident species (5-10% of population); Measuring of fish caught in MPA is providing critical data on natural mortality rates for comparison with exploited populations. This is a long-term project that is providing extremely useful data on the value of MPAs in managing fisheries.

# 13. MPA Expansion (Kerry Sink)

An overview National Protected Areas Expansion Strategy was given and targets identified for the various levels of MPAs were highlighted.

	20-year PA target	Current protection level
Land-based	12%	6.5% (7.9m ha)
Marine inshore	No-take:15%	9.1% (334km)

Table 4: Summary of land-based and marine PA targets

	Total: 25%	21.5% (785km)
Marine offshore: mainland EEZ	No-take:15%	0.16% (1 671km2)
	Total: 20%	0.4% (4 172km2)
Marine offshore: PEI EEZ	No-take:15%	0%
	Total: 20%	0%

In next five years this means that it will be necessary to add 88 km to inshore MPA network, 52 500 km2 to offshore MPA network (mainland EEZ) and 23 300 km2 to offshore MPA network (PEI EEZ). It is important to remember that not *any* km2 will do!

		Required in next 5 years			
Bioregion	Length	No-take		Total	
	Km sq	km	%	km	%
Namaqua	684	26	3.8	43	6.3
SW Cape	420	3	0.7		
Agulhas	1706	15	0.9	38	2.2
Natal	693	15	2.2	8	1.1
Delagoa	153				
Total	3656	56	1.5	88	2.4

 Table 5: Protected Area Targets for inshore marine bioregions

Key Recommendations for implementing the NPAES

- Expand land-based and marine PA network to meet ecosystem-specific targets.
- Note that targets are based on a bio-regional approach for the first time
- Increase extent of no-take zones within inshore MPAs, and reduce impacts in other zones.
- PA agencies to develop agency-specific implementation plans BUT in the marine environment national co-ordination essential.
- Revitalize PA forum.
- Give PA's a central role in national cc response strategy.

#### 14 Critical Issues for 2010

Table 6: Critic	cal Issues	for	2010	
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Issue		Action Required	Lead Agent
Promulgate Pr	ince Edward	MCM to follow a process	MCM
Island MPA		which allows for finalizing promulgation following public comment period which has now closed	

MPA Policy	Accommodate comments	MCM
	received regarding the draft	
	policy and then re-circulate to	
	a wide audience for further	
	comment	
Boundary demarcation	Ensure that a new gazette lists	MCM
	the correct boundaries for	
	MPAs, new signage, dual	
	designation needs sorting	
Estuaries	There is a need to ensure that	MCM & CAPE Estuaries
	estuaries are included in the	Programme
	NPAES and that they be	
	considered in relation with	
	MPAs	
Operational Management	Technical Committee to guide	SANParks through Sarel
Reporting	reporting formats	Yssel: All conservation
		agencies
Staff Turnover	MCM to write clause into	MCM
	contracts suggesting retention	
	of personnel within MPAs and	
	who have undertaken	
	specialized MPA training	
Mariculture	Alignment of Mariculture	SANBI & MCM
	Development together with	
	MPA planning. No	
	mariculture in MPAs – draft	
	into policies =	
	recommendation from MPA	
	Forum. (Some objection from	
	A. Boyd_to a blanket	
	approach). Bio Div WG to	
	take forward and resolve	
	outside of Forum	
	NBSA to overlay mariculture	
	zones with other layers	
Zonation	Finalise standardized zonation	МСМ
	definitions for MPAs	
Judicial Support	Conservation Agencies to	All agencies and MPA
- and a support	ensure concentrated drive to	Managers
	improve support from the	
	judiciary towards preventing	
	marine related offenses	
Climate Change	Develop a strategy to	SANBI & SAEON
	monitor/research how to deal	
	with Climate Change Issues	
Research & Monitoring	Hold a research & monitoring	SAEON
Workshop	workshop that sets priorities	SALUN
workshop		
	and identifies funding opportunities	
MDA Advisory Crown		SANDI MCM WWE
MPA Advisory Group	Form an expert advisory group	SANBI, MCM, WWF

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	for MPA's that can review	
	proposals that will impact on	
	MPAs and that can guide	
	government on MPA related	
	issues	
MCM & Conservation Agency	Senior staff of key agencies to	Dr Alan Boyd, Ane
compliance and executive	be motivated to attend	Oosthuisen, Rhett Hiseman,
management staff attendance		Peter Hartley, Jan Venter, Ms
at 2010 Forum		T. Gumede
Fine scale Plans and	Develop a strategy for the	SANBI & WWF
implementation of NPAES	implementation of the NPAES	
MLRA revision	Finalise revision	МСМ
		Note from Dr Alan Boyd -
		Hold up is due to the policy on
		subsistence fisheries
Social / economic science	Ensuring that the EEU give	WWF & EEU & MCM
	presentations around social	
	aspects at the next Forum.	
	There is a need for guidance	
	on engaging with communities	
	& this is to be included in	
	MPA training	
	MCM to ensure social	
	components are a strong	
	component for all	
	development of projects	

# 15. Date & Venue of 2010 MPA Forum:

It was proposed that SANParks host the 2010 MPA Forum and it was suggested that the West Coast National Park be the venue for the event. This would increase the opportunities for ensuring executive management from several agencies attending the Forum. It was requested that the Forum be held in early November 2010.

#### 16. Closure: (Dr Alan Boyd)

Dr Boyd gave a vote of thanks to all attendees and assured everyone that all concerns will be dealt with accordingly. It was clear from the Forum that there is a need for greater links with other programmes eg: People & Parks, Mariculture etc. Finally more senior staff should be attending the Forum as well as MCM Compliance staff.

# Appendix 1: <u>MPA MANAGEMENT FORUM 2008: AGENDA:</u>

#### 15 - 18 November 2009

Sunday	
Arrival at St Lucia	Evening Braai starting 19h00

# Monday

Time	Торіс
07h00 - 08h00	Breakfast
08h00 - 08h10	House Rules
08h10 - 08h15	DEAT: Welcome and Purpose of the meeting (Dr Alan Boyd)
08h15 - 08h20	Apologies (Peter Chadwick)
08h20 - 08h45	Acceptance of previous minutes & Matters Arising (Peter Chadwick)
08h45 - 10h00	Report Backs of major successes achieved during 2008 (15min per report
(15 mins per	back)
speaker)	• WWF Honda Marine Programme and WWF CAPE Marine
	Parks Programme (Peter Chadwick)
	<ul> <li>The Honda Partnership – opportunities for the future (Clinton Lambert)</li> </ul>
	• iSimangaliso Wetland Park Overview (Andrew Zaloumis)
	• CAPE Estuaries Programme (Pierre De Villiers)
	• CapeNature (Rhett Hiseman)
	• SANParks (Dr Ane Oosthuisen)
10h00 - 10h30	Tea/Coffee
10h30 - 12h30	<ul> <li>Eastern Cape Parks Board (Zwai Kostauli)</li> </ul>
	<ul> <li>KwaZulu Natal Wildlife (T. Gumede)</li> </ul>
	<ul> <li>iSimangaliso MPA's (P. Mokoka)</li> </ul>
	• MCM (Dr Alan Boyd)
	<ul> <li>Offshore MPA Programme &amp; Petro-SA project (Kerry Sink)</li> </ul>
	(30 mins)
	• MPA's in Kenya Wildlife Services (A.Tuda)
	0
12h30 - 13h30	Lunch
10100 14115	Legislation & Compliance (Peter Chadwick)
13h30 - 14h15	Continued form morning session
	• Marine Conservation in the Seychelles (N.Shah)
14h15 – 15h30	Legislation, Compliance and Policy: (Overview Dr Alan Boyd)
15h30 - 16h00	Tea/Coffee
16h00 - 17h00	State of MPA's in South Africa 2009 (Karen Tunley)
17h00 - 18h00	Discussion from floor over days events
19h00	Dinner
171100	

# Tuesday

Time	Торіс
07h00 - 08h00	Breakfast

08h00 - 08h30	Ecosystem Services & MPA's in Kenya (Arthur Tuda)
08h30 - 09h00	Ecotourism and sustainable financing program on Cousin island Special Reserve (Kirsten Henri)
09h00 - 10h00	Garmin equipment overview and needs (Mike Clarke)
10h00 - 10h30	Tea/Coffee
	Training & Equipment (Rhett Hiseman)
10h30 - 12h00	Awareness Raising, Training & Equipment:
	Report back of Year of the MPA (Esma Marnewick & Peter
	Chadwick) (30mins)
	Marine Guides, MPA Management Certificate Training & WIO-
	Compas (Peter Chadwick) (30mins)
	• Hardware needs requirements for 2010 (Peter Chadwick) (30mins)
12h00 - 13h00	Lunch
	Operational Management (Pierre De Villiers)
13h00 - 14h30	Overview of progress by Dr Alan Boyd (15mins)
	Discussion from floor covering
	vi. Framework for operational management
	vii. Management Plans
	viii. Operational Work Plan
	ix. Quarterly Report
	x. Annual Report
15h00	Field Outing to be confirmed (Peter Hartley)
19h00	Dinner
	Discussion Groups

# Wednesday

Time	Торіс
07h00 - 08h00	Breakfast
	Research & Monitoring (Kerry Sink)
08h00 - 08h20	Sundays River Estuary (Paul Cowley)
08h20 - 08h40	Research Priorities Workshop & Goukamma Paper (Dr A. Gotz)
08h40 - 09h00	Goukamma MP Research Findings (Sven Kerwath)
09h00 - 09h20	Table Mountain MPA Project (A. Bernard)
09h20 - 09h40	Reef Atlas Project (Prideel Majiedt)
09h40 - 10h00	Petro SA (Lara)
10h00 - 10h20	Vidal Fishing Project (B.Mann)
10h20 - 10h50	TEA (Peter Chadwick)
10h50 - 11h30	MPA Expansion (Kerry Sink)
11h30 - 12h30	Summary & Wrap Up (Setting priorities for action in 2009) (Peter Chadwick)
12h30 - 12h40	Closure (Dr Alan Boyd)
13h00	Lunch & Departure

Appendix 2: <u>Attendance Register</u>

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