

Malawi

Shire River Basin Management Program (Phase I) Project [P117617/P127866]

Implementation Support Mission (June 9 - 20, 2014)

Introduction and Acknowledgements

1. This aide memoire seeks to inform the Government of Malawi (GoM) and Management at the World Bank about the outcomes of the implementation support mission for the Shire River Basin Management Program (SRBMP). The mission took place from June 9 - 20, 2014, jointly by the Program's Multisectoral Technical Team (TT) (led by Mr. William Chipeta, MoWDI) and a team from the World Bank¹.

2. The main objective of the mission was to support the implementing agencies in the implementation of the Program, with a specific focus to: (a) review implementation progress against the planned activities in each component with a special focus for those on the critical path and those behind schedule, (b) review procurement and financial management, including review of the proposed annual workplans and budget (c) review implementation of safeguards instruments, especially related to Kamuzu Barrage, (d) review institutional capacity and arrangements for effective implementation, (e) draw lessons and discuss specific actions to facilitate improved implementation, and (f) support the Technical Team in advancing critical activities.

3. The mission undertook field trips in the Shire Basin (visits to the supported protected areas and priority catchment in Neno and Chikhwawa districts). The mission met with the TT and many other public and private stakeholders in the Shire River Basin Program, as well as with senior officials from various Ministries and Departments. A "consultant day" was piloted, where all consultants working on assignments under the project present their respective assignments, followed by a joint discussion on possible synergies and common bottlenecks. This proved to be very beneficial and will be taken forward.

4. The Bank team would like to express its gratitude to the TT and the implementing Ministries in general for the overall coordination and facilitation of the mission. This Aide Memoire highlights the status of the project implementation progress as of June 2014, the main points of which were presented and discussed during a wrap-up meeting attended by PTC members and chaired by Ms. Modesta Kanjaye, Director of Water Resources in the Ministry of Water Development and Irrigation on June 20, 2014. The aide Memoire sets out an action plan to address identified implementation challenges for the next six months. The next mission is tentatively planned for November 2014, to coincide with the third Shire Basin conference with frequent technical inputs until then as required.

¹ The mission comprised of Pieter Waalewijn (Sr. Irrigation and Water Resources Management Specialist, Task Team Leader), Nagaraja Rao Harshadeep (Sr. Environmental Specialist, co-Task Team Leader), Grant Milne (Sr. Natural Resources Management Specialist), Ross Hughes (Sr. Climate Change Specialist), Hrishikesh Patel (Spatial Analyst - remotely), Francis Nkoka (Disaster Risk Management Specialist), Cheikh Sagna (Sr. Social Development Specialist - remotely), George Ledec (Lead Ecologist - remotely), Zeria Banda (Communications Specialist), William Critchley (consultant – FAO), Jessica Troell (consultant), Steven Mhone (Procurement Specialist), Trust Chimaliro (Financial Management Specialist), and Zione Kansinde (Team Assistant).

Context

5. The current Project is the first phase of the Shire River Basin Management Program, which has as Program Development Objective: Increase sustainable social, economic and environmental benefits by effectively and collaboratively planning, developing and managing the Shire River Basin's natural resources. The program is intended to have a duration of 15 years. The first phase project will establish coordinated inter-sectoral development planning and coordination mechanisms, undertake the most urgent water related infrastructure investments, prepare additional infrastructure investments, and develop up-scalable systems and methods to rehabilitate sub-catchments and protect existing natural forests, wetlands and biodiversity. Future phases will consolidate basin planning and development mechanisms and institutions, undertake further infrastructure investments, and up-scale catchment rehabilitation for sustainable natural resource management and livelihoods.

6. The Project Development Objective (PDO) of the Phase I project is to develop Shire River Basin planning framework to improve land and water management for ecosystem and livelihood benefits in target areas. The SRBMP-I in support of the first phase of the SRBMP, will have a duration of five and a half years and is organized in three components: (a) Shire Basin Planning, (b) Catchment Management, and (c) Water Related Infrastructure.

7. The previous mission rated progress towards achieving the PDO and implementation progress as moderately satisfactory, mainly because of major delays in procurement, low disbursement rate and yet unresolved safeguards issues. The project was in full compliance with safeguards policies and legal covenants and fiduciary aspects were rated satisfactory. A detailed action plan was drawn up to improve performance.

Key Findings/Progress of Implementation

General Findings

8. The mission achieved all of its objectives. Close collaboration by Bank Team with the TT continued over the last months, and the TT has been able to complete almost all of the planned procurements and critical consultancies and equipment are in place. The mission noted that implementation has begun to accelerate since last mission, but also that many other agreed actions have been seriously delayed, and will need to receive increased TT component management attention. While disbursement remains low and of concern, the project has been able to commit significant resources by completing consultancies. As many other activities were dependent on the start of these consultancies (especially under the catchment management and flood risk management components of the project) the projections for disbursements are positive. Some departments are still understaffed and need to increase their capacities and time commitment to the project, including their internal communication. The Ministry, with support of the Kamuzu Barrage construction supervision consultant, is reviewing the bids and it is expected that this procurement can be concluded soon. Minor procurement delays were incurred as bidders requested additional time to prepare their bids. The Government has communicated it has duly compensated all Project Affected People as per the RAP, and has sent documentation to the Bank on the same. The Government is to also document all MoUs with government departments on the same, and will continue dialogue with the directly and indirectly affected community around the barrage.

9. Fiduciary performance remains satisfactory, especially with strengthened procurement team and important clarifications on decentralized funds flow (to districts and national parks) that were discussed in detail during the mission. Overall financial reporting is of high quality and timely. The PPR rated procurement as moderately satisfactory, noting issues with filing and documentation. The current mission rates both procurement and financial management as satisfactory, and stresses the importance of issues raised in the PPR.

Coordination/info sharing

10. Enhancement of data sharing and internal and external communication on the project is improving through the website, facebook page and recently the first newsletter/magazine. The standards are good, but it will be important to increase the frequency and two-way nature of this communication, and link it directly with implementation issues. The Shire Basin Forum is established and a committee has been discussing its modus operandi. However, despite this there is still little visibility of the program, and therefore not yet sufficient debate stirred around basin management issues. The program TT is encouraged, through the communications officer, to increase relevant and timely communication internally and externally.

11. The mission discussed again with TT and management the serious concerns on delays in implementation, with notable exception of procurement. The detailed action plan was only partially achieved. Ministry management and Bank team emphasized that sub-component leaders need to take leadership on activities within the respective components to adhere to these agreed actions and timelines, now that the project is in full swing. Some specific measures were discussed to improve coordination, within the TT and between TT and the decentralized implementers:

- (at least) fortnightly meetings on status of each sub-component with field implementers and relevant consultants initiated by sub-component leaders (VC, skype, phone)
- Program management (liaison officer with support of M&E consultant) to follow up on gantt charts and sub-component deliverables (Microsoft Project)
- Procurement unit to support contract management with 'deliverable database'
- Communications Specialist to maintain online project diary with key milestones, actions, meetings, dates

12. Key elements of effective collaboration among implementers were discussed, and project management, IT specialist, communications specialist and component leaders discussed to strengthen along the following lines, and this was also presented at the "consultant day" for information sharing among consultants. These have to evolve over the next few months not that the infrastructure and all teams are generally in place:

- Communications: Make use of modern ICT and communications (improved internet, mobile photos and waypoints, tablets, VC and mapping) to inform project management. Who's who regularly updated overall contact list, Regular "Consultant Days" for project (even with virtual connections/presentations, Skype, Webex, VC, emailgroups, visits, etc.
- Online library: external in the SRBMP website and internal through a structured Dropbox or similar for key documents
- Improve sharing of data and tools: Data/Metadata, Digitization/Collation/Surveys/ Analysis/Tools, MASDAP, Web Services, Google Maps/Earth, Mobile Apps. It is all starting and will need support.
- Share knowledge Products: Photos/Videos, Case Studies, Briefs, Reports, Atlases, Interactive Products (e.g. on Basin), Evidence of Client Adoption of TA, overall Monitoring & Evaluation

- Support Services: National Spatial Data Center helpdesk, suggestions for capacity development, interns
- Knowledge Sharing: Basic Training/Capacity Development, Training materials, Distance Learning (use WB VC facilities if required), Coordinating Training schedules. Amongst others the TT is developing a structured training program that makes use of the expertise present in the consultancies.
- Dissemination: SRBMP Website, Newsletters, Project Reporting

Component A: Shire Basin Planning

13. A1: Basin Planning: In the process of operationalizing the new Water Resources Act (December 2013) the MoWDI is supporting the establishment of both the National Water Resources Authority (NWRA) and the Shire River Basin Agency (SRBA). Different legal and institutional options for the SRBA as offered under the Act have been assessed, and the PSC adopted an option that establishes the SRBA as a committee under the NWRA, which will need further definition, with the overall aim of creating an executive agency with the powers vested in the NWRA at basin level, along with the stakeholder engagement and oversight functions (and more) as provided to Catchment Management Committees. (details provided in Annex 4). The institutional set-up will require further detailing over the next few months. The mission emphasized the importance of harmonizing and aligning the two new institutions (NWRA and SRBA) from the beginning. An interim CEO for the SRBA will be recruited under the program, and while this will need to be a government function, the initial establishment year costs can be financed by IDA, thereafter the institution will pick up these costs. The Shire Basin Planning Consultancy is supporting the Ministries in the roll out of the agency, as well as the development of the overall Basin Plan.

14. Stakeholder engagement is a critical element of the new SRBA and this has been progressing through the Shire Basin Forum, a broad based multi stakeholder platform linked to the nascent SRBA. Modus operandi for the forum were discussed among its representatives, but it will be important to structure the communication and engagement with the forum so that it becomes a key sounding board and partner in the program. Preparations for the next conference, planned for November 2014, have only just started and it will be important to urgently organize critical elements of the program (dates, venue, key speakers, early preparatory activities, contests, requests for abstracts, co-hosts, etc). During the mission some changes were suggested to the program and it was agreed that this conference should focus on achieving tangible outputs on the vision, possibly through writeshops, tackling key issues, that can then be fed into the first Basin Plan.

15. Procurement is underway for the architect for the office of the SRBA. From an assessment by the buildings department it appears that the desired building may be significantly more expensive than budgeted. It will be important to early on bring this to attention of the architect and seek to contain costs without significant compromise to functionality and standards of the building. Another issue that has arisen is that the allocated plot is much smaller and less suitable than initially understood by the Program – it needs urgent discussion on whether this is still a suitable location.

16. Also on biodiversity (GEF-supported) elements of the program, the mission noted that implementation of activities has begun to accelerate since the last mission, but progress remains substantially behind schedule. Two factors continue to pose constraints to implementation (i) the continuing absence of a financial management officer to support decentralized implementation, and (ii) a lack of systematic follow-up by the technical team on procurement requests from spending units at Lengwe and Liwonde National Parks, the Forest Research Institute of Malawi and the National Botanic

Gardens and Herbarium. The biodiversity assessment procurement has not yet been completed. It has been agreed that weekly or fortnightly progress meetings will be held on the GEF-supported elements of the project to reduce slippages.

17. A2: Capacity Building: This mission has to report again that no progress has been made on the ever more urgent data rescue activity. And during the mission, although this was discussed in detail, no progress could be registered. This will present a problem to modelling and modernization of data management and use in DWR and DCCMS. The recommendation from last mission was reiterated: to first assess the amount of work, and then outsource the actual retrieval and data entry, while ensuring quality control by the line departments (meteorology, hydrology, surveys), and to initiate procurement of the service provider as non-consulting service.

18. On building upgrading and equipment: The first round of IT procurement is being delivered and this will greatly improve the ease of implementation. There are still outstanding elements (internet access at different locations and improved mobile access for GPS/photography for informed project management. It will still be important that IT investments are accompanied with the relevant furniture/furnishings as well. The assessment of requirements for building refurbishment was delayed and resulted in a long list of building needs. A prioritization exercise is required, since the project cannot support all possible needs and should support those activities most critical for the activities supported by the Project.

19. The training plan was discussed and it was re-emphasized that the program can support learning, primarily cross/multi-sector training and important skills training to improve effectiveness of implementation of the program and department mandates. It appears that not many training activities were undertaken, as priority was being given to the start-up of activities. Next year's draft training plan was discussed, and it was agreed that a new iteration will be required where focus is more on general hands-on skills and on training groups of people across sectors, rather than individual MSc courses. TT was reminded on its plans to organize topical trainings of relevance to the Shire Basin for departments and TT members. A very successful study tour was undertaken to watershed management programs in India, and the team returned with a good number of lessons for direct implementation, which were discussed during the mission. Another study tour is being planned to the Okavango Delta, primarily for departments involved in wetland management and community engagement (Elephant Marshes, basin planning).

20. The National Spatial Data Center is supported with TA and has been actively supporting a number of issues of cross-cutting relevance under the program, as well as generally improving its services on GIS, open data, mapping standards, support to MASDAP, improved IT use and individual skills training. The department has been rolling this out on demand-driven basis and it is expected that this will further gain relevance as field activities pick up and consultancies roll out their activities. A specific session was held during the mission on GIS related subjects, such as common standards, data sharing, M&E requirements linked to GIS, and synergies in data collection, acquisition and legacy data.

21. Incremental operating costs: Use and flow of these funds were discussed. Districts and national parks have not been continuously accessing incremental operating costs. It was agreed that the system needed further streamlining, that a rolling system will be implemented (more details below) and that districts need to improve on their timely reporting. In that light the issue of financial management at DNPW was discussed during the mission and an interim solution was agreed to with a DNPW officer taking up limited responsibilities, while a bookkeeper is being procured as an individual consultant to be based in Blantyre and support the protected areas in their financial management requirements. In

discussions on the FY15 Annual Workplan and Budget it was clarified that incremental operating costs to implement activities under all program components are budgeted under component A2 (with the exception of GEF supported activities). This includes operating costs for districts as well.

22. A3: Hydromet: The consultancy supporting the development of the Operational Decision Support System is in place, while procurement for the consultant to support modernization of the hydromet system is significantly delayed. This will need to be concluded as this work is critical for the ODSS, flood risk management work and many others, as is the digitization of legacy data as already discussed. No field activities have been undertaken on hydromet. The ODSS support consultant is placing full time TA within DCCMS and DWR. Planned early activities under this component were the development of an options paper for a more sustainable incentive structure and remuneration for monitoring staff. This work has not yet started, but different options were discussed, including the option of a data services contract with gauge readers, rather than adding them to Ministry payroll, which would present numerous challenges. Another issue discussed under this component is the importance of safeguarding free and open access for Ministries, academia and the public at large to data and analytical tools developed under the ODSS and basin planning.

23. Groundwater monitoring network development is part of the hydromet consultancy to be procured, however early geohydrological assessments and aquifer mapping has been proposed as a separate consultancy. It was discussed that this work should also start in the coming months so that outputs inform the design of the monitoring system. Another interesting partnership that MoWDI is proposing is with an innovative groundwater monitoring, information and capacity enhancement program implemented by Water for People and University of Strathclyde. General collaboration arrangements were agreed during the mission to be detailed in August 2014.

24. A4: Program management: the M&E consultancy is well established within the TT offices. It is expected that this consultancy will increasingly provide important tools for adaptive program management and documentation of impacts during the course of the project. Reporting on the project is improving, but there is still room for improvement and management monitoring of action plans (gantts) in each of the subcomponents. An executive assistant is in place, relieving the Project Liaison officer from these duties, and it was discussed that he will refocus to assist the Project Coordinator with management functions in monitoring and follow up with component leaders on project deadlines, milestones, deliverables, and contract management, so that slippages can be significantly reduced. At the same time it is noted that following up on progress within a subcomponent is primary responsibility of the component leader. It was agreed that the procurement unit will, together with the liaison officer, and with support from the M&E consultant develop and maintain for weekly updates a dashboard with key contract dates, deliverables, other milestones and flags for management attention. It was also confirmed therefore that the liaison officer will be the primary counterpart for the M&E consultant (SMEC). It is also expected that this consultancy assists the TT in registering progress (quantitative and qualitative) on each of the project indicators, at least on a semi-annual basis.

25. The SRBMP TT has strengthened its internal teamwork, and in some components collaboration is very smooth. Yet, some departments need more participation in TT activities, and TT members in these departments need to get more dedicated time for implementation of the program, or activities will continue to lag and may not be achieved. The start of the first round of the Young Professionals Program has been delayed, but departments did work on their needs. However, there is need to clearly refocus this program so that it supports young professionals in delivering short term and hands-on support to the project, and provide them the opportunity to work directly together and within the TT.

26. Communication is a critical element of this program, which is about broad based transformation and social change in the Shire Basin. The IT specialist has started rolling out the project's website, the internal email server system, which provides the backbone for both internal and external communication. A much delayed but eventually very professional OurShire Magazine was delivered by the Project. The project also has a facebook page on which it engages on basin issues. In general though, communication products are lagging and frequent updates have not been forthcoming. Now that the infrastructure is in place it will be important that the communications specialist in the TT rolls out the different products and establishes good two-way communication externally and supports internal communication and branding. It has been agreed that in addition to the magazine there need to be brief monthly updates, and that the communications specialist will maintain a project diary with all key events, meetings, trainings, milestones, and ensure information is shared efficiently within and outside the TT using IT, email groups, etc.

27. The program is well managed, with good understanding of the interlinkages within the different components of the project. However, some departments have still not been freeing up the time of the TT members to fully dedicate themselves to working on the project, including TT members who have been delegated leaders of multi-sectoral subcomponents. Since last mission, internal approvals no longer delay the process and mobility/communication have significantly improved. It was agreed that all departments should have back-up TT members, and much more than currently engage their departmental colleagues in learning/information sharing to ensure broader embedding of the Project. It was highlighted that if specific departments continue to be non-committal their future activities will be jeopardized, whereas faster moving activities can be further strengthened.

28. Performance management of procurement under Shire River Basin Management Programme during the current supervision mission has been rated as Satisfactory which is an upgrade from last missions' rating of moderately satisfactory and the moderate rating from the PPR, as there has been rigorous processing of procurements and signing of key contracts. The mission reviewed the recently revised project procurement plan and noted that it has been revised in line with the Bank's thresholds of August 21, 2013 most of which have been revised upwards on goods, works and non-consultant services. More details on procurement are provided in annex 6.

29. The Project's Financial Management has been rated Satisfactory and risk rating remains substantial. The project is current on all reporting requirements. The Audit report for the year ended June 30, 2013 was submitted before the deadline date of December 31, 2013. The report has a clean audit opinion with few control and accountability issues reported in the management letter. The Ministry's internal audit department conducted an audit of the project's transactions and their report has been shared with the Bank. The report shows that the project is in compliance with procedures and controls put in place to ensure integrity of financial transactions. During the previous mission it was agreed that an accounts personnel should be recruited to manage FM issues at Lengwe, Liwonde National Park and Elephant Marsh. The project has not yet done the recruitment and this is affecting the timeliness of funding activities in the affected areas. The mission has agreed that the recruitment should be expedited and also that the Department of National Parks should provide accounts personnel to work with the project's Secretariat as an interim measure not exceeding six months. The funds flow to the districts affected by the project is expected to commence soon. The mission agreed that the project should refine the funds flow arrangements for the community driven activities as well as districts' incremental operating costs. The arrangements should be concluded rapidly before funds start flowing to the communities and districts. Project Disbursements to date is USD 14,741,638 representing 11% of available funding. The project has spent USD 9,851,141 which is 67% of the disbursed amount.

Component B: Catchment Management

28. 30. A number of the agreed actions identified for sub-components B1, B2 and B3 from the February 2014 implementation support mission (focused on catchment management) have been completed as planned. Some actions are still in progress and several new critical actions were agreed to during the current mission. Annex 2 provides more detailed information.

29. 31. Mott McDonald (Implementation Support Partner – ISP - for sub-components B1, B2 and B3) has completed their inception report, and largely recruited all technical and field staff. Initial sensitization work with the District Councils has been completed as planned. Demarcation of catchment boundaries is progressing well. Catchment mapping has been completed for three of the four selected sites. The Memorandum of Understanding (MOU) between the ISP and participating district councils has been revised and is a marked improvement over the first draft at clarifying the roles and responsibilities of the ISP, District Councils, participating communities, and the Lilongwe-based technical team. However, there are still questions over fund flow, procurement, financial management, and approvals for community based work. These were discussed in detail during the mission and a final detailed manual is expected before mid July 2014. The mission discussed the option of the ISP identifying and implementing key advance field activities, which could act as an informal entry point activity for communities to build support for the project and not having to wait several months for the entire planning and capacity building process to be completed.

30. Aurecon is leading the development of new national catchment management guidelines. An initial draft report is scheduled for completion in August. While the catchment guidelines will necessarily focus on the micro-scale (with communities), they must also articulate a process for a larger scale strategic assessment to bring stakeholders together and identify key issues, main contributors to degradation and identify recommendations for integrated solutions. The consultants were also urged to expand their network of data sources to include the World Overview of Conservation Approaches and Technologies (WOCAT) database methodology.

31. The marketing study (being done by Anarmac) is linked to the four catchment sites in Ntcheu, Zomba, Neno and Blantyre districts. The inception report is complete, along with the literature review and primary data collection, data entry and analysis. The draft report is now being developed.

32. In May, 2014, a delegation from the Technical Team and relevant Ministries visited India on an exposure visit, focused on catchment management. A detailed visit report was drafted, which outlined lessons learned that could be adopted into Component B activities.

33. There has been good initial progress with the monitoring and evaluation work, led by an international consultancy (SMEC). There is a need for better coordination of community surveys to reduce duplication of effort and confusion that multiple surveys could cause community members.

34. A draft MOU between key consultants (Mott Macdonald, SMEC and AURECON) has been circulated for review. This is a critical document to clarify collaboration between these organizations, protocols for data sharing, better coordination of field visits to specific communities, etc. This could be scaled up to other consultancies across the program.

35. Terms of reference and operating manual/guidelines have been completed for the innovation fund. There is some urgency with this initiative as it might be possible to showcase some of the successful proposals at the next Shire Basin conference. The exercise on developing the curriculum for

the Zomba Center of Excellence on Land and Water Management requires further work on the ToR, and better embedding within the overall training institutional landscape.

36. During the mission, the Bank presented a draft concept note to the Department of Forestry (DoF) and other stakeholders proposing a study to evaluate tree based ecosystem approaches in Malawi, with a specific focus on farmer managed natural regeneration. There was strong support for this work, linked to Component B where possible. It is anticipated that the consultants (from Washington) would present their inception report at a launch workshop, possibly in September, 2014.

37. B4: Ecological management: The mission noted that implementation of GEF funded activities has begun to accelerate since the last mission, but progress remains behind schedule. Two factors continue to pose constraints to implementation (i) the continuing absence of a financial management officer to support B4 implementation, and (ii) a lack of systematic follow-up by the technical team on procurement requests from spending units at Lengwe and Liwonde National Parks, the Forest Research Institute of Malawi and the National Botanic Gardens and Herbarium.

38. Financial management: To address on-going weaknesses in financial management, it was agreed that (i) as an interim measure, DNPW would mobilize a financial management officer by 27 June, to be based at the DNPW Southern Regional Office (at Limbe). The FM officer will have responsibility for ensuring that funds are efficiently managed - including reconciliation of accounts. The officer will be responsible for budgetted amounts under an agreed threshold level – to be agreed with the financial management Technical Team. To reduce transaction costs and delays, the FM officer will ensure that funds are made available to spending units on a quarterly basis to ensure that incremental operating costs and other day-to-day needs are met on an uninterrupted basis. The FM officer will work under the close supervision of the Financial Management officer for the Technical Team. (ii) By 30th July, DNPW will put in place a contracted financial management officer to provide a dedicated financial management service for all GEF-supported activities – covering DoF and DNPW related expenditures.

39. Procurement: To address delays to the processing of procurement requests, it was agreed that DNPW would develop an inventory of outstanding procurement requests. The inventory will specify responsibilities to task team members and this will be reviewed during monthly meetings of team members responsible for implementation of GEF-supported activities. It was agreed that the inventory would be submitted by the end of June. Annex 3 provides a more detailed update on the progress, status and implementation issues of GEF-supported activities, the key highlights are the need to restructure some consultancy assignments to better address the current challenges: the road alignment in Liwonde NP, the waterholes consultancy in Lengwe, the tourism study and the sustainable financing study. A good start has been made in engaging stakeholders, in particular surrounding communities, and this has led to joint decision making on community packages, as well as a partnership understanding with Tisunge Trust just outside the entrance of Lengwe National Park.

Component C – Water Infrastructure

40. C1 Kamuzu Barrage: It was expected that the procurement process would have been completed in June 2014, but since bidders requested additional time to provide responsive proposals, this milestone is delayed by 1-2 months. The Government team is currently reviewing the bids, with technical support from the construction supervision consultant (NORPLAN). Since last mission, a number of critical activities have happened and others are still outstanding:

- The ESIA has been approved by the National Committee on the Environment and it has been publicly disclosed. The RAP has also been approved and disclosed and the Ministry confirmed

Government has compensated all Project Affected People. The Bank will now also disclose the final versions of these documents on its website. Documentation has been sent to the Bank. Even though it is believed all directly affected have been compensated as per the RAP, it was agreed that the Project will follow up with dialogue with the wider community, including people living in the area, fishing on and around the Barrage, ensuring that eventual grievances are identified early and addressed. All outstanding issues with the government institutions (in particular agreement on location of the marine police unit) have been addressed and MoUs have been signed. It was agreed that these will be sent to the Bank as well. It will remain important for the Government to have local presence and address any grievances that may arise during implementation with people impacted or inconvenienced, and also to implement the community awareness activities that have been designed in ESMP and RAP.

- The Dam Safety Review Panel, while formally in place under the National Water Development Program, does not currently have a contract to advise on the construction of Kamuzu Barrage. The panel has advised on all critical stages on their previous contract, but this needs to be urgently addressed and prior to commencement of civil works the DSRP should be in place.
- Waiver of taxes and duties: While MRA has indicated that taxes and duties are waived for the 3 construction contracts on Kamuzu Barrage, the letter thusfar has not specified the operational modalities. These will need to be urgently clarified, since there is a large risk of customs delays and other administrative issues if it is not clarified how the Ministry and MRA will implement the waiver. It was agreed that NORPLAN, MoF, MRA and MoWDI will meet to discuss this in detail.
- Appointment and authorization of the Client's Representative. The sub-component leader for C1 represents the government on site as the single entry point. He is supported by a multisectoral taskforce that has been established, drawing from relevant Ministries. It was discussed that it is important to ensure presence at the site for the duration of construction, as well as to ensure the component leader is authorized to make day to day decisions, while referring major issues back to the Ministry. To further strengthen this arrangement it is proposed that very good communication channels are established with Lilongwe (VC) for quick deliberation when necessary.
- The Project is still to embark on the study on the financial and institutional sustainability of the Barrage management arrangements, to come up with clear recommendations on an improved institutional embedding for the Kamuzu Barrage operation and maintenance within the new institutional set-up for the River Basin. As recommended during the last mission, the starting point should be the work carried out by NORPLAN in this regard.
- Another issue is on weeds management, where the Project is to engage with MCA and the Japanese Embassy to come up with an integrated support plan to weeds management. If not already done by other stakeholders, a study is required on weed management options (including biological control, as well as possible beneficial uses of harvested weeds, as well as an operational and financial framework for these operations).

41. C2: Flood risk Management: The outlook for this component is improved since last mission as the flood risk management service provider is now in place and reconnaissance visits jointly by BRL (ISP consultant) and DoDMA are planned. It will be important to catch up on lost time and learn from the experience under component B1 for the start-up phase. It will be important to from the very start accompany the consultant, have information and documentation ready and finalize the draft MoU that

was discussed between DoDMA and districts with the ISP. It is also important that more staff in the department are engaged with this project as it is addressing many issues of concern to DoDMA and there needs to be adequate follow up. In this light it was agreed that DoDMA would organize an internal meeting to brief the team on the TORs, Technical Proposal, options and activities of ISP, and from there to have regular department discussions on the vision for modernizing the department, and integrate this in SRBMP and other support (i.e. the GFDRR DRM program). An important element is the installation of the control room, improving communication, projection and mapping abilities in DoDMA's conference room. The same applies to DWR, DCCMS and others who need to be connected to the early warning system. It is therefore important also that the Project seeks to actively integrate activities under A3 with activities under C2. A detailed action plan is provided in Annex 5.

42. The biodiversity and scoping study for the Elephant Marshes is still under procurement. Once this procurement is finalized, it will be important for the consultants to have access to Elephant Marshes, and hence the joint procurement of the airboat by DNPW and DoDMA has high priority. This has stalled over the last few months due to discussions on sharing arrangements, cost allocation and whether or not this would need to be single sourced. The mission suggested a way forward and suggested all these can proceed in parallel, once the basic elements of the operational arrangements are agreed between the different parties.

43. C3: studies: With the basin planning consultancy on board it is expected that early discussions can also identify a number of studies for future investments that can be explored. Specific emphasis is given here to investigations in the Ruo sub-basin. The Shire Valley Irrigation water availability study has been successfully concluded and proved very important for decision making on the irrigation scheme and identifying potential trade-offs with hydropower. This has been a good example of where the Project has been able to provide multisectoral input on a specific basin question. It is expected that with improved basin planning answers to such questions will become routine. It was discussed that some money under C3 could be set aside to improve resource availability for the (eco-)tourism work that is envisioned under B4, should this be required. This is a potentially important integrating sector for the Basin.

Safeguards implementation

44. The mission had a dedicated discussion on safeguards implementation, with VC to the safeguards specialists on the team. All elements of the project were discussed. Specific issues have been highlighted in the relevant sections. The importance of documentation of implementation of safeguards instruments was highlighted.

AGREEMENTS REACHED AND PENDING ACTIONS/NEXT STEPS

The TT and Bank Team agreed on the following key actions, highlighting major milestones or remedial action to achieve the project's objectives. These are only a summary of discussions and should be read in conjunction with overall project literature.

Action	Completion Date	Responsible Person/Dept
Procurements – Diligent and pro-active follow up on all procurements milestones under the Project	Various – dashboard dates are deadlines,	All Sub-component Leaders. Mr. Jere to

by sub-component leaders, with all dates as per the updated dashboard	not to be passed.	send <u>weekly updates</u> of the dashboard
Coordination/info sharing		
Organize (at minimum) fortnightly meetings on each subcomponent with all subcomponent implementers – including consultants	From now onwards	Sub-component leaders
Manage milestones and deliverables with project management tools	From now onwards with weekly updates	Liaison officer (& M&E consultancy)
Establish deliverable database for contract management (merge with dashboard for weekly updates)	July 30, 2014	Mr. Jere
establish and maintain at weekly basis online diary, online library and up to date dropbox	From now onwards with weekly updates	Horace Nyaka, Francis Muvalo
A1		
State of the Basin Report – info collected and outline discussed with consultant – preparation for conference content on basin vision	July 31, 2014	Rex Kanjedza, Tawonga Mbale
Shire Basin Forum Virtual and Focus Discussions in preparation of conference	August 31, 2014	Rex
Conference basic preparation (date, venue, partners, key speakers, program outline, early invites)	July 15, 2014	Rex
Procure interim CEO for SRBA (individual consultant)	September 31, 2014	Rex
Resolve plot location for Shire Basin Agency (and then proceed procurement of consultancy)	July 15, 2014	Rex, Alice
Complete consultant selection process for basinwide biodiversity surveys	July 11, 2014	Jester
A2		
Data rescue services (estimate volume of work and initiate procurement)	July 31, 2014	Lucy, Sydney, Stanley – involving archive staff from depts..
Prioritize building upgrades	July 31, 2014	All depts (non compliance should not delay other departments)
Okavango Study Tour	August, 2014	Jester & Rex
Procure additional TA for improved communications (for mobile access and control rooms)	August 31, 2014	Francis, Humphrey
A3:		
Operationalize partnership with Strathclyde/WfP on groundwater	August 31, 2014	Sydney (with colleagues from groundwater)
Finalize options report for monitoring staff (hydro/met) with pros and cons for different scenarios	August 31, 2014	Stanley/Sydney

A4		
Develop project management dashboard with key milestones and remedial actions	From now onwards, to start July 31, 2014	Humphrey & M&E consultant
Enroll first batch under Young Professionals Program	September 30, 2014	Humphrey
Issue monthly project brief newsletters	From now onwards	Horace
Establish online and internal documentation library	July 31, 2014	Horace + Francis
Ensure continuous content updates on website and social media page (at least weekly, link to diary)	From now onwards	Horace + Francis
Prepare 3 rd conference	Milestones in previous AM	Horace + TT committee
Finalize Shire video and develop next steps on Shire Basin movie	August 31, 2014	Horace
Fiduciary Manual update for district FM and procurement	July 15, 2014	Component leaders, Sylvester/Chisomo
B1,2,3		
Sign the revised MOU between the ISP and participating District Councils	July 15, 2014	Austin/Stella/Lusungu
Identify critical, advance work under Component B (sub-component B-2) and start implementation in parallel with catchment planning and key stakeholders.	August 31, 2014	Austin/Stella/Lusungu
Appoint counterparts to the M&E consultants (SMEC) for catchment management work.	January 15, 2014	Austin/Stella/Lusungu
Ensure wide consultation on catchment guidelines work through all relevant SWG/TWG structures	ongoing	All component leaders
Finalize MoU between component B consultants (or merge with wider coordination MoU if required)	August 31, 2014	Humphrey
Launch innovation fund call for proposals	August 31, 2014	Joseph
B4		
See detailed action plan in Annex 3	various	Jester, William
C1:		
Send documentation to Bank on intra-government MoUs related to RAP	July 15, 2014	Toney, Bryson
Clarify tax waiver operational modalities with MRA	July 15, 2014	Toney
Install Dam Safety Panel	July 31, 2014	Toney
Communicate on client organization with the consultant	July 31, 2014	Toney, Chipeta
Initiate studies on Kamuzu Barrage (financial sustainability, weed management)	September 31, 2014	Toney, Bryson
C2		
Finalize operational boat sharing arrangements and technical specifications and procure boat	August 31, 2014	Dyce / Jester
MoU signing with ISP – conclude reconnaissance	July 31, 2014	Dyce

Identify early priority investments and start implementation along planning	October 15, 2014	Dyce (ISP)
Procurement		
FM		

Disclosure

The Government of Malawi and World Bank confirm their understanding and agreement to publicly disclose this Aide Memoire.

Annex 1 - Performance Assessment

Component	Jun 2014	Comment
A	MS	Major procurements have been concluded and important steps towards the design of the SRBA and the forum have been made. At the same time, actual establishment of the agency and hiring of staff is only in early stages, and so are preparations of the conference and engagement with the consultants. Activities under hydromet have been delayed, including legacy data rescue, and these are urgently required. Agreed actions need to be followed through diligently for this component to reach the objectives of having a Shire Basin Plan developed by the multi-sector Shire Basin Institution.
B	MS	There is good progress in that the ISP is on board and has started its field work with the districts and communities. Critical bottlenecks have to be overcome in terms of procurement and funds flow, as well as improved communication between districts and component leaders with more structured follow up by the TT. The same applies in general terms to B4 on protected area management.
C	MS	Kamuzu Barrage procurement is nearing completion, and many pending issues were clarified. On Component C2, the ISP is now in place and work has to speed up soonest.
Project Management	MS	While internal project management is good, and approval processing has greatly improved, the associated reporting and timely reporting/finishing of activities needs to be improved by TT members. The oversight function of the project management needs to be strengthened by freeing the liaison officer to support this management task. Communication on the project needs to be intensified.
M&E	MS	The M&E service provision is in place and initial information is being gathered. It is the expectation that soon this work will yield in relevant regular updates on project progress, bottlenecks and in time on impacts. It remains of utmost importance to complete the household survey and not to lose documentation of the first year activities.
Safeguards	S	Safeguards implementation is in line with the documents, and training has been happening well. Kamuzu Barrage compensation was concluded and all final versions of safeguards documents have been disclosed in-country and shared with the Bank.
Procurement	S	All procurement has been following bank guidelines. The procurement unit has been adequately staffed and timely processing of procurement has greatly improved since last mission.
FM	S	The procurement has a strong internal FM system and the project is in compliance with financial reporting. The FM unit has been adequately staffed. Decentralized funds flow to districts and national parks remains an area of attention.
Overall IP	MS	While there are still knock-on effects of earlier delays and progress is not yet where it should be, last missions' expectations on rapid improvement have generally materialized. It is important that this line is continued and not only in procurement, but also on other institutional reforms and modernization programs.

Overall PDO	MS	The Project is on track to achieve the PDO in general, and activities are working towards that objective. Reporting and communication on achievements, and inclusion of a larger number of stakeholders in the project will be important for successfully achieving the PDO.
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(S=Satisfactory, MS=Moderately Satisfactory, MU=Marginally Unsatisfactory)

Annex 2 - Component B detailed assessment (sub-components B1, B2, B3²)

Summary of progress to date and emerging issues

1. The mission reviewed progress with Component B based on meetings with the Project Technical Team, key implementing partners and contractors, and a two day field visit to Neno district, which included stops to view examples of environmental degradation (for example a major gully caused by poor road construction of secondary road) as well as sites where communities were demonstrating good sustainable land management practices; examples included a well-managed Village Forest Area and nursery in Hiwa village, and conservation agriculture in Daudi village. The mission met with the Deputy District Commissioner to discuss the project and more specifically, Component B and the roles of the council, ISP, and communities. The Deputy District Commissioner was particularly happy that the M&E consultancy (through SMEC) would be working closely with the council and as far as possible, merging project M&E systems with the existing council M&E system. More detailed observations are shared in attachment 1.

2. Most of the agreed actions identified for sub-components B1, B2 and B3 from the February 2014 implementation support mission have been completed (see Attachment 2) as planned. Some actions are still in progress and several new critical actions were agreed to during the current mission. Perhaps the most important achievement since the Component B mission in February 2014 is that all major service providers have now been contracted and are executing their assigned tasks.

3. Highlights of progress to date follow below:

B-1: Develop Institutional Capacity for Catchment Planning & Monitoring

4. Mott McDonald (Implementation Support Partner – ISP - for sub-components B1, B2 and B3) has completed their inception report, and largely recruited all required technical and field staff. The ISP is moving quickly towards implementation of agreed activities in the selected catchments in the four project districts:

- Upper Lisungwe catchment in Ntcheu district,
- Chingale catchment in Zomba,
- Upper Wamkulumadzi in Neno district, and
- Blantyre escarpment catchment (upstream of Kapichira) in Blantyre district

5. Initial sensitization work with the District Councils has been completed as planned. It was agreed in February 2014, that the ISP would then conduct follow-up sensitization after they had completed their inception report. With the inception report recently submitted, the ISP is planning these critical follow-up meetings to commence before the end of June. Also in February, it was agreed that Machinga

² B-1: Develop Institutional Capacity for Catchment Planning & Monitoring

B-2: Rehabilitate Targeted Catchments

B-3: Support Alternative Rural Livelihoods

district would be involved in the project since it overlaps slightly with one of the Chingale catchments in Zomba district. Accordingly, the ISP held meetings with the District Commissioner of Machinga District Council in early June for initial sensitization. These follow-up meetings are critical; from the field visit to Neno district, it appears there is a diversity of understandings among council members of the project component and respective roles of both the council and ISP.

6. The ISP is currently mobilizing staff as per the terms of reference. As well, the ISP has agreed to recruit and place an additional eight staff in the field to increase the ongoing presence with communities. This is a very positive step. While the ISP has indicated that most participating councils have a fairly strong complement of technical officers, there are still some gaps (especially in agriculture extension) that likely won't be filled by government during the course of the project. With staff in place, the ISP is now in the very early stages of community sensitization, mobilization, and group formation, and developing options to guide subsequent participatory planning process. The ISP will be using a multi-layered assessment/planning process, starting from the catchment and sub-catchment levels, and working down to the micro-catchment level, which is most appropriate for participatory planning with communities. This integration of landscape level catchment assessment with micro-level planning is important and should provide valuable lessons that could be integrated in the catchment management guidelines now being developed (see next section) by another service provider (Aurecon). The ISP should continue to share tools and knowledge with other major service providers dealing with M&E (SMEC) and development of national catchment guidelines (Aurecon).

7. The Memorandum of Understanding (MOU) between the ISP and participating district councils has been revised since February and is a marked improvement over the first draft. The ISP is comfortable with the revised MOU and feel it reflects their input, especially the addition of a 14 day time limit for approvals of work completed (by district councils), after which an automatic no objections would be assumed and the company would be paid. The MOUs and follow-up sensitization work will greatly clarify the roles and responsibilities of the ISP, District Councils, participating communities, and the Lilongwe-based technical team.

8. At the same time however, clarity is also lacking over fund flow, procurement, financial management, and approvals. There is an urgent need for a simplified process regarding procurement and financial management for community based work. This would reduce the number of sign-offs and the level of approval in government (for both procurement by communities, and for the ISP to be paid for completed work). This would also clarify the modalities and time-frame for funds to flow to district councils that are necessary to cover their incremental operating costs. The process must be decentralized as far as possible or the component will simply not move. The example given of watering cans having to be approved in Lilongwe is an illustration of how far the procurement and FM procedures need to be decentralized and simplified. Suggestion is that ISP will work with communities and district councils to develop Village Action Plans, financial requirements, and procurement plan (as in PIP). This would then be approved by preferably by the district technical team or council within two weeks or no objections is assumed. Once the work plan is approved, then funds can flow to the community account.

9. With fund flow to councils, a flexible approach is needed that will not result in councils drained of cash while reporting on the previous period's spending and outputs between tranches. The main expenditures by District Council technical staff will be for fuel and allowance. Ideally, councils should receive approval for the next tranche of funding after spending 50% of the previous allocation and reporting on it. The ISP is in a good position to informally monitor council activities and participation related to Component B. However, it is critical that the ISP knows that councils have received funds and how much to ensure there is no miscommunication. In addition, the project will need to cover the cost of the councils calling ad hoc, out of cycle meetings related to the project, where some council members would have to drive to from outside the main town (this would include fuel, allowances, and accommodation).

10. Aurecon is leading the development of national catchment management guidelines³. The firm is currently engaged in task (a) of five assignment task clusters: a) preparation; b) analyze current information leading to an interim report; c) develop draft guidelines, electronic tools for dissemination (mobile phone access; d) capacity development; and e) develop updated guidelines. Under task (a), the consultants have made a substantial effort to gather relevant information from Malawi, other regions in Africa, and globally, and are putting all documents on a public web site. The Aurecon team has had three basin visits with a fourth planned for the last week of June. An initial draft report is scheduled for completion in August. Aurecon has developed a web site (www.Catchmentguidelines.org.mw) where documents can be shared through an open source platform.

11. The preparatory work (information gathering, stakeholder meetings, field visits) has clearly identified the role that regulatory and implementation failure in other sectors is playing with catchment erosion and downstream sedimentation. A good example is road construction in rural areas, which is often the biggest source of soil erosion in a given catchment. This was clearly evident during the Neno field visit where the mission saw numerous examples of significant soil erosion and downstream sedimentation, including one massive gully next to a road with the head of the gully next to a poorly designed drainage channel. Meetings with the technical team and Aurecon discussed whether or not to expand the guidelines to cover these other sectors. Other sectors making major contributions to land degradation are land clearance for agriculture, and cutting trees for charcoal production.

12. In addition, while the catchment guidelines will necessarily focus on the lower scale of planning and action, where people are involved, there must also be mention of the larger scales and the planning processes appropriate to them. These will include catchments/ headwaters of several thousand hectares, then hydrological sub-catchments, and further sub-divisions based on socio-political boundaries. At the larger scales there will be use of satellite imagery, GIS tools, and various hydrological and sediment models, etc. Thus for broad-scale planning – hydrological models and scenario planning procedures will be highlighted, but detailed guidelines on how to do/configure these models will not be included. The guidelines must articulate a process for a larger scale strategic assessment to bring

³ See attachment 3 for more details.

stakeholders together and identify key issues, main contributors to siltation (roads for example) and identify recommendations for integrated solutions. A simplified process is presented in Figure A-2.

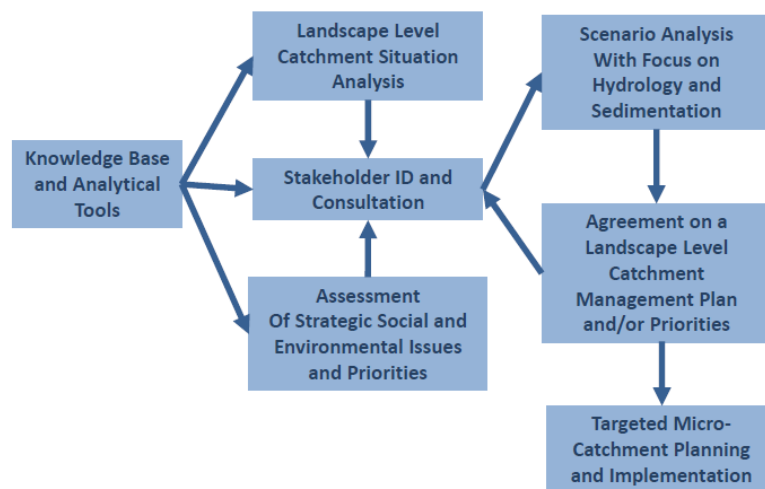
13. The proposed guidelines would be structured around three distinct sections: Part 1 will cover general concepts of catchment management; Part 2 will be the technical guidelines for treatment planning and implementation; and Part 3 will outline the detailed procedures. Part-II (technical section) is a particular challenge. The technical team and Aurecon may consider developing a separate and more comprehensive technical manual with more details, and more technologies and treatments.

14. Aurecon is also promoting the concept of having the guidelines and related material available on-line for wider use, rather than detailed manuals, although both are needed. In that regard, it will be important to begin thinking about developing a tablet/PC based decision support tool (focusing on Part II) that could assist communities and front-line staff (especially) in developing catchment plans and appropriate soil and water conservation treatments based on specific site characteristics.

15. In moving forward, it is important that the consultants produce a draft as that can be reviewed and then tested in the field. In terms of focus, it was emphasized that it is critical to get it right” at the lowest level (micro-catchment) – in other words the guidelines must be meaningful to communities, manageable enough to use easily, and measurable. It would then be important to

Figure A-2. Simplified process for landscape level catchment assessment

Landscape Level Catchment Assessment - how do we go about systematically doing it?



have a system in place to allow the guidelines to be updated as experience is gained over time. Along this line, the mission emphasized the need for the guidelines to have flexibility, and be a general guide and not overly prescriptive. In other words the guidelines should focus on principles, general procedures, and simple technical advice. The guidelines must also be short and relevant, and pitched at the right level if they are going to be used. The consultants were urged to expand their network of data sources to include the World Overview of Conservation Approaches and Technologies (WOCAT) database methodology and look at how this material could be used this as both a source of information,

and possible format⁴. In addition, the draft guidelines could be revised later based on the experience of Mott MacDonald in piloting their multi-layered planning approach.

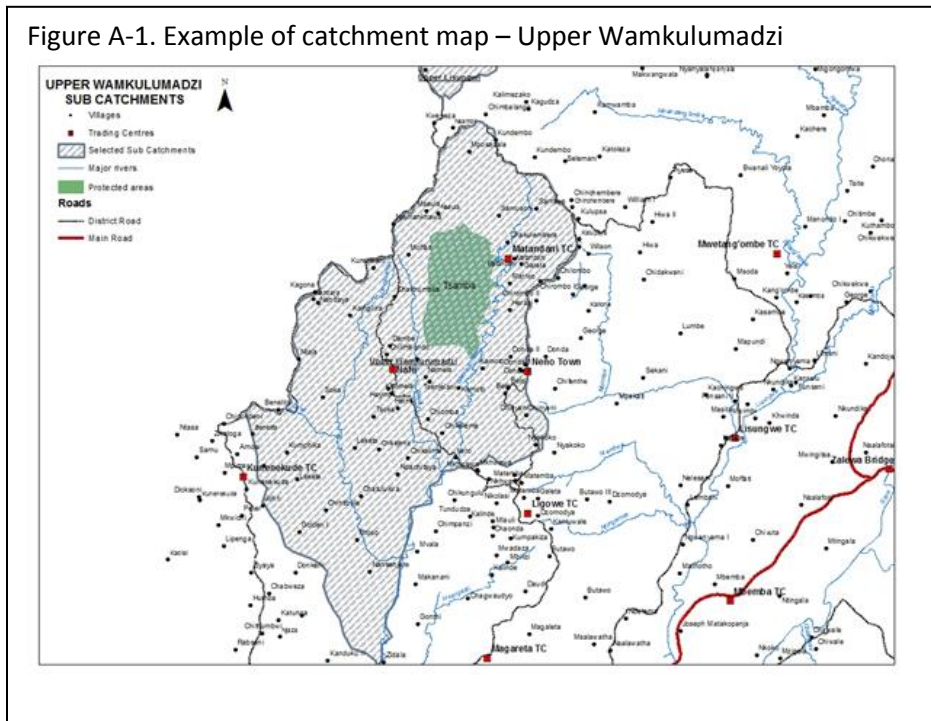
16. The next Aurecon stakeholder workshop is proposed for early July assuming a suitable date can be set and participants invited in a timely manner. Aurecon had suggested holding two workshops – with one in the north and one in the south to make them more geographically relevant, and more manageable.

17. A draft MOU between key consultants (Mott Macdonald, SMEC and AURECON) has been circulated for review and consideration of consultants before it can be signed. This is a critical document to clarify collaboration between these organizations, protocols for data sharing, better coordination of field visits to specific communities, etc.

B-2: Rehabilitate Targeted Catchments

18. With the support of the Department of Surveys, demarcation of catchment boundaries is progressing well. Catchment mapping has been completed for three of the four selected catchments, including thematic overlays and population density. Mapping of the fourth selected site (Chingale catchment) is currently being addressed by the ISP in collaboration with the Department of Surveys (DoS). Good information already available about the state of the catchments is being compiled and managed. The spatial and non-spatial information is needed for the planning process at catchment, sub-catchment, and micro-catchment levels. An example of one of the maps (Upper Wamkulumadzi

catchment in Neno District) is shown in Figure A-1



⁴ Refer to attachment 3 for more details about WOCAT and other sources of technical information

19. During the mission, discussions took place about implementing critical advance, or “no-regrets” field activities in the project sites that all parties (ISP, District Councils, Technical Team, communities) agree would emerge as priorities from the longer term planning process. Many of these activities can be identified early from the larger scale catchment level assessment and planning work, for example establishing some community nurseries to avoid losing a growing season, initial work on major gully stabilization, etc. It was generally felt by the mission that identifying and implementing key advance activities would be useful not only from a biophysical perspective, but also act as an informal entry point activity for communities to build support for the project and not having to wait several months for the entire planning and capacity building process to be completed.

B-3: Support Alternative Rural Livelihoods

20. The marketing study is linked to the four catchment sites in Ntcheu, Zomba, Neno and Blantyre districts. The study will include a stock taking of current IGA in the project areas, identifying promising market opportunities, assessing IGAs for economic potential, developing a menu of options for IGA based on value chain analysis, supply possibilities, and demand patterns, identifying marketing networks and a roadmap for implementation, and presenting findings to teams. Anarmac is the consulting firm contracted for this work. They have completed their inception report, literature review and primary data collection, data entry and analysis. They are currently drafting their initial report. In advance of the report, some promising activities include: potato markets – collection points, processing, etc., village bakeries, irrigation for cash crops, and fish farming. The study will need to do a thorough job on market assessment, identifying private sector partners, and entry points, both in local markets and in export markets (cities in Malawi, external markets). This report is critically important to guide the livelihood development under sub-component B3. Anarmac will need to link with Mott MacDonald to share information and other material since the latter will be working with communities to develop livelihoods under sub-component B3.

Related Activities

Exposure Visit to India

21. A delegation of technical team members and other representatives visited India in May for an exposure visit, facilitated by Bank staff in India and an Indian-based NGO specializing in catchment management (WOTR). The delegation visited WOTR’s sites in the state of Maharashtra (low rainfall, minor undulating terrain, low forest cover) as well as a Bank support project in a second state of Himachal Pradesh (higher rainfall, mountainous, high forest cover). A detailed visit report was drafted, which outlined lessons learned that could be adopted into Component B activities. Looking ahead, it would be useful to explore using WOTR as external trainers in Malawi for field staff from participating catchments. This would be a cost-effective way of sharing their expertise with a larger number of staff. Another exposure visit is being planned to Botswana in July 2014, focused on ecological management (linked to Elephant Marsh work in sub-component B4). In addition, plans are being made to bring DESC members to Ethiopia in January 2015 to see good examples of catchment planning and management.

Over the next six months, technical team members should liaise with the Bank team to identify other countries that be visited to be exposed to further best practices in catchment management. One potential example would be Brazil which has some excellent examples of catchment management based on a solid hydrological assessment at landscape levels and application of new modeling tools to support planning and decision making.

Monitoring and evaluation (M&E)

22. SMEC has made good progress the baseline, system development and grievance redress approach as per the terms of reference. The consultant team has completed a literature review, participated in meetings with government and other stakeholders, undertaken field visits, and are preparing for baseline surveys for B2/B3 and C2. The questionnaires are ready, and sampling frame and survey manual are completed. In addition, a position paper on grievance redress mechanism has been drafted. Work has started on the MIS software. During meetings with the consultants, the consultants expressed a view to drop control sites because of the number of programs that have operated in various sites within the four catchments, and the lack of “untouched” areas. This view was disputed by the mission and the consultants agreed to retain control sites. Issues are emerging with differences in the results framework in the PAD and in the terms of reference and the potential for overlap with different surveys by various partners. There is a need for better coordination of community surveys to reduce duplication of effort and confusion multiple surveys could cause community members. SMEC also pointed out that they are yet to see any direct counterpart staff.

Innovation Fund

23. The fund would finance - in this first call - identification and/or proving viability of innovations related to small scale, rural energy supply and demand. Terms of reference and the operating manual/guidelines have been completed. As these are cleared by the Bank, the fund needs to be established and calls for proposals circulated. There is some urgency with this initiative as it might be possible to showcase some of the successful proposals at the next Shire Basin conference.

Proposed forestry study on farmer management natural regeneration

24. During the mission, the Bank presented a draft concept note to the Department of Forestry (DoF) and other stakeholders proposing a study to evaluate tree based ecosystem approaches in Malawi, with a specific focus on farmer managed natural regeneration. The study would be financed by the Bank’s Forest Team in Washington and implemented by the World Resources Institute in collaboration with ICRAF and local partners in Malawi. There was strong support voiced for the study. Department of Forestry was especially interested in the monitoring aspects of the work and how the study results could help identify how to motivate farmers to manage natural regeneration through scaled up practices. The study should also consider connectivity between areas where natural regeneration is being managed and how to build links. It was agreed that the issue of land tenure, demand for agricultural land, and incentives is important for the study to look at. The DoF also indicated that a local NGO (Total Land Care) already has a program in place helping farmers manage natural regeneration; the study should document success stories and lessons learned, and help build a better understanding of the food, fodder, fuel nexus with natural regeneration.

Summary of Agreed Actions

B-1: Develop Institutional Capacity for Catchment Planning & Monitoring

1. **MOU with ISP and District Councils.** The revised MOU between the ISP and participating District Councils urgently needs to be signed in order to underpin field implementation of Component B, which is gradually picking up pace. It was agreed that the revised MOUs would all be signed by July 15, 2014.
2. **Procurement and FM manuals for community based work.** The initial draft FM and procurement manuals for community based work are too complex: with excessive steps, unclear timelines, and approvals and at too high a level. It was agreed that the Technical Team would simplify and combine revised procurement and FM manuals, and circulate to the ISP for comment. The package would include an agreement on thresholds for community procurement and who is the approving authority. It would also include a clear service agreement with the ISP, identifying timelines for approval of the Village Work Plan, associated financing requirements, and budget approval steps; failing to meet these timelines would mean that a no objections is automatically given. The package would also clarify fund flow arrangements to the district councils for incremental operating costs. It was agreed that the revised package would be completed by July 15, 2014.
3. **Catchment management guidelines.** It was agreed that the first draft would be completed by Aurecon by late August (rather than the original date of July), which will then be reviewed by the technical team with support from the Bank and international consultants.

B-2: Rehabilitate Targeted Catchments

4. **Advance, critical works.** It was agreed that by August 31, 2014 critical, advance work under Component B (sub-component B-2) would be identified and implemented in parallel with catchment planning. It was noted that key stakeholders such as the district council and communities would need to be involved in identifying (and agreeing on) these key priorities.

B-3: Support Alternative Rural Livelihoods

5. **Marketing study.** It was agreed that Anarmac will need to link with Mott MacDonald to share information and other material since the latter will be working with communities to develop livelihoods under sub-component B3.

Other relevant Activities

6. **Facilitation of consultancy work.** It was agreed that members of the technical team, particularly those involved with Component B, will need to provide strong, ongoing supervision and oversight of key service providers as activities are now being implemented. As part of this point, it is imperative that the counterparts to the SMEC consultants be appointed by the technical team by July 31, 2014.
7. **MOU between major consulting organizations.** The MoU between consultants (Mott Macdonald, SMEC AND AURECON) has been circulated for review and consideration of consultants. It is important this now be finalized and signed as soon as possible.
8. **Bank financed study on farmer management natural regeneration.** It was agreed that the study should take place. The Bank will arrange for the consulting team to come to Malawi (ten weeks after their contract is signed) to hold their initial workshop in the country. The workshop would present the inception report, including scoping of existing activities on agricultural land, identification of focal sites for examining the FMNR approach, and refinement of methodology (detailed) and work plan.

Attachment 1. Field Visit Report from Neno District

Part 1 – Overview - Mott MacDonald Consortium

Project title: Shire River Basin Management Programme (SRBMP) Implementation Service Provider, Upper Lisungwi and Upper Wamkulumadzi Sub-catchments

MM Division: IDD

Subject of visit: Reconnaissance of the Upper Wamkulumadzi with World Bank Mission

MM Project No: 326058

Location: Neno

Date of visit: 16th June, 2014

Present

1. ISP Team Leader – Eliot Taylor
2. ISP Team Members for the Upper Lisungwi/Upper Wamkulumadzi
3. A Representative of SMEC
4. Representatives of the Technical Team
5. Representatives of Neno District Council



Recorded by: Welton Phalira, Charles Kanyinji and Richmond Makasa	Distribution: ISP Team Leader, Eliot Taylor ISP Team for Upper Lisungwi/Upper Wamkulumadzi Field Assistant for Upper Wamkulumadzi
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Background

The Mott MacDonald Consortium represented by the Team Leader, Eliot Taylor and ISP members for the Upper Lisungwi/Upper Wamkulumadzi⁵ accompanied the World Bank Mission in a reconnaissance visit to the Upper Wamkulumadzi Catchment jointly conducted with Neno District Council, the Technical Team and SMEC on 16th June 2014. The World Bank initiated the visit to appreciate the existing status of the Upper Wamkulumadzi Catchment including an understanding of prevailing resource use and management practices under the Shire River Basin Management Programme (Phase I Project). A list of participants for this visit is yet to be produced.

During the visit, the Team was introduced to forestry and soil management interventions as well as watershed management challenges especially charcoal making and cultivation taking place in fragile areas such as steep slopes and river banks all over the catchment. This report is a pictorial presentation of the visit.



Figure 1: The Team prepares for the trip as Stella Gama welcomes the participants at the DCs Office

Namidumu Village Forest Area

The Mission visited Namidumu Village Forest Area (VFA) in the area of TA Chekucheku that was presented as a best practice for community forestry in the area. According to a committee member, the VFA solely belongs to Chidakwani Village and was founded on community's own initiative (without external support). The VFA stretches approximately over 60 hectares and is composed of indigenous trees of *Brachystegia* origin enriched with exotic trees mostly *Eucalyptus*. The number of exotic trees planted was estimated at around 1,000 – 1,5000. It was generally observed that despite deforestation in the area, the VFA and mango trees were well preserved. "We conserve natural trees so that future generations would have an access and appreciation of the natural environment. We also preserve mango trees because they give us fruits which we eat," reported members of the VFA.

⁵ Welton Phalira – Watershed Planning/ENRM Specialist; Charles Kanyinji – Deputy Team Leader/Agribusiness Specialist; Richmond Makasa – Land and Water Management Specialist/Civil Engineer/Irrigation Specialist; and Chifundo Nailuwa – Field Assistant, Upper Wamkulumadzi



Figure 2: Namidumu Village Forest Area in TA Chekucheku (Left) and a well nurtured mango tree in the field outside the forest

Charcoal Making is a Booming Business in the Catchment

On the way to Namidumu Village, the Mission observed that agriculture (opening of new gardens) and tree felling for charcoal, firewood and brick making are major activities defying catchment conservation efforts in the area.



Figure 3: Bags of charcoal, a stack of firewood and a cassava field in Namidumu Village

Nursery Establishment at Hiwa Village

The Mission visited Ndapemba Village Natural Resources Management Committee (VNRMC) in Hiwa Village which was preparing a tree nursery. At the time, some committee members of the group were

pot-filling and reported that they had planned to raise 20,000 seedlings for planting during the 2014/2015 tree planting season. The SRBMP, under Sub-component B4, had supported the group with implements including a wheel barrow, watering cans, pails, hoes and polythene tubes through the Department of Forestry. The notable challenge here was the exclusion of the general community of Hiwa Village in the work, which raises the question as to whether the work is owned by entire community or the VNRMC only.



Figure 4: Tree nursery establishment by Ndapemba VNRMC in Hiwa Village, TA Chekucheku

Soil and Water Conservation

The Mission had the opportunity to appreciate soil conservation efforts done by Alice Magombo, a smallholder farmer in Mkhewa Village in TA Dambe. Alice showcased conservation agriculture, vetiver grass planting and manure making on her farm, which is an indication that she possesses qualifications/traits of a lead farmer although the AEDC reported that she is not one.



Figure 5: Alice Magombo showcasing a compost pit, Conservation Agriculture field and Vetiver hedge row planting in her field in Mkhewa Village, TA Dambe

Landscape and Land Use Patterns/Practices

The Mission went round the catchment via the black rock to appreciate land form, water courses and land use patterns. Outstanding amongst these was the huge gully along the road in Kundembo Village, north of Tsamba Forest Reserve. Observations and reports show that the attempts had been made to reclaim this gully under the Infrastructure Services Project with insignificant results. Standing on top of the black rock the Mission mingled with cattle whilst catching a view of the beautiful scenery facing the source of Wamkulumadzi River. A clustered settlement in Nseula Village could be viewed from a distance.



Figure 6: A gigantic gully at Kundembo. Standing on top of the black rock, the Team appreciates the scenery across Wamkulumadzi, a village setting as a herd of cattle selects the best grass for a graze

Water Resources, Fisheries



Figure 7: Wamkulumadzi River and a fish pond at Neno Parish

The Mission appreciated the bountiful supply of water in the catchment as it visited fish ponds at Neno Parish and crossed Wamkulumadzi River, which is the major water source for the catchment.

Other Infrastructure

As the Mission went round the catchment it came across various types of infrastructure existing in the catchment including boreholes and bridges. Grid electricity has been supplied up to Kambale Trading Centre to the North East and Neno Parish to the South West of Neno Town. Noticeable, however, was that the road round the catchment may be impassable during the rainy season.



Figure 8: Boreholes, bridges and electricity are crucial infrastructure in the catchment

CONCLUSION

The Mission concluded the day's visit to the catchment site at Neno DC's Office where it was agreed that a wrap up meeting for the Mission's visit would be held the following day, Tuesday, 17th June, 2014 at the DC's Office commencing 10:00 hrs. The ISP would be represented at this meeting by Anthony Makuluni, Victor Nyirongo and Wilfred Ndovi.

Part 2 - Technical Field Observations - William Critchley, Consultant

1. Introduction: The following comprise brief technical notes on the two-day field visit to Neno District with the WB mission and SMBRP team members. The consultant accompanied the team on an orientation visit to inform his main brief as supporter of the watershed guidelines component. This note is based on preliminary observations and the views expressed are those of the consultant only.
2. Roads: the state of the access notes to, within and from Neno is very poor indeed. They are steep, rocky and rutted – and must be practically impassable during the wet season. There are three clear implications for the watershed activities: first, access to sites is difficult and time consuming; second the erosion from the roads caused by badly designed drainage has led to the initiation of the worst gullies in the district; third, there is a severe constraint on any marketing of produce. On a related note, the new railway that cuts through the lower part of the catchment has embankments that are severe erosion risks – and clearly this has not been adequately considered by the construction engineers. The embankments are neither planted to grass, nor covered by mesh – merely (it seems) concreted over in some minor areas where rill erosion is occurring even before the rainy season sets in.
3. Erosion: as mentioned above, roads appear to be the principle cause of gully/ non-selective erosion. In fact the district is *relatively* free from gully erosion, but what is almost certainly more pernicious and damaging is selective erosion – rainfall runoff carrying away the most erodible and richest soil particles. This process is much less visible than non-selective erosion processes but has a very damaging impact on soil fertility.
4. Fertility management: although the existence of selective erosion is a supposition (though highly likely due to the slopes and soils evidently low in organic matter and thus erodible) this is certainly leading to impoverishment of fertility. There was little sign of organic manure application (composting absent?), and it appears that maize stover is commonly burnt. The only significant agroforestry trees are mangoes which add little to fertility. Furthermore the general lack of livestock in the area implies little manure to be provided to cropped land. Nevertheless *Tithonia diversifolia* was seen growing in some field boundaries, and this plant offers the possibility of a mulch/ compost crop which can add significant quantities of nitrogen and phosphorus to the soil: this is a practice in parts of Africa.
5. Conservation status: there are a few conservation activities that are evident to the eye. The most evident is the practice of hand-hoed ridging that underpins most cultivation. I was told these ridges are tied (ie small earth plugs set in them to prevent lateral movement of water) and that makes sense as they are evidently not all on the contour. Secondly there is agroforestry – but almost exclusively in the form of mango trees. Mangoes are poor for agroforestry as their shade and canopy is extremely dense. Thus they reduce crop yields in their vicinity. Stumps of other

(indigenous?) trees can be seen. Have they been recently felled for charcoal? A study into agroforestry trends is indicated. Certainly there is considerable potential to promote the 'fertility tree' *Faidherbia albida* which grows well in many parts of Malawi (due, in part, to the presence of a water table fairly close to the surface). *Faidherbia* trees improve the nutrient status and structure of the soils and improve crop growth under their canopies. We were told the project nursery would be planting these.

6. Barriers to erosion: the presence of 'default terraces' on the higher slopes is encouraging. These are terraces that have been formed by leaving a strip across the contour and allowing natural vegetation to grow. Eroded sediment is filtered out and by the process of tillage erosion (ie dragging the soil downwards during hoeing) and water erosion, forward sloping terraces form by 'default'. The terrace banks could be used for fruit tree planting. Vetiver grass was seen in a few places. While vetiver form a formidable barrier to erosion, it is usually (in Africa) unpopular with farmers as it is unpalatable to livestock. *Pennisetum purpureum* (elephant grass) is usually preferred as it is an excellent source of fodder. Certainly if zero-grazed/ stall-fed livestock, especially dairy cows, were to be introduced, then the latter grass would be a much better choice as a contour strip against erosion within farms.
7. Agronomy: our visit was during the dry/ winter season so few crops were present. The main maize crop had been harvested. Perhaps the most notable crops still in the field, growing, were sweet potatoes (several different cultivars it seemed) and pigeon pea (*Cajanus cajan*). It is particularly good (from a conservation perspective) to see this latter crop as it is very helpful in maintaining ground cover after the main cereal harvest, and also fixes nitrogen.
8. Conservation agriculture: one trial/ demonstration plot of conservation agriculture (CA = no-till, rotation, mulching) was shown to us. Maize stover was the mulch in use, and we were told the normal practice was to burn stover – thus mulching with this material makes good sense. It seems odd that, under the stover, ridges were being compared with pits. With such a cover of mulch it is unlikely that there is any impact of such treatments, which, anyway, go against the principles of no-tillage under conservation agriculture.
9. Forests: we were taken to see protected village forest characterised by indigenous species. Often (it seemed) these are associated with burial grounds. However they offer an opportunity for expansion as biodiversity/ carbon rich enclaves within the landscape. The forest we saw was being 'enrichment planted' with eucalyptus...which could only make good sense if the eucalyptus was being used as a renewable source for charcoal production. Currently it isn't (as far as it was possible to know) but that idea could offer good potential for the future in terms of protecting indigenous trees against being cut for charcoal.
10. Rangeland: both lower down the catchment (in association with sparse woodland) and the upper catchment (largely tree-free) there is quite a good cover of perennial grasses. Yet, surprisingly, there appear to be few livestock (possibly due to tse-tse fly?). The grass provides reasonably good ground cover.

11. Wrap-up Meeting: while it was not possible to discuss some of these technical points in detail, at the wrap-up meeting, chaired by the District Commissioner, I was able to make the point that any catchment planning with a true participatory element, should be based on land units that are *Meaningful. Manageable and Measurable* to the local community. Otherwise participation would be likely to be difficult to achieve.

Attachment 2 – Agreed Critical Actions

Status of Progress Against Actions from February, 2014 Mission focused on Component B			
Issue	Agreed Action	Timeline	Status
a. Improved linkages between key service providers (Mott MacDonald, Aurecon, SMEC)	Establish a mechanism for regular meetings by team leaders of the major consulting agencies, and the TT to identify actions to improve collaboration in the field and at HQ level. Include GIS expert, and other important consultants in these meetings	Mechanism for meetings agreed by March 31, 2014. Initial meeting by April 15, 2014	Completed
	Develop a joint annual work schedule among the three main service providers, showing who is doing what, where and when	Begin with first annual schedule when ISP is on board	To be completed as part of MOU development
	Uploading all TORs and sectoral guidelines to the Project Web Site. Add the main TORs to the MoU as Annex.	February 28, 2014	Completed
	Develop an organogram showing linkages between the consultancies. Develop a separate MoU between the three key service providers for complementary activities	February 28, 2014	MOU was completed by ISP. Organogram has been drafted and now needs to be circulated
b. Innovation fund	Detailed operating manual completed and circulated to the TT for comments and send to the Bank for review and approval.	March 15, 2014	TORs, manual and guidelines have been completed in draft and circulated to the Bank.
	Call for proposals issued in local newspapers.	April 1, 2014	Not completed
c. Involvement of Machinga District Council	Send all relevant documents, including TORs and proposals, workshop proceedings, etc., to the council. Hold a follow-up meeting with the council.	February 28, 2014	Meetings held with district commissioner of the council (and ISP) 1 st

			week of June
d. Mainstreaming environmental and social safeguards into Component B	Develop a <u>practical</u> implementation guide with more detailed step by step process and timelines, outline of activities, responsible agencies and roles, verification and sign-off, etc. Ensure the guide is integrated into the ISP work and Aurecon work.	March 31, 2014	Not included in FY 14 work plan. Will now be part of FY15 work program.
e. Resolving final fiduciary issues for Component B, related to direct fund flow to communities	Initial meetings with ISP, TT and Bank. Input into final MoU between ISP, Councils and Project by end of ISP inception	2 months after GoM signs contract with Mott MacDonald	ISP on board. Issue was discussed during current mission (see actions for current mission (below)(
f. Moving M&E into operational mode	Meeting on MIS and GIS aspects with TT and SMEC	April 7, 2014	Discussions have been held between key partners
g. Linkages between Sub-components B1, B2, and C2.	A stakeholder workshop for Component C, similar to the approach used for Component B at the Blantyre workshop, held to help identify linkages between activities in Sub-components B1, B2, and C2.	March 31, 2014	Not completed
Agreed Actions from June, 2014 Mission focused on Component B			
Issue	Agreed Action	Timeline	
<i>B-1: Develop Institutional Capacity for Catchment Planning & Monitoring</i>			
1. MOU signed between ISP and District Councils.	The revised MOU between the ISP and participating District Councils urgently needs to be signed in order to underpin field implementation of Component B, which is gradually picking up pace.	July 15, 2014.	

2. Procurement and FM manuals for community based work	the Technical Team would simplify and combine revised procurement and FM manuals, and circulate to the ISP for comment. The package would include an agreement on thresholds for community procurement and who is the approving authority. It would also include a clear service agreement with the ISP, identifying timelines for approval of the Village Work Plan, associated financing requirements, and budget approval steps; failing to meet these timelines would mean that a no objections is automatically given. The package would also clarify fund flow arrangements to the district councils for incremental operating costs. by	July 15, 2014.
3. Catchment management guidelines	The first draft would be completed by Aurecon by late August (rather than the original date of July), which will then be reviewed by the technical team with support from the Bank and international consultants.	August 31, 2014
<i>B-2: Rehabilitate Targeted Catchments</i>		
4. Advance, critical works	Critical, advance work under Component B (sub-component B-2) would be identified and implemented in parallel with catchment planning. It was noted that key stakeholders such as the district council and communities would need to be involved in identifying (and agreeing on) these key priorities.	Preliminary works identified and agreed to by all parties by August 31, 2014.
<i>B-3: Support Alternative Rural Livelihoods</i>		
5. Marketing study	Anarmac will link with Mott MacDonald to share information and other material since the latter will be working with communities to develop livelihoods under sub-component B3.	As the marketing study is completed, with the sharing process overseen by the technical team.
<i>Other relevant Activities</i>		
6. Facilitation of consultancy work by TT	Members of the technical team, particularly those involved with Component B, will need to provide strong, ongoing supervision and oversight of key service providers as activities are now being implemented. As part of this point, it is	Ongoing. M&E counterparts to be appointed by July 31, 2014

	imperative that the counterparts to the SMEC consultants be appointed by the technical team.	
7. MOU between major consulting organizations.	The MoU between consultants (Mott Macdonald, SMEC AND AURECON) has been circulated for review and consideration of consultants. It is important this now be finalized and signed	July 31
8. Bank financed study on farmer management natural regeneration	It was agreed that the study should take place. The Bank will arrange for the consulting team to come to Malawi to hold their initial workshop in the country. The workshop would present the inception report, including scoping of existing activities on agricultural land, identification of focal sites for examining the FMNR approach, and refinement of methodology (detailed) and work plan.	Approximately 10 weeks after contract signing, with a probably date of September, 2014.

Attachment 3 - Mission Report

National Integrated Catchment Management Guidelines

William Critchley, Consultant

1. Introduction

The mission reported here conforms to the terms of reference (TOR) set out in the consultant's contract dated 11 March 2014. These are summarised as follows:

- Provide advice on global good practice on tools/ guidelines as well as consultative processes to ensure stakeholder ownership
- Share and discuss good examples of guidelines that can be referred to
- Help establish contacts with communities of practice
- Discuss key considerations for the guidelines with respect to Malawi
- Take part in a video conference with relevant parties (prior to field visit)
- Provide low-intensity email back stopping prior to and post-mission
- Undertake a five day mission to Malawi for intensive discussions

This report covers the main element of those TOR, namely the one week mission to Malawi which took place from 14-21 June. Nevertheless it should be noted that the consultant spent some days in preparation for the mission, produced a background paper (attached here are Annex One) took part in a video conference (on 25 March) and will still be in a position to provide two days of distance backstopping post-mission from home base. Please note that this mission report is kept brief by specific request.

2. Field Trip

The first two days of the mission were occupied with a field trip to a project watershed within Neno District, in the company of Grant Milne of the World Bank, and both Eliot Taylor, Team Leader, Implementation Service Provider, Austin Tibu, Technical Team Member, Watershed Management, Stella Funsani (Forestry) and others. Notes on this field trip are provided in Annex Two of this report. This field trip was a very useful exercise and helped the consultant become oriented with the area, the challenges – and to exchange initial preliminary ideas with the team.

3. Meetings about the Guidelines

A preliminary meeting was held on 18th June in Lilongwe, and a wrap-up meeting the next day, but the substantive meeting regarding guidelines was held on 18th June with Willie Enright and Samantha Braid of Aurecon, the company engaged to develop the guidelines. The Aurecon team have done a very considerable amount of preparatory work, and this was evident from the meeting. Discussions were wide-ranging and stimulating. The Aurecon specialists hope to be able to continue to engage with Mr Critchley in future – but it was explained that currently he has only two days remaining on his contract for distance support. The following captures the essence of the meeting and the main points raised and discussed. Several of these points were confirming Aurecon's understanding: others were new. The following is set out as notes rather

than text (and they broadly follow the sequence of discussion), as this is the most functionally useful way of presenting the points⁶.

a. General

- Catchment guidelines⁷ are intended to capture the most important ways and means of stimulating best-practice watershed management – especially at the local level.
- Guidelines cannot be a comprehensive encyclopaedia of agricultural and NRM practice in Malawi. They need to be relatively brief and simple – though targeted and relevant.
- There is a danger of making guidelines too complex, and too long, and ‘losing’ the audience. They should capture interest and stimulate activity and help create a mindset to conserve and produce and sustainably.
- Guidelines are not ‘tramlines’ or a ‘blueprint’, but a guide to best-practice in planning and executing catchment management.
- They are primarily aimed at local level and intended to engage field agents and the people in participatory activities: without active participation of all stakeholders, catchment management will simply fail.
- Catchment management needs to be integrated in order to yield the multiple co-benefits of production, hydrological function, biodiversity and climate resilience.
- In the preamble it is important to be clear about the scope, objectives, contents and context of the guidelines:
 - Highlight that various points that may be very important within the context of the watershed as a whole are excluded as they are not part of the scope e.g. marketing, detailed road design, health issues, etc.
 - However it is essential that references be given as to where such information can be found: and references also for each of the approaches and technologies described for more detail.
 - It should be pointed out that the guidelines are based on experience elsewhere in Africa (notably Ethiopia and Uganda) where there has been remarkable success with watershed (catchment) management.
 - This will be a First Edition, further phase/projects will need to update; and/or develop a supplementary manual for detailed and wider ranging aspects to catchment management.
 - Guidelines are focused on the community level (thus simple language, and plenty of diagrams etc.).
- The technical guide section for catchment management activities, includes the ‘bare bones’ or basic details in enough detail to get people started. Each technology will include references to more comprehensive documents if the user wants it; but activities can still be carried out using only the guides.

b. Presentation, Format and Length

- The appearance and user-friendliness of the guidelines will be crucial in their use and popularity.

⁶ Many thanks to Samantha Braid for keeping detailed notes of the free-ranging discussions.

⁷ The terms ‘catchment’ (UK English) and ‘watershed’ (USA English) are broadly synonymous and interchangeable. In Malawi the term ‘catchment’ has been chosen to describe the guidelines

- Format:
 - A single document!
 - A4? Get lost in the pile? Pocket book? Spiral bound? Index tabs to sections? Colour coding of sections? All worth thinking about.
 - Include technical drawings and pictures/photos.
 - Make it attractive – make people want to read it.
 - The WOCAT⁸ 2-page format of presenting summaries are a good starting point (wocat.net) though can be tailored.
 - An alternative format for info sheets is that contained in the DVD ‘SLM in SSA’ (copied by the Aurecon team)
- c. Layout and number of Technical Entries
- Aim for 50 technical guides. Don’t stretch too thin by including too many. Remember it’s a first edition. Keep focused on catchment management for community livelihoods. There can be specific products at a later date for particular aspects.
 - Indicate criteria for choices (decision support tool)
 - Illustrate potential, box- inserts of success stories
 - For a given technical entry, provide a guide to the principle and take one important example: but highlight variations e.g. check dams with variations being gabions; masonry, earth, stone, vegetative etc.
 - CM process need to highlight interaction between planners and implementers. Guides then inform implementers how to start.
 - There must be a focus on a limited number of highly relevant activities: the very comprehensive list drawn up by Aurecon (‘Guidelines – Drill down’) will serve as a database of potential activities, but is being trimmed down (this process is on-going, and will be iterative)⁹ to around 50 key activities that will be described in the guidelines.
 - There will be a wide range from agronomic technologies that improve production and conserve soil while building up fertility, on to physical and vegetative conservation structures, to village forest management arrangements and on to design of feeder roads etc.
 - It must be remembered that the inclusion of technologies that improve production are absolutely key: these will provide one of the main incentives to keep stakeholders on board and enthusiastic.
 - In some case it is only possible to frame the challenge, without going into all the details of the activities required: for example overgrazing as a challenge, but only broad indications can be given of how to address the problem (e.g. land rights; local rules and responsibilities; the potential for cut and carry systems of livestock feeding). But there is no room for details on how to farm livestock - chickens, pigs, goats etc.
- d. Technical Points
- Key themes that must not be overlooked are:
 - Sustainable land management with both production and conservation elements
 - Soil fertility considerations

⁸ Note the WOCAT methodology in general was explained and discussed

⁹ A preliminary suggested selection will follow in a few days

- Fire management
 - Selective erosion (often unseen/ unnoticed) is probably more important at least in Neno than non-selective erosion (dramatic gullies etc) as it robs the soil of fertility through the selective removal of nutrient-rich particles by runoff.
 - Beware too hard a sell of vetiver grass! While an effective hedge and barrier to erosion, it is not a multifunctional species and has proved unpopular with farmers – especially those with livestock – over much of Africa. Vetiver is most useful as a hedge to keep livestock in/out.
 - Consider multifunctional species such as Elephant grass/ Napier grass for contour barriers in-field (silt trapping and cattle fodder and/or mulching).
 - Good potential to use of tithonia (Mexican sunflower) for green manure (see Annex 2).
 - There is good local use of pigeon pea (legume; food crop; good ground cover; intercrop etc etc): this is a type of technology that can easily be overlooked in the guidelines.
- e. Additional References made available/ discussed¹⁰
- Sustainable Land Management Guidelines and Best Practice for Sub-Saharan Africa. TerraAfrica document – see especially section on fertility management.
 - World Bank Institute: note that the document cited above (SLMG & BP for SSA) has been developed into an interactive learning module.
 - Soil and Water Conservation Manual for Kenya.
 - Sustainable Land Management in Sub-Saharan Africa (DVD and Technical Insert).
 - It was noted that WC has many other references and contacts that can be tapped into on demand.
- f. Scale of Planning
- While the catchment guidelines will necessarily focus on the lower scale of planning and action, where people are involved, there must also be mention of the larger scales and the planning processes appropriate to them. These will include catchments/ headwaters of several thousand hectares, then hydrological sub-catchments, and further sub-divisions based on socio-political boundaries. At the larger scales there will be use of satellite imagery, GIS tools, and various hydrological and sediment models, etc.
 - Thus for broad-scale planning – hydrological models and scenario planning procedures will be highlighted, but detailed guidelines on how to do/configure these models will not be included.
 - Village action plans however will be the main focus of the catchment guidelines and can be envisaged as the smallest ‘doll’ in a Russian Doll configuration.
 - In terms of local catchment management planning – the Ethiopia guidelines¹¹ give a good outline that can be tailored to Malawi’s situation.
 - District level, Village level, Community level
 - But note that strict catchment divisions follow hydrological boundaries; politics follows administrative boundaries. Try not to split communities/villages along hydrology boundaries, rather incorporate all or exclude all of a community.

¹⁰ These were hand carried by WC and scanned/ copied by the Aurecon team.

¹¹ ‘Community Based Participatory Watershed Development: A Guideline’ MoARD, 2005

- In terms of scale – the more localised (small catchment area) the higher the community participation and this is where results will be initially felt and this will help ‘put wheels’ on the whole process.
- The lowest level (at least) catchment must be ‘MMM’ “**m**eaningful, **m**anageable and **m**easurable”. In other words the actions people take must deliver clear benefits to them: they will hardly be interested in monitoring silt in a river 100km from the village catchment – but if there is more water available to the village, better yield in crops (appreciable change) – that is key.
- Engaging people is a fuzzy process that needs particular skills. It may seem ‘messy’ at times, but it is worth the effort.
- There needs to be a community-based committee to lead the process. SB suggested working within structure of existing committee e.g. Community Protection Committee, rather than creating a new committee, as there are too many committees and volunteer fatigue.

g. Participation and Approaches

- Key participatory methodologies will be highlighted in the guidelines e.g. ‘Before and After’ mapping with transect walk; historical profiles; but they won’t be fully described in the guidelines as there are plenty of books that give full information. The key here is to give enough guidance to allow people to put them into practice and not confuse them with too much theory and detail.
- Suggest a box-insert that illustrates other participatory methodologies to give visual examples, but need not be described in the guidelines themselves.
- Need to foster concept of Rights and Responsibilities – yes right to use the wood, land, etc. but responsibility to use it sustainably.

h. Stakeholder Workshops

- For the Stakeholder workshops highlight ‘bottom-up’ – starting with the village/community scale then expanding out. This helps with the psychology of the community that they are actually contributing to a bigger picture. Need to foster responsibility and ownership.

i. Launch and Inception

- Aurecon proposed a field trip for the extension officers and TA linked with the training workshops, to show working/good examples. This consultant agreed, cross-visits are an important tool to spread knowledge. If budget allowed, proposed making cross-visits outside of Malawi as well.
- Compile a budget, early, for the launch – food and drinks. But don’t forget the idea of promotion materials (e.g. posters; *chitenje* (cloth) with a picture of catchment management; caps or T-shirts with logos).

j. Planning and Process

- Project programme. This consultant recommends the suggestion of the team on pushing out some of the earlier deliverables to ensure more time to do a better job rather than rush.
 - Interim report due 1 July (outline of guidelines)
 - 1st Draft guidelines moved from end July to end August
 - Final detailed guidelines moved from end September to Mid-November.

- Project deadline remains unchanged.
- 1st year of project focused on developing the guidelines and tools; 2nd year of project focused on capacity-building, awareness raising and training.

Additional Notes to Support the Process

A. Introduction: A Possible Basis for Developing Guidelines

Guidelines for catchment management in Malawi will be strongly based in participatory methodologies, associating conservation with production, and looking at land as part of the overall ecosystem. This has been a firm trend over the last 25 years. Following these principles will, automatically, should ensure a good degree of climate resilience. There is much information available on methods and practices, but making simple guidelines that are easy to follow is the challenge.

The WOCAT network (www.wocat.net) has built up a large database of sustainable land management experience in Africa, though there are no entries for Malawi. The best covered country in the region is South Africa, which has its own WOCAT focal point at the Agricultural Research Council and has published its national experiences. LADA (www.fao.org/nr/lada) is aimed at an assessment of land degradation at multi-scales, thus is also relevant. However it is a project called DESIRE (www.desire-project.eu) that focusses on decision-support for SLM/ watershed management. It combines the methodologies of WOCAT and LADA. The 5 stage ‘approach’ of DESIRE takes the user through inventory of degradation (and SLM) to planning, testing new methods, selection, implementation and dissemination. It is based in participatory methodology and described well in the on-line publication *Desire for Greener Land*. However, tailoring and simplification will be needed to produce easy-to-use guidelines suited to catchment management in Malawi – and to reduce training time and costs.

At micro-catchment/ micro-watershed level, a proven approach is to channel appraisal, planning, implementation and monitoring through a catchment committee (or a water-users’ association). One strong entry point is to establish a multi-functional farmer field school (FFS see www.fao.org for multiple experiences). At watershed scale, more technical input may be required, e.g. the use of models such as WEAP and SWAT. Examples can be found under the Green Water Credits programme (www.ISRIC.org). That scale of planning is not addressed in these notes.

B. Resources

1. History

Malawi has a long history of land use guidelines that need to be acknowledged and looked through for content and ideas. For example:

- Land Use and Conservation on Tea Estates (Min. Natural Resources and Survey, 1963)
- A Land Husbandry Manual: Land-Use Planning/ Physical Conservation (Shaxson et al, Min Agriculture and Natural Resources, 1977). This volume is 337 pages (plus an equal length in annexes). However, these two are technical handbooks rather than guidelines on ‘approaches’; focusing on land capability and remedial action. Nevertheless useful.

There will be guidelines or sources giving detail on technologies/ participatory approaches in Malawi that have appeared since. These are the essential starting point for development of new guidelines.

2. Watershed Management

Books on, and overviews about, watershed management, are plentiful. For example:

- Policy and practice in the management of tropical watershed (Pereira, 1989) and
- Participatory Watershed Development (Farrington et al, 1999)

3. Soil and Water Conservation

Africa-wide (and globally) there exist many sources of technical information/ guidelines about soil conservation/ sustainable land management/ water harvesting. For example:

- Soil Conservation (1981) and Land Husbandry (1992) by Hudson which are technical
- Soil and Water Conservation Manual for Kenya (Thomas et al, 1997) which is very practical but again doesn't touch on approaches

4. Sustainable Land Management and Water Harvesting: Case Studies from Africa

Other resources are based on case studies of Sustainable Land Management – and examine both the technology and the 'approach' supporting the implementation of the system. For example:

- Where the land is greener (WOCAT: Liniger & Critchley, 2007) 14 of the 42 case studies are from Africa, and it also has an analytical section
- Sustainable Land Management in Practice: guidelines and best practices for Sub-Saharan Africa (WOCAT: Liniger et al 2011) This booklet combines case studies with principles, and a section on adoption and decision support.
- Water Harvesting: guidelines to good practice (Mekdaschi Studer & Liniger, 2013)
- Conservation Agriculture: a manual for farmers and extension workers in Africa (IIRR and ACT, 2005). For more on CA visit www.fao.org
- Sustainable Land Management in Sub-Saharan Africa (Critchley et al, 2012) A series of 12 mini-movies accompanied by technical leaflets (available at www.accessagriculture.org where other technical movies can also be found)
- Successful Natural Resource Management in Southern Africa (CDCS, VU University Amsterdam, 1996) This edited volume is geographically topical and charts the 'new approach' to soil conservation etc (though it might be difficult to access a copy).

5. Land Degradation Assessment

With respect to simple, de-mystified land degradation assessment, a useful booklet is:

- Handbook for the Field Assessment of Land Degradation. (Stocking & Murnaghan, 2001)

6. Participation

Participatory approaches to rural development – especially in terms of appraisal and M&E - have been well covered in the literature. There must be guidelines tailored to Southern Africa also? For example:

- Participatory Rural Appraisal: practical experiences. (Nabasa et al, 1995) and
- Participatory Learning and Action: a trainer's guide. (Pretty et al, 1995). This latter volume is particularly useful for practical application of participatory tools – and comes from IIED's PLA network which has produced nearly 100 editions of PLA 'notes' which cover various topics under the general participatory umbrella. For example no 55 is entitled Practical tools for community conservation in Southern Africa. This can be downloaded from IIED's website www.iied.org

Annex 3: Protected Area Management (B4 & C2) – Summary of discussions and agreed actions

Introduction:

- 1) **Background:** The following short report provides a quick assessment of the implementation status of GEF-supported activities of the Shire River Basin Management Project and provides a summary of agreed actions. The assessment is based on field visits and meetings between 7-13 June, 2014. The mission¹² visited Lengwe National Park, the Eastern Escarpment Forest Reserves (Neno and Tsamba FRs) , Liwonde National Park and held discussions at local and national level with DNPW, Department of Forestry and the National Botanic Gardens and Herbarium. The field visits and discussions provided an opportunity to review progress of GEF-supported project activities in each of the three components of the project.
- 2) **Overall progress:** The mission noted that implementation of GEF funded activities has begun to accelerate since the last mission, but progress remains behind schedule. Two factors continue to pose constraints to implementation (i) the continuing absence of a financial management officer to support B4 implementation, and (ii) a lack of systematic follow-up by the technical team on procurement requests from spending units at Lengwe and Liwonde National Parks, the Forest Research Institute of Malawi and the National Botanic Gardens and Herbarium.

Generic Issues

- 3) **Financial management:** To address on-going weaknesses in financial management, it was agreed that (i) as an interim measure, DNPW would mobilize a financial management officer by 27 June, to be based at the DNPW Southern Regional Office (at Limbe). The FM officer will have responsibility for ensuring that funds are efficiently managed - including reconciliation of accounts. The officer will be responsible for budgetted amounts under an agreed threshold level – to be agreed with the financial management Technical Team. To reduce transaction costs and delays, the FM officer will ensure that funds are made available to spending units on a 6 monthly basis to ensure that incremental operating costs and other day-to-day needs are met on an uninterrupted basis. The FM officer will work under the close supervision of the Financial Management officer for the Technical Team. (ii) By 30th July, DNPW will put in place a contracted financial management officer to provide a dedicated financial management service for all GEF-supported activities – covering DoF and DNPW related expenditures.
- 4) **Procurement:** To address delays to the processing of procurement requests, it was agreed that DNPW would develop an inventory of outstanding procurement requests. The inventory will specify responsibilities to task team members and this will be reviewed during monthly meetings of team members responsible for implementation of GEF-supported activities. It was agreed that the inventory would be submitted by the end of the mission.

Site-by-Site Issues

¹² The field mission comprised Ross Hughes (AFTN3) and Pieter Waalewijn , Task Team Leader (AFTN2)

Lengwe National Park

- 5) **Purpose:** GEF-support integrated into the SRBMP aims to improve the management of Lengwe National Park - which covers 887 km² of the lower Shire basin. The conservation of woodlands in the Park plays a role in reducing land degradation and hence soil loss and nutrient depletion. The woodlands and seasonal wetlands help to ameliorate flash flooding on the western floodplain of the lower Shire. The Park supports important biodiversity and offers potential for attracting larger numbers of national and international tourists and other visitors. These could bring benefits for park financing and for the economy of the lower Shire as a whole. Project-supported interventions seek to increase the ability of the park to generate and retain revenues for reinvestment in conservation and community engagement and hence increase prospects for longer-term sustainable management of the ecosystems within the Park's boundaries. The field visit and discussions at Lengwe National Park showed that good progress is being made for activities where project funds have been made available to the project.
- 6) **Community development:** Progress in the implementation of community sensitization work around the Park has been impressive – and this is particularly important since the park authorities have for many years lacked the resources for any form of effective engagement with local communities. The sensitization discussions have so far included meetings with 28 CBOs. Amongst the issues raised during these sensitization meetings was the need for the Park to work more closely with local communities, to clarify park boundaries on the ground and to support communities to identify alternatives to income generation from illegally-sourced charcoal production. Communities also expressed a wish to visit the Park and understand more about management objectives and benefit sharing. Mission discussions agreed that priorities for community development should be consolidated and documented succinctly in the revised management plan prior to the next mission. These should focus on investments that could offer prospects for improving both development and conservation outcomes. Once this has been done, community development sub-project resources can be allocated to address priority community development and conservation needs.
- 7) **Trails:** Excellent progress has been made by the park team in re-grading the Old Lengwe trails system and this will, for the first time in about 10 years, open-up much of Old Lengwe for day and overnight visitors to the park. The trail system will also greatly improve the ability of the park protection team to patrol areas which have been hitherto inaccessible. In one area visited by the mission, Mopani woodland clearance for charcoal production together with a number of operational charcoal pits were observed along the route of a re-opened trail near the southern boundary fence. These observations underscored the importance of improving trail access for patrolling purposes. It was agreed during mission that the existing re-grading operation – now nearly complete, would be finalized using DNPW funds and that project funds would also be used for grading a trail along the full length of the boundary fence – to enable inspections and maintenance.
- 8) **Water holes:** Problems with sustaining supplies to the water holes remains a major issue. Water holes and hence most wildlife are concentrated in a small part of 'Old Lengwe' close to the Park headquarters and even in these areas, water supply is erratic. For this reason, much of the potential of the national park to sustain wildlife populations remains unrealized. Periodic failures of the pumped water supply from Illovo also contributes to human wildlife conflict issues as wildlife (especially buffaloes) go in search of water outside the boundaries of the Park.

- 9) **Fencing:** Repair and extension of the existing fence line was included as a priority activity to reduce human-wildlife conflicts in areas immediately to the north and south of the boundary of Old Lengwe. Unfortunately, progress on this aspect of project implementation is behind schedule. Fence design issues were discussed during the mission and it was agreed that DNPW will extend the fencing using the existing design specification. EOs for this work have already been shortlisted. Decisions have yet to be taken on whether this fencing will be extended along the northern or southern boundary of Old Lengwe – or a balance of the two. This issue is linked with the need for decisions on the location of patrol stations.
- 10) **Enforcement strategy and patrol stations:** Enforcement operations have improved as a result of project support - as resources are now available to provide field allowances for patrol teams. However, enforcement operations remain constrained by lack of mobility – at the time of the mission, there was only one functioning park vehicle (on temporary assignment from another protected area), by lack of fuel and the lack of appropriate field equipment due to delays in procurement. Mission discussions identified procurement issues as a major factor and measures have been agreed to address this issue (see above). A new 4WD patrol vehicle is being procured for use at Lengwe NP and the technical team has been tasked to speed up procurement of field equipment, radios, uniforms *etc.* New financial management measures (as above) should also improve the flow of incremental operating cost funds for fuel and maintenance. The mission also agreed with the park team that the enforcement strategy for the Park would be revised, documented and integrated into the Park management plan by the time of the next mission. It was also agreed that the Park would take a decision soon on the location of the patrol stations – as clarity on this issue is needed prior to decisions on fencing (since the patrol stations will need to be located together with solar panel and battery units for the fence) and the location of water holes (since patrol camps should be located to ensure that new water holes are properly protected).
- 11) **Biodiversity and heritage information centre:** DNPW have prepared a first draft of the MoU for joint signature with the Department of Culture and the Lower Shire Heritage Trust to cover arrangements for the management, maintenance and operations of the buildings at the Park gate which lie just outside the Park boundary. These buildings were built by the Lower Shire Heritage Trust and provide an opportunity for hosting an information and interpretation centre on the Park's biodiversity and the cultural heritage of the lower Shire in general. The Park buildings could also be used as a sales location for park entrance fees, maps, leaflets, posters and sales of community craft products (currently, visitors to the park have no access to basic information on the Park's ecology and cultural features). The project has allocated support to renovate these buildings and it was agreed during the last mission that management and operational arrangements for the buildings would be set-out in a tripartite MoU for signature by DNPW, the Department of Culture and the Lower Shire Heritage Trust. The Lower Shire Heritage Trust provided comments on a first draft of the MoU in February 2014, but there has been no subsequent progress on this issue. Discussions during the mission reached agreement that DNPW would now incorporate these comments and circulate a second draft of the MoU for further review and discussion. It was agreed that DNPW will also organize a meeting at local level to present the MoU for discussions with the heritage Trust and local community members. It was agreed that the MoU will be finalized by 25 July. This will then enable the project to proceed with support for the renovation of these buildings.

- 12) **Park infrastructure:** The mission was informed that the contract for the infrastructure consultancy has now been signed and the consultant architect will start work shortly in preparing concept designs for the buildings at the entrance gate, for TA/tourism accommodation and for renovation of the conference room. The consultant will also supervise the works contracts for these buildings and for the construction of the 3 patrol stations (using the same design as used at Majete Game Reserve). It was agreed that concepts designs emerging from this consultancy will be circulated widely

Liwonde National Park

- 13) **Purpose:** Project support at Liwonde National Park is focussed on efforts to restore road access during the wet season to enable round-the-year patrolling and visitor access, and for community development activities. A small amount of funds are also made available to cover incremental operating costs associated with participation in the project. These investments were selected to improve the longer-term capability of DNPW to properly manage the Park and engage local communities in the implementation of the Park management strategy. Communities around the Park experience high levels of problems from wildlife - predominantly elephants that frequently roam beyond the Parks boundaries. The park itself also suffers from high levels of illegal hunting.
- 14) **Financing of Park Management:** Chronic under-resourcing of park operations, combined with restricted mobility for ranger teams, means that wildlife populations are at considerable risk. DNPW reported that only one vehicle was 'partially' operational and also reported that 3 rhinos within the sanctuary area of the Park have died from wounds related to snaring over the last one year alone. Snaring remains widespread throughout the Park and tourists frequently submit observations of injured and snared wildlife. This will eventually deter tourists from visiting the park and will subsequently impact on Park and DNPW finances through declining tourism revenues. DNPW updated the mission on the current status of concession discussions with Robin Pope Safaris at the south end of the park and for an overall management concession for the park. For the former, a dispute over road re-alignment is currently threatening the future of the RPS concession. If the concession holder withdraws, this would further undermine the precarious state of Park finances. A process for approving an overall management concession for Liwonde is proceeding (albeit rather slowly). The government's Public Partnership Commission is currently reviewing expressions of interest for assuming overall management responsibility for the park. Until agreements are reached on both issues, Park enforcement and management operations are likely to remain under-funded and with limited effectiveness.
- 15) **Trails and bridges:** The mission inspected the main access road running through the Park and the challenges of upgrading river crossings to restore wet season access. The mission was also informed that the RFP submitted by the only shortlisted firm for the roads upgrading consultancy greatly exceeded funds allocated for this activity.
- 16) **Community development:** The mission was briefed on ongoing progress with 'community sensitization' meetings – the Park has now met with 22 of the 31 CBOs around the park boundary although progress has been delayed somewhat due to funds flow issues. Human-elephant conflict issues emerged as the predominant concern raised by communities during these meetings. Communities are also seeking support from the project for income generating

activities. The Park also confirmed that funding through the National Fund Order mechanism started in December 2013 with a first tranche of 7 million kwacha (US\$17,500) to be shared between the Park and local communities. The mission agreed that ideas and requests for support and engagement with communities (e.g. on measures to address human – elephant conflicts and for support in developing income generation) should be consolidated, prioritized and documented in the revised management plan prior to the next mission. Once this has been done, community development sub-project resources can be allocated to address priority community development and conservation needs.

Eastern Escarpment Forest Reserves (Neno and Tsamba Forest Reserve)

- 17) **Purpose:** The Project is supporting improved management of these forests reserves through the introduction of Participatory Forest Management (PFM) approaches that engage local stakeholders in forest management. The mission visited the Eastern Escarpment forest reserves of Neno and Tsamba and met with staff of the District Forest Office (DFO). Field level activities have yet to start but DFO staff have attended project-supported PFM training based on the curriculum developed previously by the EC-funded IFSLMP project. These staff are now keen to start their work. The project has also supplied two motorbikes to the district forest office that should help with mobility as field activities start to get underway.
- 18) **Neno forest reserve:** The DFO faces a major challenge at Neno FR associated with illegal encroachment, charcoal and lime production and a high frequency of forest fires that result from these activities. In the absence of interventions from the DFO, local communities regard the reserve as being ‘ownerless’ and are rapidly depleting the woodlands – mostly for charcoal production. Forest reserve boundaries have not been demarcated and there is a low level of awareness of its status as a forest reserve amongst traditional leaders. The DFO is also under-resourced and hence unable to implement an enforcement-based approach at this forest reserve. These problems have been exacerbated by the construction of an access road through the reserve which has ‘opened-up’ this reserve to illegal extractive purposes. For these reasons, there is strong support and interest in adopting a participatory based approach to forest management at district level. It was agreed that the TT would adjust the work plan to ensure that activities and budgets target immediate needs at Neno – including the construction of barriers and guard posts at either end of the new road to help reduce current levels of charcoal extraction. The recent recruitment of the PFM facilitator to the TT will also help to accelerate the roll-out of PFM activities at Neno FR.
- 19) **Tsamba FR:** This reserve remains in good condition in large part because of strong leadership from the traditional authority. Some evidence of charcoal production was observed but the emphasis of DFO activities at this forest reserve will focus on monitoring and ensuring good relations with traditional authorities are maintained. The mission also visited a nearby community tree nursery at an early stage of establishment.



Lime production at Neno forest reserve poses a challenge to sustainable forest management at Neno Forest Reserve.



A new road constructed through Neno forest reserve has 'opened-up' this forest to illegal charcoal production, encroachment and resulting forest fires.



The Eastern Escarpment Forest Reserves (visible background) were included in project design to protect remnant forests on steep slopes of the Shire sub-catchment.

Elephant marshes

- 20) **Purpose:** Project support at the Elephant marshes is designed to improve the evidence base for climate resilient and sustainable planning and management of this biodiversity-rich site in the lower Shire floodplains. It is envisaged that this will provide the basis for future planning and investment support to introduce sustainable management of this key wetland area.
- 21) **Climate resilient planning and management of the Elephant marshes study:** EOIs have now been shortlisted and evaluation of the RFPs will be undertaken before the end of June. To build broader capacity amongst DNPW and other agencies with a stake in the management of the marshes, the technical team is developing plans for a study tour to the Okovango wetlands to discuss experience of multi-sectoral approaches to wetland management and community development. The study tour is likely to take place in mid July 2014.
- 22) **Airboat procurement:** A draft MoU for management of the airboat was reviewed by the mission. The MOU requires extensive revision to clarify responsibilities for management, maintenance and operation. This will require revision prior to procurement to ensure clarity on management, operation and housing arrangements prior to delivery. This has now become a priority procurement issue since the Airboat will be required for the Elephant marshes study team. Procurement of the Airboat has been delayed pending agreement of tax free importation status. The mission understands that this has now been resolved and procurement can now proceed.
- 23) **Recruitment of the wetland co-management specialist:** DNPW are drafting terms of reference for the wetland co-management specialist who will provide the focal point for Elephant marshes study team and who will also lead on community consultation and planning work in the marshes. The ToR will be submitted for World Bank review by 30 August.

Other GEF-supported Activities.

- 24) **Support for the Forest Research Institute of Malawi (FRIM) and National Herbarium and Botanic Gardens (NHBG):** The meeting held a brief meeting with the director of the NHBS who (understandably) expressed frustration at the slow pace of project support for procurement for office refurbishment services and IT equipment. At the time of the mission, the NHBG and FRIM had not yet received IT equipment (this issue has subsequently been addressed) and building refurbishment had yet to begin. Action required to address procurement issues is addressed above. NHBG re-affirmed its commitment to support and engage with the basin biodiversity surveys and further discussions at project level will take place to ensure that sufficient incremental operating costs are available to support this engagement.
- 25) **Sub-Basin Biodiversity and Ecosystems Study:** Evaluation of three RFPs for the basin wide biodiversity surveys consultancy have been undertaken. The mission agreed with the technical team that the evaluation committee would review the scoring of the technical bids in response to Bank review comments on the evaluation report by 11 July.
- 26) **Protected areas financing and tourism development study:** First draft terms of reference for both studies were reviewed and discussed during the mission. It was agreed that these will be developed further with a view to finalization by the time of the next mission.

Tabular summary of agreed actions for GEF-supported activities.

Agreed Actions	Responsibility	Deadline
Project management		
Financial management: Establish FM capacity at regional level (i) DNPW to assign FM officer from HQ on an interim basis and introduce quarterly transfers and reconciliation, (ii) Hire diploma level TA to southern regional office (medium term).	DNPW	Interim arrangement: 20 June Medium term arrangement: 30 July
Work plan: Revise draft work plan (2014/15)	DNPW and DoF	20 June
Outstanding procurement requests: Prepare and circulate inventory outstanding procurement requests. Assign specific responsibilities and deadlines for delivery.	DNPW (William Mgoola)	17 June
Monthly meetings: Initiate monthly telecom/skype meetings of forestry and conservation teams	DNPW (Jester)	20 June
Biodiversity Surveys (Basinwide)		
Biodiversity surveys: Review and revise biodiversity scoring in evaluation report, review technical bids and negotiate contract (with attention to FRIM and Herbarium engagement).	DNPW	11 July
Lengwe National Park		
Information and heritage centre: Finalize tripartite MoU <u>or</u> inform WB that agreement cannot be reached.	DNPW/Min Culture/Tisunge Heritage Trust	25 July
Water and roads contract: Cancel existing procurement process, discuss support possibilities from Ilovo, water department and prepare separate and revised ToR for water holes and check dams.	DNPW	11 July (placement of re-advertisement)
Fencing: Initiate procurement of fencing services for repairs and extending the fence line. Decision on location of extension of fencing.	DNPW	30 July
Community development: Lengwe NP to update and expand on previous management plan and propose a strategy and specific sub-projects and budgets for community engagement and support. Community engagement strategy integrated into management plan.	DNPW	30 October (Community engagement strategy).
Enforcement: Lengwe NP to update management plan and propose specific locations for patrol stations. Update enforcement and patrol strategy in revised management plan	DNPW	Patrol station locations: 30 July Enforcement strategy: 30 October.
Park infrastructure: (i) Undertake consultation process on concept designs and water supply plans, (ii) review cost estimates for patrol stations (3 or 4 patrol stations).	DNPW	October 30 (concept consultations) July 30 (patrol station costs)
Vehicles: Complete procurement of Landcruiser pick-up and rehabilitate existing park vehicles.	DNPW	30 August

Tourism and sustainable finance: Finalize ToRs.	DNPW	30 September
Elephant Marshes		
Boat purchase: Complete procurement processing for air boat and place order.	Project Coordinator DNPW	30 July – confirmation of duty free status and order to be placed.
Boat housing and operation: (i) Finalize agreements between DODMA, DNPW and Agricane for boat hosting (ii) Initiate procurement for boat house construction.	DNPW	30 August
Technical assistance: Finalize ToR and submit for Bank review.	DNPW	30 August
Climate resilience study: Complete evaluation of RFPs	DNPW	30 June
Liwonde National Park		
Budget planning: Review and revise project support for Liwonde NP and integrate into PIM and cost tables.	DNPW	30 October
Roads contract: Prepare new ToR for a comprehensive engineering assessment of route alignments, upgrade requirements and detailed designs for river crossings.	DNPW	11 July (place advertisement)
Community development: Liwonde NP to update and expand on management plan and propose a strategy and specific sub-projects and budgets for community engagement and support.	DNPW	30 September
Participatory Forest Management (Neno, Tsamba, Mangochi and post IFSLMP sites)		
PFM consultant: Complete contracting and agree work plan for PFM support.	DoF	19 June (consultant in place) 30 July (work plan in place).
Establishment of local forest management boards and produce strategic forest area plans.	DoF	30 October
National Botanic Gardens and Herbarium		
Complete office refurbishments, IT equipment deployment. Explore local contracting for office refurbishment.	DoF (Stella)	30 July
Forest Research Institute of Malawi (FRIM)		
Complete office refurbishments, IT equipment deployment. Explore local contracting for office refurbishment.	DoF (Stella)	30 July

Annex 4: Options paper for SRBA – for records

Establishing a Shire River Basin Agency and Multi-Stakeholder Forum

Under the National Water Resources Act (2013)

On October 31, 2013, the World Bank and UNDP convened a multi-stakeholder workshop to discuss the establishment of a Shire River Basin Agency (SRBA). The goals of this workshop were twofold: (1) to come to a better understanding and consensus on the proposed mandates of a SRBA; and (2) to explore and assess the legal options for establishing the SRBA under the new national Water Resources Act (2013). The findings of this workshop were then presented to a broader group of stakeholders at the Second Annual Shire Basin Conference, held in Blantyre on November 20-21, 2013. At this Conference, there was additional stakeholder discussion on the appropriate mandate of and options for establishing SRBA and the role that a Basin Stakeholder Forum could play in helping the SRBA achieve effective integrated water resource management (IWRM) at the basin level.

This paper was initially developed as a background document to assist stakeholders in understanding what the potential role(s) of SRBA might be and to set forth the legal options available for establishing the Agency. It has since been revised to reflect the discussions at both the October 31 Stakeholder Workshop and the feedback received during the November 20-21 Shire Basin Conference.

I. Background

The Lake Malawi-Shire River Basin complex is the single most important natural resource system in Malawi. The Shire Basin covers approximately one-third of the country and provides water for the domestic needs of approximately 45% of Malawi's population and supports a wide range of ecological services that are the basis of diverse livelihoods and key economic sectors, including agriculture, energy, fisheries, tourism and industry.

The basin faces a number of threats to its sustainability. High population density, endemic poverty, and lack of effective regulation have led to unsustainable land use and management practices that are detrimental to the river. In particular, high levels of deforestation are leading to massive soil erosion and increased sedimentation in the Shire. This, in turn, has led to more frequent and severe flooding in the basin. Sedimentation also negatively impacts irrigation canals, fisheries, and hydropower production. The water quality of the river is further degraded by high levels pollution from agricultural runoff and human and industrial waste. The flow levels in the basin are likely to be insufficient to meet the projected need for proposed hydropower, water supply, and irrigation development necessary to support a rapidly growing population. Climate variability and change will compound these issues, presenting higher levels of uncertainty related to precipitation and resulting flow patterns, as well as increased incidence and frequency of floods and droughts.

Despite these challenges, there currently is no institutional mechanism to coordinate planning, management, and systems operations in the Shire Basin. The former Water Resources Act (1969) provided for regional water resources boards and catchment management authorities (CMAs), but no CMA has been established for the Shire.

In 2005, the National Water Policy was revised to take into account the existing and emerging challenges facing Malawi's water resources. The Policy emphasizes that these challenges, in line with international best practices, "need to be addressed urgently through appropriate and clear policies on water resources management in conjunction with natural resources management policies through the adoption of integrated water resources management (IWRM) approaches." In 2013, the national Water Resources Act ("the Act") was passed, providing the legal framework for implementing IWRM and mandating the creation of new institutions to oversee this implementation. The Act therefore provides the legal basis for the creation of a catchment- or basin-wide authority to undertake integrated planning and management of the Shire. The Act provides four options for doing so, each of which is explored in detail in section IV, below.

II. Potential Mandates for Basin Institutions: Learning from International Experiences

In order to effectively evaluate the four options for establishing the SRBA set forth in the NRWA, it is first necessary to identify the desired mandate and functions of the institution: what should the SRBA be set up to achieve? How should it relate to other institutions with water management competences? What key challenges to implementation are foreseen that might impact the way in which the SRBA is structured?

a. *Integrated Water Resources Management – implications for structuring a basin agency*

The broad mandate of any water management institution under the 2005 National Water Policy and the Act is to implement IWRM principles and approaches. It is thus important to understand what is meant by IWRM and what the role of a basin institution is in implementing these approaches.

The Global Water Partnership's definition of IWRM is widely accepted. It states: 'IWRM is a process which promotes the coordinated development and management of water, land and related resources, in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital

IWRM is aimed at managing, allocating, and developing water resources in a sustainable way that takes account of the social, economic, and environmental aspects of water use and management. An IWRM approach recognizes that there are many different and often competing users of water, that they are all interdependent, and that they all impact and depend on the sustainability of the basin ecosystem.

A central tenet of IWRM is that of subsidiarity – that water should be managed at the lowest appropriate level to foster more effective, participatory, and accountable decision-making. To balance these considerations with the need to integrate all of the various interests that impact water resources – including the ecological sustainability of the resource – the basin is widely recognized as the most effective scale at which to implement IWRM. Basin-level institutions therefore play a critical role in planning and implementing IWRM.

One key aspect of IWRM is the recognition of the cross-sectoral nature and multiple scales at which integrated water management must take place. The Shire Basin, for example, is governed at the national level by the Act, but also cuts across 12 Districts, each with their own local governance regime and

mandate for water service provision and management. The Basin is also home to large industry, commercial agriculture, smallholder agriculture, fisheries, and the country's largest source of hydropower. This high level of complexity requires specific management and institutional mechanisms to foster coordination and cooperation across decision-making processes both horizontally (among the relevant sectors) and vertically (among the various levels of water management and governance). Overseeing this "multi-level governance" at the basin level is thus a key role of basin institutions, which can provide a unique, basin-wide perspective when assessing impacts and balancing interests, while still ensuring that various decisions are made at the most appropriate level.

Another key aspect of effective IWRM is broad-based stakeholder engagement. The Shire is home to diverse stakeholder groups, many of which represent competing interests related to the basin's resources. It is thus critical for a basin-level institution to be able to identify, convene, and effectively engage with these stakeholders to enable them to contribute meaningfully to basin-level planning and decision-making. This has implications for the way in which a basin institution is structured, including the relationship it holds with various stakeholder institutions. The establishment of the Shire Basin Stakeholder Forum and the way in which it relates to the Shire Basin Agency will provide an important mechanism in the Shire for ensuring meaningful stakeholder participation.

b. *Potential Functions of a Basin Agency*

There is no blueprint for developing an effective basin agency. Each basin has its own social, political, legal, and ecological characteristics that must define the mandate, functions, and institutional structure of an agency. However, it is possible to distill a number of functions that are best performed at the basin level and that are common across the many basin institutions that have been established around the world.

Broadly, the spectrum of functions that basin institutions are mandated with can be divided in three categories: (1) advisory/coordination; (2) planning/managerial; and (3) regulatory.

Advisory and Coordination functions often include:

- Providing technical advice to government decision-makers;
- Bridging local and basin stakeholders with national level policy- and decision-makers;
- Coordinating among users, sectors, and levels of government (multi-level water governance);
- Fostering stakeholder engagement and awareness raising; and
- Overseeing conflict resolution.

Planning and Managerial functions of basin institutions often include:

- Basin-wide planning and overseeing the implementation of those plans;
- Allocating resources at the basin level (in line with national policies and laws);
- Monitoring, collecting data, managing, and disseminating information;
- Developing and managing infrastructure;
- Protecting and conserving basin ecosystems;
- Planning for and implementing disaster preparedness and climate adaptation; and

- Mobilizing and managing financial and technical resources.

Regulatory functions can include:

- Standard setting;
- Licensing/permitting;
- Managing charges for licenses (pollution, water use) and penalties;
- Compliance assistance and enforcement.

Experiences in other countries have shown that, while there is no ideal model for a river basin institution, there are relevant lessons that can provide important insights for the establishment of the SRBA. Key aspects of successful basin institutions include:

- A well-defined mandate including, at a minimum, basin-wide planning and coordination roles;
- The legal, political and administrative will and capacity to carry out its designated functions;
- Clearly defined roles for relevant institutions and coordination mechanisms;
- Strong and broad-based stakeholder support;
- Sustainable funding, adequate staffing and trusted technical competences/resources; and
- The flexibility to respond to changing information and circumstances by evolving over time.

III. Options for a Shire River Basin Agency: Form Following Function

Taking into account the lessons described above, the participants in the October 31 workshop developed a non-exhaustive list of the mandates and functions that they felt were necessary for the SRBA to achieve IWRM at the basin level in Malawi. These included:

- Basin-wide planning and oversight of implementation;
- Monitoring implementation of plans and other basin-relevant initiatives;
- Coordinating among users across the basin;
- Facilitating stakeholder engagement;
- Coordinating among levels of government and across sectors (multi-level governance);
- Overseeing conflict resolution;
- Protecting of basin ecosystems;
- Providing advice to National Water Authority (and/or regional offices) on licensing and enforcement, as well as on development and management of infrastructure;
- Collecting data and managing information;
- Building capacity of relevant stakeholders to undertake basin planning and IWRM;
- Undertaking and disseminating basin-relevant research.

There was general consensus that several of these functions would need to be devolved onto the SRBA over time as its capacity to take on the functions was developed. It was also emphasized that the focus of the institution should be on basin-wide issues and that the SRBA should work closely with other

relevant institutions to avoid overlap in their authority, to leverage respective competencies and capacities, and to ensure a coordinated approach to planning and integrated management in the Basin.

A final concern was raised related to the issue of combining advisory and regulatory functions within the SRBA. While a basin agency that was tasked with regulating activities for which it was responsible for implementing would certainly result in a conflict of interest, it was agreed that having knowledge about the regulatory issues and providing advice to the Authority on such issues was not in conflict with taking on a planning and decision-making role as envisioned above. The SRBA should, nonetheless, be carefully structured to avoid any potential conflicts of interest.

With these desired functions and operational considerations in mind, the following analysis provides insights into the four legal options provided within the Act for establishing the SRBA.

IV. Legal Options for Establishing SRBA under the Act

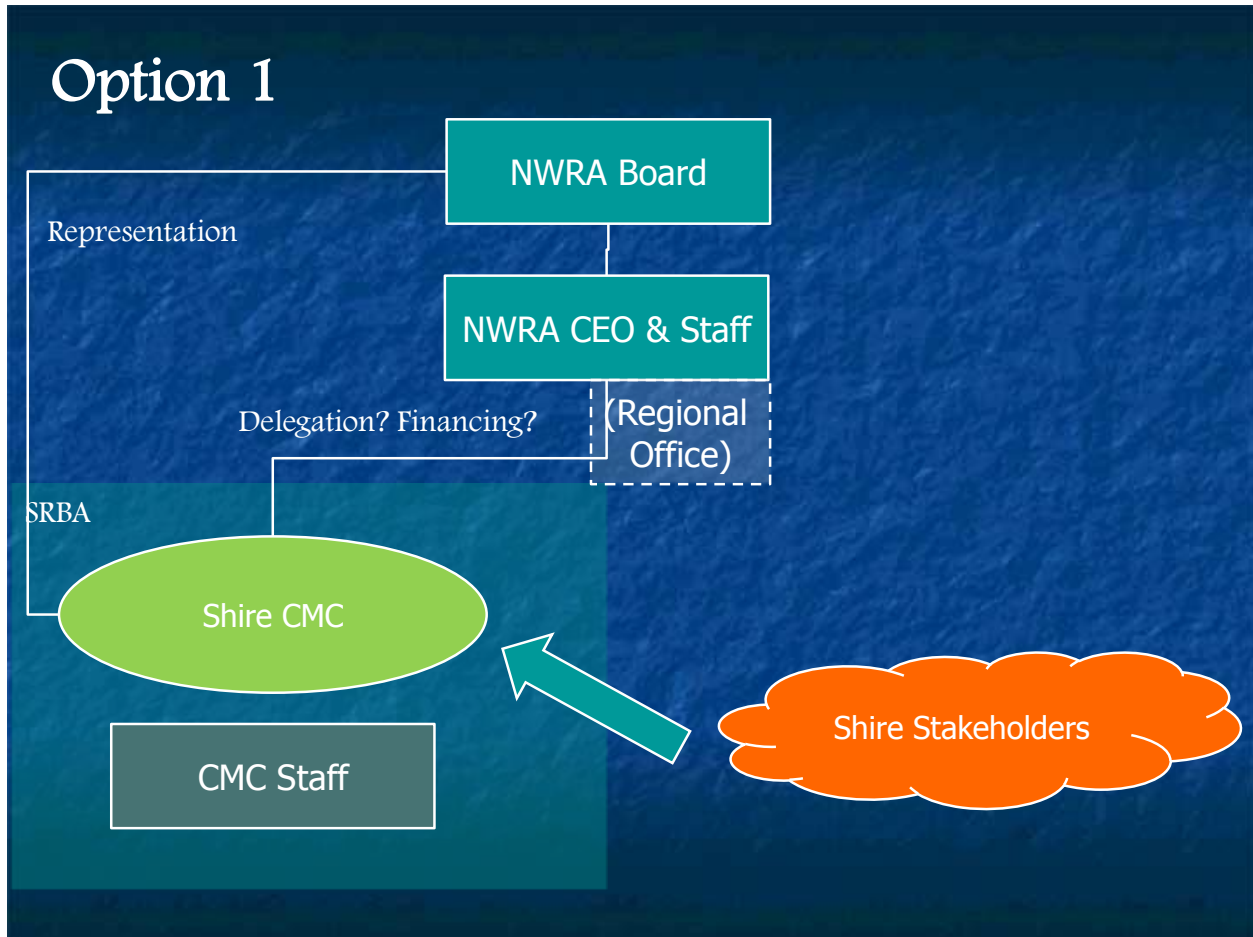
OPTION 1: Establish the SRBA as a Catchment Management Committee

The National Water Resources Act provides for the establishment of catchment management committees (“CMCs”). CMCs are to be designated for “a specific catchment area, after public consultation, on the proposal of the community and stakeholders concerned, or the Authority may establish a CMC on its own initiative.” They are a multi-stakeholder body that is meant to inform catchment planning and management.

Pursuant to Section 29 of the Act, the role of the CMCs is to “advise officers of the Authority at the appropriate regional office” concerning water resource use and allocation; the granting, adjustment, cancellation or variation of licenses and permits; or other pertinent matters. The Authority is then to work with the CMC to develop a Catchment Management Strategy that will:

- Guide the management, use, development, conservation, protection and control of water in the catchment;
- Promote conflict resolution and cooperative management in the catchment;
- Develop plans for allocation of water in the catchment with guiding principles for implementation;
- Provide mechanisms for public and stakeholder engagement in water resources management in the catchment;
- Promote establishment of Water User Associations (WUAs); and
- Promote and sensitize users to protection and management for equitable, efficient and sustainable use of water resources.

The first Option is thus to establish the SRBA as a CMC under the Act.



There are advantages to establishing the SRBA as a Catchment Management Committee. CMCs were created within the Act to be representative, multi-stakeholder bodies. As such, establishing the SRBA as a CMA could provide an important platform for the stakeholder engagement, coordination and conflict management that the SRBA must undertake. A CMC can be legally constituted at the catchment, or basin-wide level (although there are several sub-catchments within the Shire Basin which would likely require some form of institutional governance that was accountable to the SRBA). The Catchment Management Strategy as set forth in the Act also embeds most IWRM principles, enabling it to act as an effective basin-wide planning instrument.

However, while there are many advantages to establishing the SRBA as a CMC, there are two key drawbacks. First, the CMCs are meant to be advisory bodies only and have no independent planning authority under the Act. This severely limits the CMC in terms of its ability to take on many of the desired functions of a basin institution. Under the Act, even the Catchment Management Strategy is to be developed by the Authority (in consultation with the relevant CMC). The second drawback relates to the operational capacity of the CMCs as created under the Act. As advisory bodies, CMCs are not envisioned within the Act as having full-time staff or running as a fully functional office. They are to consist of appointed representatives of various stakeholder groups. While the Act does envision CMCs as capable of administering funds to support water resource conservation activities, the spectrum of

planning, management and support that would be required of an effective SRBA is much broader than the operational duties of the CMCs as set forth in the Act.

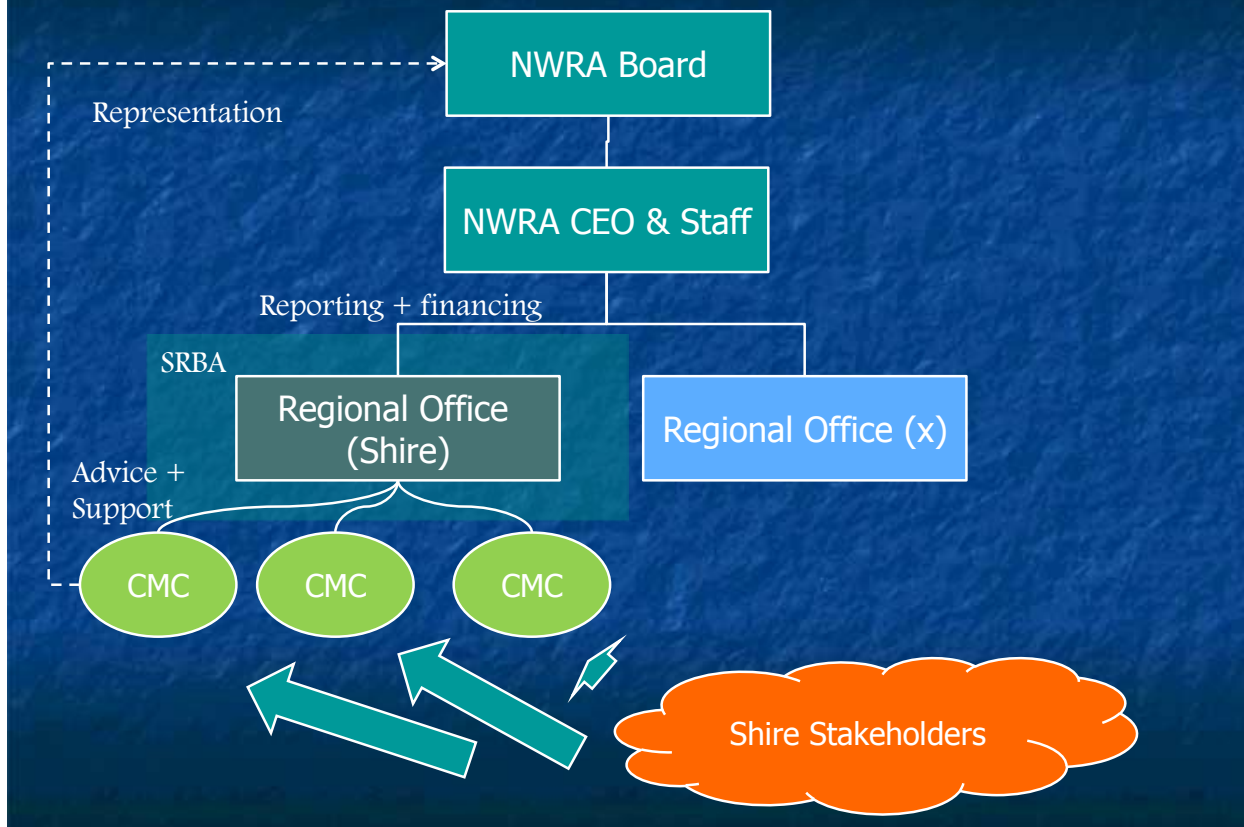
OPTION 2: Establish the SRBA as a Regional Office of the National Water Resources Authority

The 2013 National Water Resource Act establishes National Water Resources Authority (“the Authority”) and empowers it to:

- Develop principles, guidelines and procedures for allocation of water resources;
- Monitor and assess the National Water Policy and National Water Resources Master Plan;
- Receive and determine applications for permits for water use and monitor and enforce the conditions of those permits;
- Regulate water quality;
- Manage and protect catchments;
- Determine water use charges;
- Gather, maintain, and publish information on water resources;
- Work with stakeholders to improve water regulation and management;
- Advise the Minister on water resources-related matters;
- Prepare, implement and amend a Water Action Plan;
- Review relevant legislation and advise the Minister on amendments;
- Prosecute offenses under the Act;
- Establish committees and regional offices; and
- Any other authority delegated under Section 15 of the Act (which allows the Minister to delegate any additional authority granted under Act except that of passing regulations).

The second option for establishing the SRBA would thus be to **establish a regional office (pursuant to Section 13 of the Act) of the National Water Resources Authority at the level of the Basin.**

Option 2



A regional office would have the broad spectrum of authorities outlined above, enabling it to undertake all of the desired functions of the SRBA. As a regional office, it would have broad legitimacy as a government department and also the ability to obtain funding directly from the Authority for its operations with no restrictions.

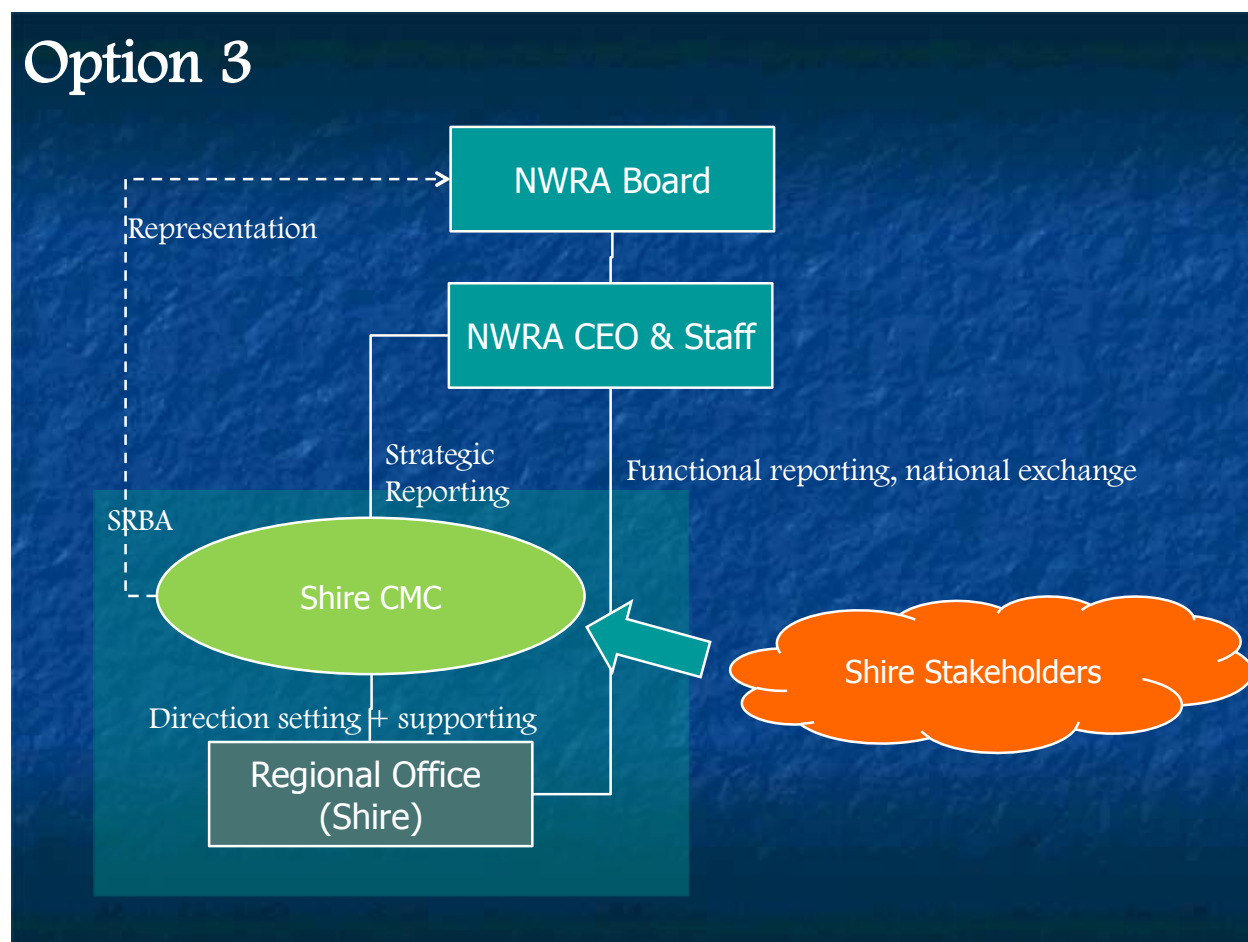
However, the Act does not provide any specific guidance on how to determine the geographical, administrative, functional scope of the regional offices, ultimately leaving the scope and oversight of the SRBA firmly with the Authority. The effectiveness of a basin institution depends to a great extent on its ability to take a basin-wide perspective – something that could easily be compromised with such close national oversight. Even at the regional level, the national priorities and demands on a regional office are potentially different than those of the Shire. Maintaining control over the SRBA could compromise the institution's ability to maintain accountability to its constituents and ensure appropriate allocation of resources.

Furthermore, there is no specific mechanism outlined in the Act for how stakeholders should be engaged in the establishment, decision-making and operations of the regional offices, which could provide a "loophole" resulting in top-down decision-making that would ultimately undermine the legitimacy and accountability of the SRBA. However, it is also likely that the establishment of catchment management committees (see below) could provide that mechanism if structured appropriately.

Finally, the designation of a regional office as the basin agency would also mean that one-third of the country would be designated as a “region.” This may have implications for how the Authority is structured, requiring a great proportion of the resources of its resources to be allocated to this one region.

OPTION 3: Establish the SRBA as a CMC “Plus”

The third option would attempt to overcome the constraints on the authority of the CMCs by establishing a Shire Basin CMC and partnering it with a regional office of the Authority at the level of the Shire. This partnership approach would enable the SRBA to leverage the broad stakeholder representation of the CMC to inform the planning and management authority granted to regional offices of the Authority.



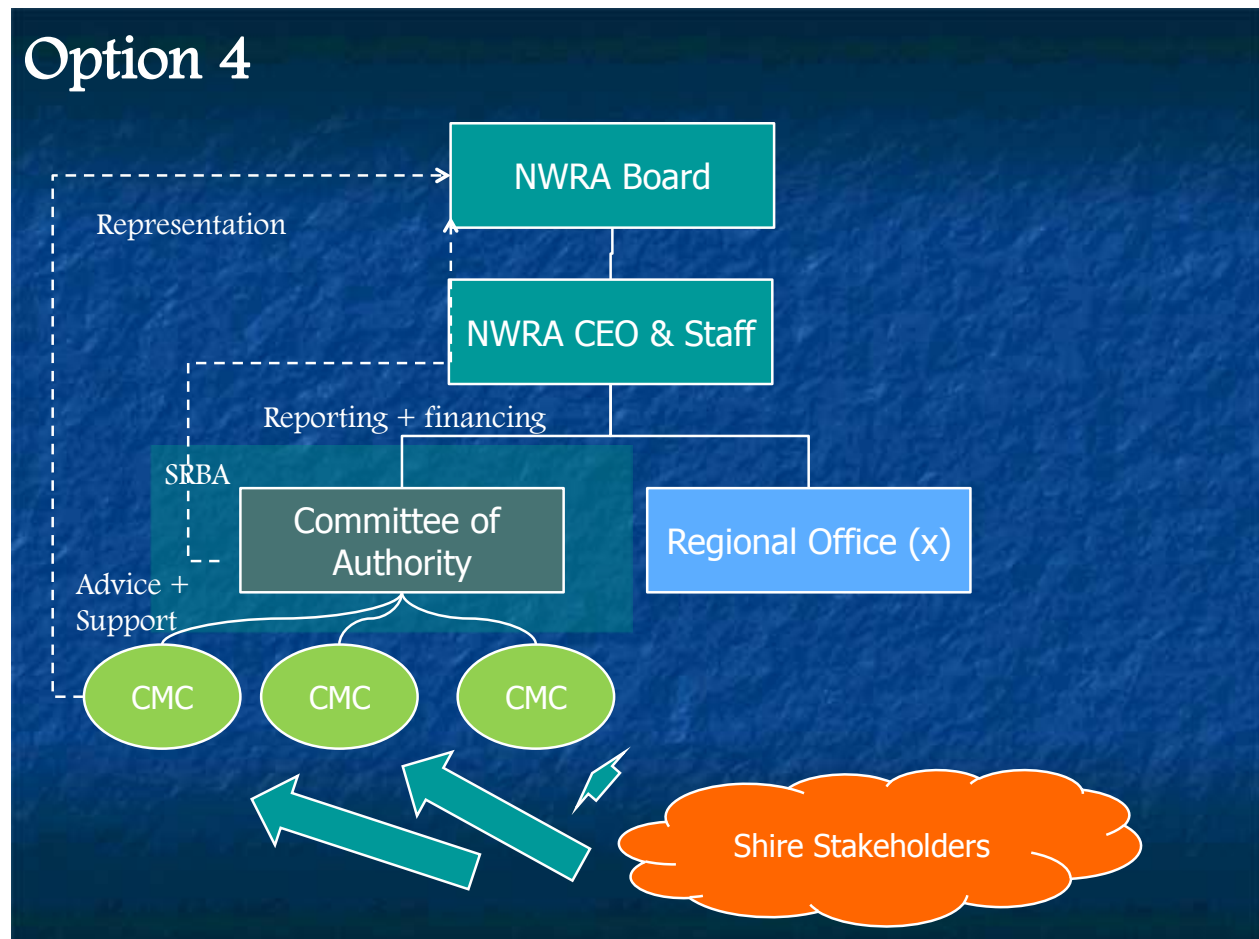
The various desired functions of the SRBA would need to be carefully allocated between the Shire CMC and the Shire regional office. The CMC would act as a multi-stakeholder advisory body, playing a key role in coordinating among users in the Basin and a platform for integrating stakeholder concerns and priorities into basin-level planning and decision-making. The regional office would provide oversight and

support the development of a Catchment Management Strategy that effectively acts as a basin-wide management plan. The regional office could also provide technical and financial support to the CMC.

While this arrangement appears to overcome some of the strongest challenges to Options 1 and 2, it raises additional concerns in terms of implementation. First, the division of responsibilities between two institutions would require a clear delineation of mandates and responsibilities and would require a high level of effective coordination. In practice, this could present serious problems of territorialism over authority and competition for resource allocation. This arrangement also fails to address the issues that accompany direct oversight of the SRBA by the Authority. As noted in Option One, the effectiveness of a basin institution depends to a great extent on its ability to take a basin-wide perspective – something that could easily be compromised with such close national oversight.

OPTION 4: Create the SRBA as a Committee pursuant to Section 11 of the Act

The fourth and final option provided under the Act is to create the SRBA as a “Committee” under the National Water Authority and have the Authority delegate all necessary responsibilities and authority.



Section 11 provides that the Authority may “for the purpose of performing its functions under the Act, establish committees and delegate to any such committee such of its functions as it considers

necessary.” The members of a committee may be appointed by the Authority, hold office for terms established by the Authority, and regulate their own procedure if delegated under the terms of its establishment.

The scope of the delegable authority to a Section 11 Committee established under the Act is therefore much broader than that of a CMC. In addition, a Committee can be established as a semi-autonomous body, with the potential to delegate functions and authorities over time as the organization builds the capacity to take them on. Because there is no specific mandate for how a committee is to relate to other organizations, it may be structured to relate to CMCs and Water User Associations that could then be established for the sub-catchments in the Basin in ways that can leverage their capacity to represent the specific interests in those sub-catchments. While a Section 11 Committee would be a creature of the Authority, the terms of establishment of a Committee as outlined in the Act are quite flexible and can grant the necessary institutional independence, as well as clearly outline any accountability or oversight measures. Thus, while the scope of the functions and authority would ultimately be the decision of the Authority, this option provides the flexibility necessary to establish a SRBA that is legally granted the required mandate and is fully capable of executing the range of functions necessary to constitute an effective basin management institution.

Potential areas of concern with this option would include the lack of guidance on the process for establishing committees within the Act. Effective stakeholder engagement is a critical aspect of forming a legitimate basin institution, and there are no procedural requirements to ensure that this process is transparent, accountable, or that the members appointed are selected using appropriate criteria. However, it is envisioned that the SRBA would take on the responsibilities and authority of a CMC as set forth in the Act, and be granted additional authority to be able to achieve integrated basin planning and management. Thus, it would be structured to involve stakeholders from across the Basin in its establishment and functioning, most likely by establishing sub-basin CMCs and granting them formal representation on the SRBA. Moreover, the formation of a Shire Basin Stakeholder Forum could provide an important institutional mechanism for holding the Authority accountable to stakeholder needs and priorities throughout the process of establishing the SRBA. A Section 11 Committee thus provides the greatest flexibility under the Act to create an independent and fully functional basin institution.

Another area of concern is the fact that CMCs are specifically established within the Act to take on some of the functions of a basin agency. Why, then, should the Authority create a new institution that was not envisioned in the Act? The reason for this is the scope and level of importance of the Shire Basin to Malawi’s overall ability to effectively manage its natural resources and ensure that development is undertaken in a sustainable manner. As noted above, the Basin accounts for approximately one-third of the country and supports approximately 45% of the population. It is home to several (some quite large) sub-catchments and 12 District governments, as well as highly sensitive and critical infrastructure and industry. These factors highlight the uniqueness of the Shire and the need to create an equally unique institution that is tailored to meet the complex planning and management needs of the Basin. The CMCs could be established at the sub-catchment level and serve the purpose of representing the very different perspectives and needs of the sub-catchment stakeholders, while the SRBA could maintain a basin-wide perspective for planning that incorporates and balances those perspectives and needs.

Additionally, the SRBA necessarily needs a broader range of authority than is possible for a single CMC, as well as the independence from the national Authority to ensure it's accountability to that basin perspective. This final option provides an opportunity to meet all of these needs, and it was the consensus of the stakeholders that this was the preferred option for establishing the SRBA.

V. Summary of Options

Legal Option for Constituting SRBA	Advantages	Challenges
<p>Option 1:</p> <p>SRBA is a Catchment Management Committee</p>	<ul style="list-style-type: none"> • CMCs are representative, so can provide the platform for necessary basin-wide stakeholder engagement, coordination and conflict management. • CMCs can be legally constituted at the catchment, or basin-wide level. • Catchment Management Strategies (as set forth in the Act) encompass many IWRM principles, enabling it to act as an effective basin-wide planning instrument. 	<ul style="list-style-type: none"> • CMCs are only advisory in nature. They have no independent planning or decision-making authority, severely limiting their ability to act as an effective basin institution. • Limitations to CMC operational capacity may inhibit ability to function as effective basin agency (i.e., ability to hire full-time staff or running as a fully functional office).
<p>2: Regional Office of the Authority</p>	<ul style="list-style-type: none"> • A regional office has broad mandate and authority under the Act that allow it to undertake all of the desired functions of the SRBA. • Broad legitimacy as a government department and also the ability to obtain funding directly from the Authority for its operations with no restrictions. 	<ul style="list-style-type: none"> • Lack of guidance in Act with respect to geographical, administrative, and functional scope of regional offices leaves oversight of the SRBA firmly with the Authority, potentially undermining its independence. This, in turn would impact the ability of SRBA to take a basin-wide perspective and maintain accountability to its constituents. • No specific mechanism for stakeholder engagement provides a “loophole” that could result in top-down decision-making that would ultimately undermine the legitimacy and accountability of the SRBA.
<p>Legal Option for Constituting SRBA (cont'd)</p>	<p>Advantages</p>	<p>Challenges</p>
<p>2: Regional Office of the Authority (cont'd)</p>		<ul style="list-style-type: none"> • Shire Basin is one-third of the country, so there are implications for how the Authority is structured, requiring a great

		proportion of the resources of its resources to be allocated to this one region.
3: CMC “Plus”	<ul style="list-style-type: none"> • Has potential to overcome the constraints of Options 1 & 2 by leveraging the multi-stakeholder advisory capacity of the CMC as well as the oversight and technical and financial capacity of a regional office. 	<ul style="list-style-type: none"> • Difficult to implement effectively - division of responsibilities between two institutions would require a high level of effective coordination and possibility for conflict and territorialism. • Fails to address the issues that accompany direct oversight of the SRBA by the Authority.
4: Section 11 Committee	<ul style="list-style-type: none"> • Scope of delegable authority to a Committee is broad enough to grant the necessary mandate/authority desired of SRBA. • A Committee can be established as a semi-autonomous body, with the potential to delegate functions and authorities over time as the organization builds the capacity to take them on. • A Committee may be structured to relate to CMCs and Water User Associations that could then be established for the sub-catchments in the Basin in ways that can leverage their capacity to represent the specific interests in those sub-catchments. • A Committee can be structured to provide clear lines of accountability or oversight measures. • This innovative and flexible institutional mechanism can effectively reflect the unique scope and level of importance of the Shire Basin and meet the need to create an equally unique institution that is tailored to the complex planning and management needs of the Basin. 	<ul style="list-style-type: none"> • No procedural requirements to ensure that the establishment of the SRBA is transparent, accountable, or that the members appointed are selected using appropriate criteria. (HOWEVER, the SRBA is envisioned as incorporating the responsibilities and authority of a CMC as set forth in the Act, as well as additional necessary authority to be able to achieve integrated basin planning and management.) • This body is not explicitly envisioned in the Act as a basin institution.

The previous section and the table above highlight the opportunities and challenges that accompany each option for the establishment of the SRBA. These options were discussed in depth with stakeholders, and a consensus was reached that Option 4 – a Section 11 Committee – is the most effective option for constituting an effective basin management organization. The viability of Options 1 and 2 are undermined by their restrictions on the legal authority and institutional independence of the SRBA, respectively. While Option 3 (“CMC Plus”) appears to overcome the essential issues inherent in

the first two options, it presents additional difficulties associated with implementation that could ultimately undermine the overall effectiveness of the SRBA. Option 4 presents the greatest flexibility to achieve the priorities for both mandate and function that have been agreed upon as essential for a fully functional and effective management institution for the Shire River Basin.

VI. Proposed Next Steps

The legal options and stakeholder feedback presented above should form the basis of a considered analysis by officials within the Ministry of Water Development and Irrigation and other relevant government authorities. Feedback from these individuals can then inform a final decision on: (1) the proposed functions of the SRBA; and (2) the most effective legal option for establishing the SRBA as an institution.

Once these issues are agreed, the SRBMP can build on the institutional analysis being undertaken as part of the Programme to develop a more refined proposal for the structure and functions of the SRBA that reflects the strengths and weaknesses of existing and emerging institutions under the Act. The SRBMP can also provide more in-depth analysis on the relative strengths and weaknesses of the various institutional structures of existing basin organizations in areas with challenges similar to the Shire. Taken together, this information can form the basis of the legal establishment of the SRBA, which should be flexible enough to allow for progressive delegation of authorities onto the Agency as its capacity is built over time.

VI. Establishing a Shire Basin Stakeholder Forum

As noted throughout this paper, a critical aspect of integrated basin-level water management is effective stakeholder and public engagement in planning and decision-making. In recognition of this, the Shire Basin Stakeholder Forum was inaugurated at the Second Shire Basin Conference (November 2013).

Stakeholder Forums play a variety of roles in basin planning and management. The Shire Conference participants were asked to provide feedback on the desired functions of such a Forum both in the short-term and as the SRBA is formalized and basin-wide planning proceeds.

The Conference participants agreed that the immediate role of the Shire Basin Stakeholder Forum should be to bring Shire stakeholders together to:

- Share ideas and educate each other on basin issues and the priorities and needs of different stakeholder groups;
- Create a sense of responsibility and ownership over basin management issues and decisions;
- Provide a venue for soliciting feedback from stakeholders on specific issues related to basin planning and decision-making;
- Enable stakeholders to assist in setting priorities for basin management and ensure that different perspectives and priorities are represented in decision-making and that decision-making is linked to development planning at the basin and sub-basin scales.

Given these desired functions, the Forum should have a tiered approach that nests levels of participation according to the objectives, resources available and priorities of the stakeholders themselves. At the highest level, the overall Forum should have open membership to represent the diverse stakeholders throughout the Basin. This level is pertinent to information sharing and awareness raising. Beneath this level, sub-forums or working groups could be formed to address specific issues in more depth with more active participation from representatives of stakeholder groups. Membership could be issue-based or sub-catchment based, with the latter focused on a cross-section of issues at that geographic level to enable face-to-face meetings and cross-sectoral approaches.

There will be a need for feedback to stakeholders on an ongoing basis, both to inform the broader Forum on progress in activities and developments in the Basin and also to provide specific feedback to subgroups on decisions in which they are involved. The broader information systems could include a Facebook page, SMSs, and a newsletter. More formal mechanisms could be developed on a case-by-case basis to ensure that sub-groups receive meaningful and accessible information related to how their feedback is being accounted for in decision-making.

Specific issues that must be addressed in further developing the Forum include:

- How to identify and involve legitimate representatives of diverse stakeholder groups, especially traditionally marginalized voices;
- How to effectively communicate among levels of representation (i.e., either through assemblies or traditional systems);
- How to identify specific issues for stakeholder engagement;
- How to incentivize and maintain interest in engagement;
- How to establish and manage expectations for different levels of engagement.

As the SRBA is established and there are more formal roles for stakeholders in basin-level planning and decision-making, there may also be a need for the Stakeholder Forum to evolve to fill those roles. In discussing how the Forum should link to the SRBA in the future, the following functions were identified:

- More formal advisory services to the SRBA (e.g., stakeholder advisory committees on specific issues);
- Redress of grievances and accountability.

To further develop the role and institutional capacity of the Shire Stakeholder Forum, an Interim Taskforce was nominated by the Forum members to undertake the following activities with technical assistance from the SRBMP:

- Build on existing stakeholder identification processes to compile a more comprehensive list of stakeholders in the Basin and identify those who should be invited to join the Forum;
- Undertake a preliminary stakeholder analysis;
- Develop further guidelines for the Forum and refine the Forum's proposed mandate, structure, and proposed membership.

Annex 5 – detailed action plan on Component C2 – Flood Risk Management

Brief Minutes of Component C2 Discussions

Present

- James Chiusiwa
- Fyawupi Mwanyongo
- Madalitso Mwale
- Dyce Nkhoma
- Pieter Waalewijn
- Nagaraja Rao Harshadeep
- Francis Nkoka

Agenda and presentation	Discussions	Actions
<ul style="list-style-type: none"> • Agreement on the boat sharing between DODMA and Department of Wildlife <ul style="list-style-type: none"> ○ A meeting was held and two department agreed to pull project resources to procure the boat ○ Duty waiver was requested and today DODMA got a copy of letter from MoF who are following up with MRA on duty waiver request. ○ The two departments will meet after the mission to agree on percentage contribution to the purchasing of the boat. • A draft MOU of sharing the boat was prepared. 	<ul style="list-style-type: none"> • This activity has delayed and it needs to be quickened. • The MOU needs to be improved and finalized: <ul style="list-style-type: none"> ○ MOU is central to upcoming activities – ISP and Elephant Marsh Consultancy ○ MOU should highlight priority use of the boat on which period of the year. ○ Should include the use of the boat for tourism ○ The roles of each and every users should be highlighted including Agricane. • Considerations should be made in advertising of the boat is single sourcing is not adequate to the specifications. • The specifications to be more detailed • The procurement contract should include freight and training 	<ul style="list-style-type: none"> • Detailed specifications of the boat to be finalized and draft bidding documents to be finalized by end June. • DODMA to meet DNPW to finalise roles, responsibilities and contributions percentage to be included in the MOU • MOU to be improved and finalized – End of June
<ul style="list-style-type: none"> • ISP Contract Management <ul style="list-style-type: none"> ○ MOU between ISP and 	<ul style="list-style-type: none"> • The Department to start having a meeting with ISP to 	<ul style="list-style-type: none"> • The department to organize internal meeting

<p>District Council has been drafted and shared with ISP and District councils</p> <ul style="list-style-type: none"> ○ Waiting to finalise it with ISP ● Contract has been signed and the ISP is currently mobilizing ● The ISP has requested for two more weeks to mobilize 	<p>plan implementation activities of the ISP.</p> <ul style="list-style-type: none"> ● The launch workshop will be not be conducted instead district meetings will be done and inception workshop will be held 2/3 months after the ISP has mobilized. ● The department to hold a quick workshop in the department to ensure all department staff are on top of all ISP issues and activities ● The department to attach staff to the consultant to ensure capacity is built within the department ● The department to review the TORs, Technical proposal ● The department to organize awareness at district level to introduce the ISP and present roles and responsibilities of ISP, all stakeholders and district council in the implementation of the ISP activities. ● MOU to be finalized during inception stage and to be discussed during the awareness stage 	<p>to review the TORs, Technical Proposal, options and activities of ISP – <i>Before the end of June</i></p> <ul style="list-style-type: none"> ● The department to plan for the district awareness meeting – setting dates, details meeting agenda and field visits with the ISP. ● The department to plan for meeting with the ISP – <i>By end of June.</i> ● To organize district awareness workshop
<p>Control room</p>	<ul style="list-style-type: none"> ● The current meeting to be improved into a control room ● Work with Justin and Alice to prepare good maps 	<ul style="list-style-type: none"> ● Dyce to contact Justin and Alice ● The department should have discussions on the future status of the department, the activities to modernize the department and the staffing requirements
<p>Internet</p>	<ul style="list-style-type: none"> ● Use the project resources to get wifi connection to improve internet 	<ul style="list-style-type: none"> ● Dyce to contact Francis to check the department internet connectivity and

	connection in the department	proceed with necessary actions
YPP	<ul style="list-style-type: none"> • YPP TORs has been prepared 	<ul style="list-style-type: none"> • The YPP TORs to be revised • The department should start thinking the next batch of YPP and consider short term like 6 months with specific actions to be achieved
Annual work plan	<ul style="list-style-type: none"> • The work plan was discussed • The annual work plan only to include activities and cost to be paid this year • All operation costs are allocated under A2 	<ul style="list-style-type: none"> • Revise the work plan <i>by Thursday</i>
Procurement of trucks	<ul style="list-style-type: none"> • Initial specifications were not met by the bidders • Use UN • Where to be based • Make a decision 	<ul style="list-style-type: none"> • The department to prepare a one pager on where the trucks will be packed and how they will be used and details management issues

