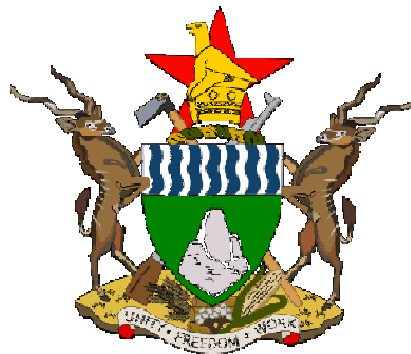




**African Water Facility**  
**Facilité africaine de l'eau**

*Mobilising Resources for Water in Africa*  
*Mobiliser des ressources pour l'eau en Afrique*



**REPUBLIC OF ZIMBABWE**

## **Developing an Integrated Urban Water Management Master Plan for Marondera Municipality**

**African Water Facility | Facilité africaine de l'eau**

**African Development Bank | Banque africaine de développement**

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## **ABBREVIATIONS**

AfDB	African Development Bank
AWF	African Water Facility
BNR	Biological Nutrient Removal
CBO	Community Based Organization
CIFA	Country Integrated Fiduciary Assessment
EMA	Environmental Management Agency
FM	Financial Management
GOZ	Government of Zimbabwe
GWP	Global Water Partnership
IUWM	Integrated Urban Water Management
MDGs	Millennium Development Goals
MoEWC	Ministry of Environment, Water and Climate
MoFED	Ministry of Finance and Economic Development
NAC	National Action Committee
NCB	National Competitive Bidding
PFM	Public Finance Management
SADC	Southern Africa Development Community
SBD	Standard Bidding Documents
SDGs	Sustainable Development Goals
SI	Statutory Instrument
STREP	Short Term Emergency Recovery Program
UNICEF	United Nations International Children Emergency Fund
WASH	Water, Sanitation and Hygiene
WHO	World Health Organization
ZIM ASSET	Zimbabwe Agenda for Sustainable Socio-economic Transformation
ZIMRA	Zimbabwe Revenue Authority
ZINWA	Zimbabwe National Water Authority

## EXECUTIVE SUMMARY

**Background:** At the African Water Facility (AWF) Governing Council meeting held in Harare, Zimbabwe in November 2013, the Government of Zimbabwe expressed its interest to be included in the roll out of the “Cities of the Future” Program, which encompasses “Integrated Urban Water Management (IUWM) principles which the AWF is pursuing with selected countries and partners. The Government further expressed its interest through an official request. The Municipality of Marondera with a population of 65,000 inhabitants was selected by the Government of Zimbabwe to receive support to develop an integrated water and wastewater Master Plan that will in part present detailed prioritized investments. This project will also build the capacity of the key sector players, which will in the long term foster an integrated approach in managing the water and sanitation facilities in the country.

**Goal:** The overall project goal is to provide the Municipality of Marondera with an innovative integrated planning approach that will ensure the sustainable management of water and sanitation for Marondera’s population. The project will address the immediate water and sanitation infrastructure needs, the development of an Integrated Urban Water Management (IUWM) Master Plan for the Municipality and enhance the capacity of the Government of Zimbabwe and key stakeholders to implement sustainable water and sanitation facilities.

**Rationale:** The IUWM approach contributes to improved water security through the adoption of a holistic approach. This involves designing water management as a system within a catchment, taking into account the entire water cycle in general, and in particular, that wastewater and fecal sludge are resources. The proposed IUWM approach is based on effective participation of key sector partners from the public, private and social sectors, and with each having an interest in good water governance.

**Activities and Implementation:** The Ministry of Environment, Water and Climate will be the Executing Agency. The project which will be implemented over a 30 month duration consists of four project components as follows: (i) Component 1 focuses on some immediate repairs to the water and sanitation infrastructure; (ii) Component 2 deals with *Sustaining the Future* which involves developing a Master Plan to the year 2035 that will pave the way to the sustainable water and waste management in the Municipality of Marondera using an IUWM approach; (3) Component 3 addresses Capacity Development issues - the IUWM approach is a new approach that will require capacity building not only of the Municipal Team but also of National staff coming from the relevant Ministries as well as University staff who could in the future carry out similar activities using local expertise; and Component 4 deals with Project Management which includes the establishment of a Project Management Team (PMT) within the Ministry of Environment, Water and Climate will be established to coordinate project implementation. An international consultancy firm will be recruited to undertake the technical studies and prepare the Masterplan. A Technical Advisory Committee consisting of representatives from various stakeholders will provide technical oversight and guidance to the PMT.

**Cost and Financing:** The total cost of the project (excluding taxes) is estimated at Euros 2,340,450 Euros which will be financed through an African Water Facility grant of Euros 1,997,100 representing 85% of the total amount, and a co-financing of Euros 179,550 from Global Water Partnership (GWP) and other donors representing 8% of the project and a Government of Zimbabwe in-kind contribution of Euros 163,800 representing 7% of the total amount.

**Recommendation:** In view of the long-term benefits of the proposed project to Marondera and Zimbabwe as a country, it is recommended that the AWF approves a grant funding not exceeding Euros 1,997,100 to the Republic of Zimbabwe to finance the project as outlined in this appraisal report.

## LOGICAL FRAMEWORK

### COUNTRY AND TITLE OF THE PROJECT: ZIMBABWE – DEVELOPING AN INTEGRATED URBAN WATER MANAGEMENT MASTER PLAN FOR MARONDERA MUNICIPALITY

**Purpose of the project:** Provide the Municipality of Marondera with an innovative and integrated approach that will ensure availability and sustainable management of water and sanitation for all the population of Marondera.

	CHAIN OF RESULTS	PERFORMANCE INDICATORS			MEANS OF VERIFICATION	RISKS AND MITIGATION MEASURES
		Indicators	Reference 2015	Target		
IMPACT	<p><b>Impact</b> Increased access to improved water supply and sanitation services resulting in improved public health for the population of Marondera</p>	<ol style="list-style-type: none"> <li>Diarrhea morbidity in children under 5</li> <li>Access rate to drinking water</li> <li>Access rate to sanitation</li> </ol>	<ol style="list-style-type: none"> <li>7.2/1000(2010)</li> <li>77%</li> <li>63%</li> </ol>	<ol style="list-style-type: none"> <li>&lt;5 in 2020</li> <li>100% by 2025</li> <li>100% by 2025</li> </ol>	<p>National statistics, DHS (Demographic and Health Surveys)</p> <p>Progress reports and field surveys</p> <p>JMP report</p> <p>Satisfaction surveys</p>	<p><u>Risks :</u></p> <ul style="list-style-type: none"> <li>Prevailing economic crisis in the country affects the interest of local and national authorities and donors in the project</li> </ul> <p><u>Mitigation measures:</u></p> <ul style="list-style-type: none"> <li>The project will consider the overall economic and political situation in the proposals that will be made, and adjust to the national capacity to implement.</li> <li>Donors' round table will be organized</li> </ul>
	<p><b>Outcome 1</b> The IUWM innovative approach to water and sanitation planning and management and the Master Plan for Marondera approved by Government</p>	<ol style="list-style-type: none"> <li>Number of IUWM planning decisions made by the Government of Zimbabwe and Marondera Municipality</li> </ol>	<ol style="list-style-type: none"> <li>0</li> </ol>	<ol style="list-style-type: none"> <li>1 by Government of Zimbabwe by 2020, and 1 by Marondera Municipality by 2018</li> </ol>	<ol style="list-style-type: none"> <li>Statement of the Council of Ministers of Government</li> <li>National plans and sector strategic document</li> </ol>	<p><u>Risks :</u></p> <ol style="list-style-type: none"> <li>Low ownership of the project by national and local authorities</li> <li>The integrated approach is not well understood or appreciated by the partners.</li> </ol>
	<p><b>Outcome 2</b> Water resources, water supply, wastewater and solid waste services in the Municipality of Marondera managed in a cost effective and sustainable way.</p>	<ol style="list-style-type: none"> <li>Cost recovery of the water, wastewater and solid waste services</li> <li>No of innovative business models allowing more effective and sustainable operation of WSS services</li> </ol>	<ol style="list-style-type: none"> <li>45%</li> <li>0</li> </ol>	<ol style="list-style-type: none"> <li>80% by 2020</li> <li>1 by 2025</li> </ol>	<ol style="list-style-type: none"> <li>Performance reports from the Municipality</li> <li>Project and performance reports</li> </ol>	<p><u>Mitigation Measures</u></p> <ul style="list-style-type: none"> <li>A Technical Advisory Committee will follow project implementation. The project will adopt a participatory approach in order to optimize ownership of Master Plan and Investment Plan.</li> </ul>

	CHAIN OF RESULTS	PERFORMANCE INDICATORS			MEANS OF VERIFICATION	RISKS AND MITIGATION MEASURES
		Indicators	Reference 2015	Target		
	<p><b>Outcome 3</b> Funds mobilized by the Government of Zimbabwe and the Municipality of Marondera for the implementation of prioritized projects for the first 5 years of the Master Plan</p>	1. Funds mobilized/pledged	0	1. 100% of funds mobilized for investment needs for the first five years by 2022	1. Minutes of Donor conferences 2. AWF annual leveraging survey	The project will also benefit from capacity building component which includes raising awareness and training sessions, and support to the Project Implementation Team.
OUTPUTS	<p><b>Component 1 :Immediate Needs</b></p> <p>1. Basic studies and designs for the immediate works undertaken, detailed costings</p> <p>2. Immediate repairs to the Water reticulation system and sewer network undertaken</p> <p>3. Waste Stabilization Ponds rejuvenated</p> <p>4. Repairs to the Elevated Steel Tanks at Braithwaite</p>	<p>1. Design Document produced</p> <p>2. kms of semi-nonfunctional pipeline replaced</p> <p>3. No of waste stabilization ponds rejuvenated</p> <p>4. No of water supply tanks repaired</p>	<p>1. 1</p> <p>2. 0</p> <p>3. 0</p> <p>4. 0</p>	<p><u>Horizon 2018</u></p> <p>1. 2</p> <p>2. 3 kms</p> <p>3. 5 No.</p> <p>4. 3 No.</p>	Progress reports and field visits	<p><u>Risks:</u></p> <ul style="list-style-type: none"> <li>▪ Donors are not interested in the project.</li> <li>▪ The challenge and pressure at local level are so important that works will start before the end of the project and not implement an integrated approach.</li> <li>▪ Marondera Municipality and the MoEWC do not co-ordinate well in project implementation and delivery</li> <li>▪ Marondera Municipality is not sufficiently involved in project management and therefore does not offer the necessary support</li> </ul>
	<p><b>Component 2 :Sustaining the Future</b></p> <p>1. Masterplan including scenarios, detailed technical design and investment plan developed, institutional analysis undertaken</p> <p>2. Full feasibility and detailed designs of the selected masterplan option undertaken</p>	<p>1. No. of implementable masterplans including scenarios, detailed technical designs and an investment plan developed and accepted by all relevant parties</p> <p>2. Design documentation approved</p>	<p>1. 0</p> <p>2. 0</p>	<p><u>Horizon 2018</u></p> <p>1. 1</p> <p>2. 1</p>	Master Plan	<p><u>Mitigation measures</u></p> <ul style="list-style-type: none"> <li>- A participatory approach will be the backbone of this project, organizing regular information meetings right from the launch of the project, during which recommendations of stakeholders and donors will be taken care of.</li> <li>- Marondera Municipality's engineer to be part of the PMT</li> <li>- PMT to regularly report to the Municipality</li> </ul>

	CHAIN OF RESULTS	PERFORMANCE INDICATORS			MEANS OF VERIFICATION	RISKS AND MITIGATION MEASURES
		Indicators	Reference 2015	Target		
	3. EIAs of proposed investment projects undertaken	3. EIA related documents approved	3. 0	3. 1	Master Plan	
	4. Sub-catchment water resources development strategic plans for the Upper Manyame, Nyagui and Macheke sub catchments developed	4. No of Sub-catchment management plans approved	4. 0	4. 1	Agreements between GoZ and Municipality. Commitment of Donors	
	5. Institutional analysis required to support the implementation and sustainability of IUWM undertaken	5. No. of Institutional analysis reports produced. Master Plan	5. 0	5. 1	An agreement has been reached between the GoZ, the Municipality and donors for the funding of the projects proposed in the Master Plan	
	<b>Component 3: Capacity Development</b>					
	1. Capacity building assessment on IUWM and other WSS issues undertaken	1. No of training events in IUWM held	1. 0	1. 3 events at community level, 1 at national level and 1 Training of Trainers with the University	Project progress reports and mission reports	
	2. Capacity building plan in IUWM targeting all levels developed	2. Number of advisory missions to key stakeholders	2. 0	2. At least 3 missions during Project duration		
		3. Capacity building plan developed	3. 0	3. 1 by 2018		
MAIN ACTIVITIES	<b>COMPONENTS DESCRIPTION/KET ACTIVITIES</b>					<b>CONTRIBUTIONS</b>
	<b>Component 1 : Immediate needs</b> <ul style="list-style-type: none"> <li>Definition of immediate needs (Undertaking repairs to the leakages of the water tanks, selected pipelines, valves, broken trans-sewers pipes to the waste stabilization ponds and other critical sections, rejuvenating the ponds system)</li> <li>Cost estimation and designs</li> </ul> <b>Component 2 : Sustaining the future</b> <p>(i) Phase 1: Diagnostic (Analysis of the institutional framework; Water balance study, Analysis of the hydraulics of the water supply system; Analysis of the wastewater and solid waste system; Environmental impact assessment and climate change impact; Sub-catchment area study and plan; Additional on-going studies)</p>					<b>Total cost of the project:</b> 2,340,450 Euros  <b>Financing plan:</b> * AWF Grant: <b>1,997,100</b> Euros (85%) * GWP and Donors: <b>179,550</b> Euros (8%) *Government: <b>163,800</b> Euros (7%)

- (ii) Phase 2: Analysis of scenarios (Identification of possible scenarios (1) Business as usual; (2) Integrated approach; Unit cost estimations; Choice of most viable option)
- (iii) Phase 3: Master Plan Development and prioritisation of investments

**Component 3 :Capacity Development**

- (i) Capacity building needs assessment
- (ii) Awareness and capacity building events (in Marondera; at National level on IUWM, and ToT with a selected University)
- (iii) Support to the PMT, TAC, Launching event and donor round table on issues related to IUWM

**Component 4 : Project Management**

- (i) Establishment of Project Management Team (PMT) and Technical Advisory Committee (TAC)
- (ii) Technical and financial management of the project and liaison with AWF
- (iii) Contracting and follow up of Consultants
- (iv) Ensure communication and visibility of the project
- (v) Organize a donors' round table



# 1 CONTEXT

## 1.1 Project Origin

1.1.1 At the African Water Facility (AWF) Governing Council meeting held in Harare, Zimbabwe in November 2013, the Government of Zimbabwe expressed its interest to be included in the roll out of the “Cities of the Future” Program. The Government subsequently backed its interest with an official request to the AWF for support. The “Cities of the Future” concept encompasses “Integrated Urban Water Management (IUWM) principles which the AWF is pursuing with selected countries and partners. At the Government’s request, the AWF subsequently fielded an identification mission to work with the Ministry of Environment, Water and Climate (MoEWC), and with other relevant agencies to identify an urban center to which IUWM planning principles could successfully be applied in Zimbabwe. IUWM seeks to develop efficient, flexible, urban water systems by adopting a holistic view of all components of the urban water cycle (water supply, sanitation, storm water management) in the context of the wider watershed. The Government selected the Municipality of Marondera. The rationale for choosing Marondera over the other towns was principally based on prospects for substantial value addition in the face of dire needs for improved water supply and sanitation services in Marondera. The town is the 7<sup>th</sup> largest community in Zimbabwe, and unlike its contemporaries, has not yet received adequate external support to revamp its water supply and sanitation services since the start of the economic recovery programme of the country in 2009.

1.1.2 An AWF Mission undertook an appraisal mission to Harare, Zimbabwe from the 8<sup>th</sup> to 19<sup>th</sup> June 2015 for the project entitled “Developing an Integrated Urban Water Management Master Plan for Marondera Municipality”. The Mission met and held discussions with senior government officials and professional staff at the MoEWC, the Ministry of Local Government, Public Works and National Housing, the Ministry of Finance and Economic Development, the Municipality of Marondera, and representatives of various donor agencies, civil society and Multilateral Agencies in Zimbabwe. This report is the result of the consultations held during this Appraisal Mission, and includes in its annexes Terms of References for the Development of a Master Plan for the IUWM in the Municipality of Marondera.

## 1.2 Sector Challenges

1.2.1 With a current population of about 13 million inhabitants, Zimbabwe drinking water indicators have moved from 79% (1990) to 77% (2015), according to the 2015 Joint Monitoring Report of WHO/UNICEF. For sanitation, the figures are 67% (1990) and 63% (2015). The water and sanitation figures used to be particularly high in urban areas where strict development by-laws almost ensured a universal access for all residents.

1.2.2 The declining status of water supply and sanitation services is attributed to economic problems in the country since around 2000 and this resulted in an unprecedented hyperinflation levels and subsequent abandonment of the local currency in favour of a multi-currency system in 2009. The economic decline affected communities in many ways, which include massive skills flight to neighbouring countries and beyond, collapse of public service delivery, resulting in the deterioration of vital national infrastructure (water, energy, railways, roads, *etc.*).

1.2.3 High non-revenue water and poor bill collection efficiency have been cited by many studies since 2009 and these are at the core of the recovery of the urban water sector in Zimbabwe. Even though huge amounts of funds have been channelled into the sector to improve the performance of the systems, challenges remain and additional resources are still required to revamp water and sanitation infrastructure. These resources will be vital in repairing or replacing old and leaking infrastructure to avoid erratic water supplies, replace non-functional water meters, reduce frequent sewer blockages, and increase disposable incomes on the part of consumers among others.

1.2.4 In the period 2010 to 2013, the Government of Zimbabwe with assistance from cooperating partners worked to improve the water sector. This included the improvement of inter-ministerial and inter-sectoral coordination by re-establishing the National Action Committee for WASH, and the development of the National Sanitation and Hygiene Strategy for 2011-2015; National Water Policy, Water Tariff Study; National Water Sector Investment Framework; Greater Harare Water and Sanitation Strategy; Urban WASH Service Level Benchmarking; and Integrated Results-based Management to mention but a few.

### **1.3 Sectoral Priorities**

1.3.1 The new 2013 Constitution of Zimbabwe, under Section 77 on the Right to Food and Water, guarantees citizens a right to safe, clean and potable water and compels the State to take reasonable legislative and other measures, within the limits of the resources available to it, to achieve the progressive realisation of this right. However, the constitution is silent on sanitation provision and it is therefore important to ensure that both public and private provision of water supply and sanitation complies with human rights.

1.3.2 The Zimbabwe National Water Policy of 2013 and the Sanitation and Hygiene Strategy 2011 – 2015 have recognised the different roles of water services providers and water services authorities, opening up the sector for private sector participation and relaxing standards for service provision. Onsite sanitation in urban areas is now allowed and the central role of research in driving the sector is recognised. The role of the Zimbabwe National Water Authority (ZINWA) and its catchment and sub-catchment councils versus that of urban councils were clarified and a regulator will be setup to oversee their operations.

1.3.3 Solid waste management is one area that has often been ignored in many urban areas in Zimbabwe. An Environmental Management Agency (EMA) was established under the Environmental Management Act [Chapter 20:27] and operationalized in March 2003 through Statutory Instrument (SI) 103 of 2003. EMA has published waste guidelines to reduce environmental pollution through the establishment of compliant landfills for all urban areas. However, currently no urban local authority has a compliant scientific landfill and the collection of refuse from households and institutions by municipalities has been erratic due to aged refuse collection equipment. This has led to solid waste blocking storm water drains; polluting the water resource; and at times causing flooding in urban centres.

1.3.4 The good performance of all water service providers and solid waste management authorities is key to the success of the local economic blueprint – the Zimbabwe Agenda for Sustainable Socio-Economic Transformation (ZIM ASSET): October 2013 - December 2018.

### **1.4 Problem Definition**

#### **1.4.1 The Municipality of Marondera**

1.4.1.1 Marondera (known as Marandellas until 1982) is the provincial capital of Mashonaland East Province of Zimbabwe, located about 70 km east of Harare and has a population of around 65,000 according to the Zimbabwe national population census of 2012 of which 53% are female. The annual population growth of Marondera was about 2.9% between 1992 and 2002, but has reduced to 1.7% between 2002 and 2012. The earlier high growth rate was due to increasing demand for housing in Harare, with Marondera becoming a dormitory town of Harare. The latter decline was due to economic problems and failure by the local authority to deliver more housing plots.

1.4.1.2 Up until the economic decline of the new millennium, Marondera used to be a key centre of Zimbabwe's large forestry and farming district and market for timber, tobacco, maize, beef, and dairy products.

1.4.1.3 Greater Marondera is an educational centre with numerous elite private and government schools in the area. It houses some of the most popular high schools and junior schools in Zimbabwean history such as Bernard Mizeki College, Waddilove High School, Peterhouse, Watershed College, Rakodzi High School, Marondera High School and Wise Owl High School. Junior schools in Marondera include Ruzawi Prep, Godfrey Huggins, Digglesford School, Lendy Park, Springvale House and Wise Owl Primary School. It also houses an agricultural commercial college called Kushinga Phikelela, and a government research station called Grasslands Research Station. Three universities are establishing themselves in Marondera, with two of them privately owned.

1.4.1.4 The failure to provide for housing needs has seen urban fringe developments spearheaded by rural district councils and these developments do not have proper urban infrastructure such as roads, refuse disposal, water supply and sewerage reticulations. The Government established a huge and unserviced peri-urban housing scheme right at the periphery of the town (Garikai Hlalani-Kuhle scheme) of about 1,000 plots in 2006 to cater for the countrywide clean-up programme (Murambatsvina) which had been implemented earlier.

1.4.1.5 A combination of economic decline and devastating successive years of droughts since the 2000 has seen rapid de-industrialization of Marondera. A notable example was closing down of the Cold Storage Commission - a major industrial firm in town in 2006. This greatly affected revenue inflows for the Marondera Municipality and led to an unprecedented collapse of local infrastructure due to little or no maintenance. Some of the key projects that were already underway, such as the construction of a 4,000 m<sup>3</sup>/d biological nutrient removal (BNR) plant which was nearing completion had to be abandoned.

1.4.1.6 The administrative capacity of the council was also affected due to economic migration and vital supporting facilities such as accounting/engineering software could not be maintained or improved. Marondera's last master plan spanning the years 1985 to 2005 was never updated and a strategic plan was only developed recently in line with the ongoing Integrated Results-Based Management system.

## **1.4.2 Water Supply Status in Marondera**

1.4.2.1 Marondera relies on raw water supplied by four dams, two of which are owned by Zimbabwe National Water Authority (ZINWA) while the Municipality owns the other two. Although water from the recently connected Wenimbi is relatively clean, its pumping costs are prohibitively high due to the lengthy delivery main. The existing water treatment plant has a capacity of 13,500 m<sup>3</sup>/d, but is only treating about 8,600 m<sup>3</sup>/d due to plant and pumping limitations. Apart from the aged infrastructure, the intermittent power supply has had its toll on limiting the production capability of the treatment system, pumping and distribution of treated water. The daily average water supply of 136 l/cap/day is generally enough for the town, but this is affected by very high non-revenue water of about 48%. Almost every property in Marondera (97%) is directly connected to the municipal water supply network, but does not benefit from a 24 hours supply service, due to power cuts and the water system's poor performance.

1.4.2.2 No studies have been carried out to partition and ascertain the portions of non-revenue water (real and apparent losses). However, many of the consumer and council bulk meters are non-functional and there are visible leaks in the water distribution system, such as those at the elevated steel reservoirs in Dombotombo Township. When Garikai houses are included, only 88% of the connections are metered.

1.4.2.3 Marondera sits on a watershed, with the Mazowe, Manyame and Save catchments all starting from the town. This geographical aspect also makes pumping of water and sewage over the ridge to the other side of the town very costly. This also explains why most areas in the town do not receive treated water from the treatment plant with low-lying areas most likely to receive water most of the time and those on higher ground receiving inadequate and unreliable water supply.

1.4.2.4 The Municipality of Marondera has been levying very low tariffs on treated water supplies at about US\$0.21/m<sup>3</sup> resulting in a poor cost recovery efficiency of 46%. Whereas the low tariffs have enticed residents to pay their bills as demonstrated by Marondera having the highest bill collection efficiency in the country at 82%, the revenues collected are not sufficient to maintain and expand the water and sanitation infrastructure. This has been exacerbated by the fact that the council to finance other municipal activities also uses the same revenues.

### **1.4.3 Wastewater Management Status in Marondera**

1.4.3.1 The sanitation situation in Marondera is critical. Although 91% of the properties in the town have access to a toilet, most of the collected sewage is not being treated. The town had a very good sewer network, which is now suffering from overloading and lack of maintenance. This has resulted in sewage flowing into vleis (an area of low marshy ground, that feeds a stream) and, eventually, into rivers and water bodies such as Rufaro Dam (which is one of the most polluted water bodies) in Zimbabwe and yet a vital cost-effective source of water supply for Marondera.

1.4.3.2 A 4,000 m<sup>3</sup>/d capacity Biological Nutrient Removal (BNR) sewage treatment plant was constructed in the late 90's but was abandoned when almost complete due to lack of funds. The plant could have discharged good quality effluent into Rufaro Dam and in so doing promote indirect recycling as the dam is also a source of raw water supply for the town.

1.4.3.3 A pump station closer to Rufaro Dam which broke down several years ago has recently been rehabilitated and awaiting commissioning but no sewage gets to the pump station as the trunk sewers have long collapsed and rehabilitation is very slow due to financial constraints.

1.4.3.4 A sewage stabilisation pond system, which used to serve the town of Marondera until 2006 was decommissioned due to disrepair and lack of sewage inflows. The rehabilitation of these ponds is ongoing albeit very slowly. The ponds have a design capacity of about 4,500 m<sup>3</sup>/d and in the past the effluent was used for pasture irrigation but the irrigation, facility is no longer functional.

1.4.3.5 The gravity trunk sewer feeding the pond system has deteriorated over the past years with some Garikai Houses constructed on top of the sewer. Other Garikai Houses were constructed below the trunk sewer and will thus not be possible to connect to it. The trunk sewer has also suffered from vandalism by some farmers who are using the effluent to irrigate their crops.

### **1.4.4 Solid Waste Management Status in Marondera**

1.4.4.1 Despite having one old refuse compactor and few tractors to share between the Health and Engineering Departments, the Municipality of Marondera seems to be performing satisfactorily with municipal solid waste collection. The coverage of solid waste collection through door-to-door collection is very high at 96% whilst about 62% of the generated solid waste in the town is collected. The rest is either burnt at source or disposed of in undesignated areas in the town.

1.4.4.2 The solid waste collected by the council is dumped in a forested area about 8 km from the town centre. The council is yet to identify and develop a suitable scientific landfill that meets local environmental standards set by the Environmental Management Agency. The current dumpsite is not accessible during the rainy season, which forces the refuse truck drivers to litter the road leading to the dumpsite.

1.4.4.3 Solid waste recycling in Marondera is minimal and is carried out by unlicensed scavengers who sell the waste to waste collectors mainly from Harare. The council does not give any support to these waste pickers. However, only about 3 tonnes of waste per month is estimated to be recycled from the dumpsite.

1.4.4.4 The figures on cost recovery in municipal solid waste management for the council appear distorted and estimated at 70%. However, the collection efficiency is very low at 16%, making it difficult to have meaningful investment in this sub-sector.

1.4.4.5 Only about 16% of the properties are using acceptable and prescribed types of refuse receptacles. The rest are using unconventional receptacles such as cardboard boxes, grain bags, *etc.*

### **1.4.5 The Institutional Framework**

1.4.5.1 A fragmented institutional framework with a multitude of stakeholders has characterized the water and sanitation sector in Zimbabwe.

1.4.5.2 In 2010, the Government decided to transform and enhance the old National Action Committee (NAC) on rural water supply and sanitation that had hitherto focused on rural areas only. The new NAC now has three subcommittees, each looking at specific issues:

- i. Rural Water Supply and Sanitation Sub Committee,
- ii. Urban Water Supply and Sanitation Sub Committee, and
- iii. Water Resources Management Sub Committee.

1.4.5.3 WASH Sector Steering is now the responsibility of the Cabinet Steering Committee for Water and Sanitation chaired by the Minister of Environment, Water and Climate (MoEWC). Included in this Cabinet Steering Committee are Ministers for Agriculture; Health and Child Welfare; Transport Communications and Infrastructure Development; Energy and that for Local Government. The national coordination and management of the sector is through a National Action Committee for water and sanitation chaired by the Permanent Secretary for the ministry responsible for water.

1.4.5.4 A particular Act of Parliament under the minister responsible for water resources governs water in Zimbabwe. A new national water policy was launched in March 2013. Various laws and regulations govern how the resource should be utilised and shared. Urban areas are distinct spatial areas defined by law and governed by specific statute operating as the second tier of government. The governing legislation, the Urban Councils Act Chapter 29:15, is premised on a decentralization framework (though no specific decentralisation policy exists) that devolves and delegates responsibilities to elected urban councils. Urban areas are different from rural areas and different Acts of Parliament govern their local governments.

1.4.5.5 The Government through its various agencies has taken a number of steps to respond to prevailing water challenges and climate change. These include the development of the National Environmental Policy in 2009; the Sanitation and Hygiene Strategy 2011-2015, the National Climate Change Response Strategy during 2012-2014.

1.4.5.6 Catchment and Sub catchment councils are mandated by the Water Act to manage water resources and levy all water use in Zimbabwe including clear water for councils. The Environmental Management Agency (EMA) is in charge of all pollution and mandated by the Environmental Management Act charges all effluent disposal including water bodies. Most of the urban centres including Marondera have been fined by EMA for continuously polluting water bodies. However, the income realised from effluent disposal has not been used to put in place any remedial action to the affected water bodies.

1.4.5.7 The institutional problems identified through a stakeholder workshops in Harare and Marondera include conflicting laws and policies, policy inconsistencies, lack of inter-sectoral dialogue leading to institutions working independently (silo mentality), political interferences, and the institutional setup itself. This shows that key sector players are not feeling the impact of recent reforms on the ground.

## **1.5 Lessons Learned Regarding the Current Situation**

### **1.5.1 General Comments**

From the above status of the water supply and sanitation in Marondera, it appears that:

- i. The extent of drinking water and sanitation services in Marondera and proposals for the future must go beyond purely technical aspects. The problem is more complex, and relates to technical, financial, economic and institutional aspects.
- ii. Some confusion exists regarding the roles and responsibilities of different actors, models of management and how these link up; despite there being concerted efforts by the Government to improve coordination and performance in the WASH sector.
- iii. There is a lack of coordination and inter-sectorial dialogue, communication and involvement of communities, taking into account the gender dimension.
- iv. A lack of ownership by stakeholders of changes to be made and the weak capacity of these actors limited the implementation of an integrated approach in the WASH sector.

### **1.5.2 Key Issues Identified by the Stakeholders**

The main key issues identified by the stakeholders include:

- Meeting the demand for drinking water in the town through the extension/rehabilitation of the network to reduce losses, and develop effective strategies for enhancing revenue collection.
- Developing innovative methods of reducing the cost of WASH service delivery and ensuring sustainability of services by focusing on: (a) reducing pollution inflows into Rufaro Dam as it is a cheaper source with less pumping costs; (b) increasing water availability in the town by recycling approximately 3,000 m<sup>3</sup>/d of BNR effluent through Rufaro Dam; (c) increasing effluent irrigation from waste stabilisation ponds by involving downstream farmers; and (d) the integration of drinking water, sanitation and energy.
- Educating and raising awareness of the population on rational water management, and behaviour likely to affect the water quality.
- Promoting the inclusion of gender and climate change resilient development in urban water management.
- Enhancing capacity of local authorities, government and local universities on the philosophy and modalities of implementing IUWM.

### **1.5.3 Main Lessons Learned Concerning Governance of the Urban WASH Sector**

The main identified lessons learnt regarding governance of the urban WASH sector in Zimbabwe and corroborated through a stakeholders' workshop held on 12/06/15 in Harare are below:

- (i) Harmonisation of policies and laws and clarification of duties, roles and responsibilities of all key players led to efficiency and performance in the WASH sector.
- (ii) Control and interpretation of policies at national level are important to improve the coordination and ensure harmonization of interventions in the sector.

- (iii) Institutions need to regularly meet in thematic groups to address topical issues. In line with this, existing platforms, structures should be strengthened and objectives redefined.
- (iv) Institutions should send individuals with decision-making capacity to appropriate meetings to reduce delays in decision-making.
- (v) The service level benchmarking project and the integrated results-based management system being introduced by the Government have enhanced transparency and accountability and should be up-scaled to other areas.
- (vi) There should be a mechanism to follow up on policy implementation in the WASH sector.
- (vii) Decentralising the administration and utilisation of resources; municipalities should be allowed to use the resources allocated and availed to them to speed up implementation and be encouraged to channel resources in the right direction.

## **1.6 Justification of an Integrated Approach**

### **1.6.1 Justification for an Integrated Urban Water Management in Marondera**

1.6.1.1 Given the situation described above, it proposed to introduce the principles of IUWM for the improvement of water supply and sanitation service delivery in Marondera, the relevance and feasibility of which will be better demonstrated through studies proposed to be undertaken under this project.

1.6.1.2 Institutionally, better coherence, coordination and communication between the various bodies responsible for urban planning and the entities responsible for the management of water supply and sanitation services at the national, catchment/sub-catchment, municipal, and community level is necessary. It will not only allow better analysis and understanding, but also more ownership of current activities and better coordination of investment plans among the various sectors concerned.

1.6.1.3 In terms of water management, it is vital to have: (a) a better understanding of all the possible water resources, both in terms of surface water, groundwater, but also gains from wastewater reuse; (b) a plan to reduce water losses and efficient management of demand. There is also a need to protect receiving water from sewage and solid waste pollution thereby enhancing the quality of service and financial viability of water services. A better analysis of the demand for water and its uses could also demonstrate the ability to use different levels of water quality for different uses, including urban agriculture, green areas and some industrial processes. Awareness and community involvement in the management of water, land use and waste management could have complementary benefits.

1.6.1.4 Marondera sits on a watershed where three catchments of Mazowe, Manyame and Save start from. The town affects and is affected by these three catchments. In the current situation it gets water from the Wenimbe Dam in the Save catchment and discharges polluted water to the Rufaro Dam which is in the Mazowe catchment. The implementation of IUWM principles would ensure a balanced win-win situation for the three catchments as their future developments and water needs will be factored in.

1.6.1.5 An integrated master plan is required for Marondera involving the municipal council, Government and the surrounding rural-district councils as all three have significant urban settlements within and around the town. In essence, the project should go beyond a mere water master plan, which deals with future physical developments of these key players. The town will also have to develop a physical master plan to deal with land use planning to guide any future water developments. In addition, the current complex institutional setup will have to be critically examined to ensure that the roles, responsibilities and mandates are very well defined at all levels.

1.6.1.6 Waste management in Marondera requires urgent attention. Focus should be on community involvement, rehabilitation and maintenance of storm water drains, maintenance of public toilets, good hygiene practices, and empowerment of youths and women groups. Waste management and garbage collection goes beyond treatment and should consider decentralisation and possibilities of recovering fertiliser and energy. This could help to create jobs and income, providing new revenue streams for the council.

## **1.6.2 Justification of AWF Intervention**

1.6.2.1 This project is well aligned with AWF's 2012-2016 strategy, which focuses on supporting project preparation, water governance and water knowledge projects. The project is specifically in line with the AWF Strategic Priority 1 'preparing investment projects' and will build technical and institutional capacity in Zimbabwe for up-scaling IUWM to other towns most of which have similar challenges to Marondera. Under Strategic Priority 2 the Facility supports the development of policies, strategies, plans and instruments at local, national, regional, and transboundary levels. The proposed project, as an initiative to prepare a strategic plan and investment projects, is also in line with this strategic priority.

1.6.2.2 The project is well aligned with the Sustainable Development Goals and the Africa Water Vision 2025. Particularly, in as far as sustainable access to safe and adequate water supply and sanitation, adequate quantity and quality of water for sustaining ecosystems and biodiversity, effective and sustainable strategies for addressing natural and man-made water-resources problems, including climate variability and change, and public awareness and commitment for integrated water-resources management are concerned. Through the studies to be conducted, this project will identify approaches and contribute to climate change resilience, adaptation, and the mitigation of environmental impacts in the framework of integrated urban water management in Marondera.

1.6.2.3 The AfDB Long Term Strategy 2013-2022 formulates two objectives; the first objective is to ensure that inclusive growth is sustainable. One of the five operational priorities is infrastructure development. The proposed project obviously contributes to this strategy by basing the infrastructure development on an integrated planning approach with a strong focus on making infrastructure sustainable.

1.6.2.4 The Integrated Water Management Master Plan for Marondera closely links with the objectives of the new National Water policy, the National Environmental Policy, the Sanitation and Hygiene Strategy, the National Climate Change Response Strategy, various laws and regulations that govern water resources management and their uses and shares in Zimbabwe. The Masterplan is also well aligned with Zimbabwe Agenda for Sustainable Socio-Economic Transformation (ZIM ASSET): October 2013 - December 2018, which is a Results-Based Agenda, is built around four strategic clusters that will enable Zimbabwe to achieve economic growth and reposition the country as one of the strongest economies in the region and in Africa. The four strategic clusters identified are; Food Security and Nutrition; Social Services and Poverty Eradication; Infrastructure and Utilities; and Value Addition and Beneficiation. Efficient performance of the WASH sector is key and critical to the success of Zim-ASSET.

## **1.7 Project Beneficiaries**

1.7.1 The immediate beneficiaries of the project are the 65,000 inhabitants of Marondera including the senior and professional staff of the Municipality of Marondera.



1.7.2 The other main beneficiaries are the sector professionals from the Ministry of Environment, Water and Climate, the Ministry of Local Government, Public Works and National Housing, the Ministry of Finance and Economic Development, various donor agencies and universities that have been exposed to a new approach to the management of water and sanitation services.

1.7.3 Inhabitants in low-income neighborhoods, particularly women, will particularly benefit from the implementation of this project, with a consequent improvement of WSS services, increased productivity, and the number of working days saved due to better health.

## **2 THE PROJECT**

### **2.1 Goal, Impacts and Objective**

#### **2.1.1 Goal**

The overall project goal is to provide the Municipality of Marondera with an innovative and integrated approach that will ensure the sustainable management of water and sanitation for Marondera's population. The project will address the immediate Water Supply and Sanitation (WSS) needs, the development of an Integrated Urban Water Management Master Plan for the Municipality and enhance the capacity of the Government of Zimbabwe and key stakeholders implement sustainable water and sanitation facilities.

#### **2.1.2 Impacts**

The project will be based on an IUWM approach promoting the effective participation of key municipal partners from the public, private and social sectors, which will lead to the main three following long-term impacts:

2.1.2.1 The improved well-being of the Marondera's population through the provision of equitable and sustainable water supply and waste management services

2.1.2.2 The enhanced capacity of the town of Marondera to achieve the National Municipal performance targets connected to water, sanitation and climate risks management as set by the Government of Zimbabwe as well as achieve the water-related targets as defined in the Sustainable Development Goals (SDGs).

#### **2.1.3 Objective**

The main project objective is to develop an Integrated Urban Water Management Master Plan for the Marondera Municipality that will contribute to the above-mentioned overall project goal.

### **2.2 Medium and Short Term Results**

#### **2.2.1 Medium Term Results and Outcomes**

On the medium term, it is expected that the project will contribute to the following outcomes:

- **Outcome 1.** The IUWM Master Plan for Marondera and the innovate approach to water and sanitation are approved by the Government and the Municipality
- **Outcome 2.** Water resources, water supply, wastewater and solid waste services in the Municipality of Marondera are being managed in a cost effective and sustainable way.

- **Outcome 3.** Funds mobilized by the Government of Zimbabwe and the Municipality of Marondera for the implementation of prioritized projects for the first 5 years of the Master Plan

### 2.2.2 Outputs

In the short term, it is expected that the project will contribute to the following outputs:

- The development of a Master Plan for the management of water and sanitation services in the municipality of Marondera that includes an investment plan and an analysis of the availability of water resources at the sub-catchment area at the horizon 2035.
- The raising of funds from local and national public financing partners to support the suggested investment plan for Marondera together with the contribution of multi-lateral, bi-lateral agencies and NGOs that are active in Zimbabwe.
- The technical design of immediate needs to improve the water supply and wastewater network to a standard that allows the system to avoid further deterioration in the short term.
- The improved capacity of municipal authorities and sector professionals to plan and coordinate water and sanitation services in an integrated manner.
- Increase understanding and ownership of the national sector authorities of the integrated approach that is being promoted in the project.
- Transfer of capacity and knowledge on integrated approaches to a National University and / or Research Centre.

## 2.3 Project Components and Activities

2.3.1 It is proposed to improve the water supply, wastewater, and solid waste management services in Marondera using an integrated approach that could be implemented as a pilot case for Zimbabwe in general. The project will include four components: a) Component 1: Immediate Needs; b) Component 2: Sustaining the Future; c) Component 3: Capacity development; d) Component 4: Project management.

2.3.2 **Component 1 – Immediate Needs.** The current water and wastewater infrastructure could greatly benefit from urgent repairs while waiting for major interventions to be implemented; however, they do not represent by any means a permanent solution to the problems of water and wastewater management in the Municipality of Marondera.

1. Undertake critical assessment of the status of water supply and sanitation infrastructure with a view to prepare detailed designs and detailed cost estimates, including drawings, bill of quantities and technical specifications in each case, based on a very limited budget given for this purpose. In their work, the Consultants will also make use of previous studies and documents that are available from council. The envisaged work involves the following proposed activities:
2. Undertake immediate repairs to the Water and Sewer reticulation system – this would involve: (i) replacing outdated, semi-nonfunctional GI water pipeline network in problematic points within Marondera suburb with suitable and flexible PVC pipeline, and (ii) Rehabilitating non-functional sewer mains for problematic points and pumping mains to Chicago, Dombotombo and Cherutombo pump-stations
3. Rejuvenating the Waste Stabilization Ponds – which includes; (i) Revamping of existing waste stabilization ponds (not attended to since 2012), (ii) improving accessibility to such

(access road, site clearance), (iii) providing security (perimeter), presently vandalized, and (iv) de-sludging and cleaning out of (now sludge cake) drainage channels, anaerobic, facultative and maturation ponds

4. Repairs to the Elevated Steel Tanks at Braithewaitte – includes; (i) De-commissioning of Tank no. 1 (ii) fixing and supplying a new 400 m<sup>3</sup> modular tank to replace Tank no. 1, (iii) undertaking repairs on Tank no. 2 paneling, and (iv) Other repairs to all 3 tanks pipe works
5. Undertake construction supervision of the identified urgent works to be undertaken

**2.3.3 Component 2 – Sustaining the Future.** One of the main objectives of this consultancy is to develop a Master Plan that will pave the way to the sustainable management of water and wastewater in the Municipality of Marondera. The plan will also include a list of prioritised investments and their detailed feasibility and design for the short term and medium term horizons, and will try to integrate other aspects of development in the Municipality in order to avoid having a separate vision for water that does not match the development of housing, roads, etc. This component includes mainly the following main activities:

1. Develop a Master Plan for the management of water, wastewater and solid waste considering a 20 year horizon and possible scenarios of the extension of the town, including elaborating an investment plan looking at the short, medium and long term horizons, and undertaking full feasibility and detailed designs for the selected Master Plan option, and an Environmental Impact Assessment for the proposed investment projects.
2. Prioritizing investment projects to be presented to various cooperating partners, and to the National and Local Governments, and undertaking detailed feasibility and design for priority projects identified for the short to medium term horizon.
3. Undertaking an economic appraisal of Marondera to allow for the development of realistic projections that would inform the development of the Master Plan.
4. Develop a sub-catchment Water Resources Development Strategic Plan for the sub catchments directly impacting/impacted by the Marondera town. This will involve working closely with ZINWA sub-catchment councils in the Marondera area. The tasks include an assessment of water availability, spatial and temporal demands, current and future storage, water allocation criteria, institutional systems and coordination, environmental impact, economic sustainability, etc. It will also consider how the system would be affected and respond to climate change scenarios. The sub-catchments include: Upper Manyame, Nyagui, and Macheke.
5. Assess causes of high non-revenue water, including real and apparent losses, to propose measures of mitigation, to consolidate the hydraulic model of the network, and to analyze possible reuse of water for agriculture, greening of parks and/or industry.
6. Undertake feasibility studies including opportunities for resource recovery and re-use, as well as propose an optimal and financially sustainable model that takes into account the analysis of the various options of rejuvenating the ponds and or the BNR system. The re-use and recovery studies will also explore the water quality standards and uses aligned to these standards.
7. Undertake feasibility studies for the scientific management/disposal of solid waste and identify options of possible business opportunities that go beyond the first step of the chain. In addition, the study will also consider potential development towards job creation.
8. Undertake an institutional analysis, which would include reviewing the roles and responsibilities of the various stakeholders at local and national level, and suggest ways to improve their interaction or coordination. The analysis will also include a review of the

capacity of the Council to technically and financially manage the water, wastewater and solid waste management systems, including cost recovery processes. Different business models, including community-based organizations (CBO) involvement, public-private partnerships, *etc.*, will also be reviewed and the most appropriate model recommended.

**2.3.4 Component 3: Capacity Development.** The Integrated Urban Water Management approach is a new approach that will require some capacity building not only of the Municipal Team but also of national staff coming from the relevant Ministries as well as University staff who could in the future carry out similar activities using local expertise. It is further suggested that the capacity building team will provide support to the consultant. This component includes the following main activities:

1. Conducting 3 training workshops for capacity reinforcement of stakeholders at various levels, local and national, as well as knowledge transfer to universities and/or a research center in Zimbabwe, including the design of an information system, as follows (training will follow the IUWM Modules methodology developed jointly by GWP, USF and the world bank and will be adjusted to the local context): (a) A 3 days training on IUWM approach at the occasion of the launch of the project; target group: all the team that will be involved in the project at national and local levels, including the consultants, the town engineer, and TAC members; (b) Training of trainers with a reputable National University taking the case of Marondera on IUWM approaches, 6 months after the launch; (c) Training of other relevant staff members of other municipalities on IUWM approach 12 months after the launch of the project.
2. Providing on the job training activity to provide governance support to Marondera Municipality including its councillor's managerial, financial, cost recovery and transparency issues. The appraisal mission has highlighted the poor level of financial management of the Marondera Municipality, and a specialized consultant on financial and administrative matters will be working with the Municipality during a period of 3 weeks in order to: (a) To review existing financial and administrative practices, book keeping, billing, tariff setting, payments, treatment of non-payments; (b) To propose a new and more effective financial and administrative system (hardware and software) in line with the current regulations and procedures prevailing in Zimbabwe; (c) To apply the new system for a first period.
3. The GWP Office in Zimbabwe together with TAC and the University that has been selected for this project will: (a) work together to promote good IUWM practices and facilitate knowledge exchange with other councils to maximize impact; (b) organize learning visits to councils with successful management stories.
4. Offer regular support to the Consultant's team on IUWM issues through visits (GWP Zimbabwe) or skype calls (GWP Africa or Stockholm) on a quarterly basis during the first year and then bi annually, and contribute to the organization of the final Round Table of Donors.

**2.3.5 Component 4: Project Management.** This component includes the following main activities:

1. Establishing a Project Management Team (PMT) within the Ministry of Environment, Water and Climate that will oversee the coordination, implementation, and progress and monitoring of the project. The PMT will regularly report to Marondera Municipality and Marondera's project engineer be a member of the PMT.

2. Establish a Technical Advisory Committee (TAC) consisting of representatives from various stakeholder entities that will provide technical support and guidance to the Project Management Team during project implementation. Marondera Municipality will be represented on TAC.
3. Organizing a donor’s round table at the end of the project to mobilize resources for the downstream investments

## 2.4 Project Risks

2.4.1 The possible risks that may arise during the project and mitigation measures are described in the following table:

**Table 2.1: Risks and Mitigation Measures**

Risks	Mitigation Measures
<ul style="list-style-type: none"> <li>▪ Marondera Municipality and the MoEWC not co-ordinating well during project implementation</li> <li>▪ Marondera Municipality not well integrated into project management and therefore not providing the necessary support for project implementation</li> </ul>	<ul style="list-style-type: none"> <li>• Marondera Municipality will sit on the Project’s advisory committee</li> <li>• The Municipality has committed to providing office space to the project consultants and the PMT to be based in Marondera</li> <li>• The Municipality’s Engineer’s is to be assigned to the PMT and will participate in all PMT meetings.</li> </ul>
<ul style="list-style-type: none"> <li>▪ Economic crisis prevailing in the country affects the interest of local and national authorities in the project</li> <li>▪ Statistics not available or reliable</li> </ul>	<ul style="list-style-type: none"> <li>• The project will consider overall economic and political situation in the proposals that will be made, and adjust the same to the national capacity to implement.</li> <li>• Most of the statistics for Marondera can be generated locally and checked</li> </ul>
<ul style="list-style-type: none"> <li>▪ Low ownership of the project by national and local authorities.</li> <li>▪ The integrated approach is not well understood or appreciated by the partners.</li> </ul>	<ul style="list-style-type: none"> <li>▪ A Technical Advisory Committee will guide the project during implementation. The project will adopt a participatory approach in order to optimize ownership of Master Plan and Investment Plan.</li> <li>▪ It is suggested that the project will benefit from the capacity-building component that includes raising awareness, training sessions, and support to the Project Implementation Team.</li> </ul>
<ul style="list-style-type: none"> <li>▪ Donors are not interested in the project.</li> <li>▪ The challenge and pressure at local level are so important that works will start before the end of the project and not implement an integrated approach.</li> </ul>	<ul style="list-style-type: none"> <li>▪ A participatory approach will be the backbone of this project, organizing regular information meetings right from the launch of the project, during which recommendations of stakeholders and donors will be taken care of.</li> </ul>

## 2.5 Costs and Financing Plan

2.5.1 The total cost of the project (without taxes) is estimated at 2,340,450 Euros. It will be financed through a grant from the African Water Facility totalling 1,997,100 Euros representing 85% of the total amount, and from a co-financing of 179,550 Euros from GWP and other donors representing 8% of the project financing. The Government of Zimbabwe (either at National or Local levels) will make an in-kind contribution of 163,800 Euros to the project which represents 7% of the total amount.

2.5.2 The main project cost consists of the payment for the consultancy services to undertake the preparation of the master plan and the prioritization of the investments projects. Table 2.2 indicates a summary of costs per category of expenditure.

**Table 2.2 : Estimated Project Cost by Category of Expenditures (in Euros with 5% cont.)**

Item	Category	Amount and Sources			Total
		AWF	GWP & Donors	Gov. of Zimbabwe	
A	Goods	70,000			70,000
B	Services	1,350,000	146,000		1,496,000
C	Works	350,000			350,000
D	Project Management	132,000	25,000	156,000	313,000
	Total	1,902,000	171,000	156,000	2,229,000
	Contingency (5%)	95,100	8,550	7,800	111,450
	Grand Total	1,997,100	179,550	163,800	2,340,450
	Percentage	85%	8%	7%	100%

2.5.3 As a contribution to the project budget, the Government of the Zimbabwe will provide: (i) a contribution to the management of salaries and allowances of PMU staff, running costs (water, electricity, telephone, internet) and office space.

2.5.4 Table 2.3 shows the distribution of costs per component. A detailed cost table is presented in Annex 1.

**Table 2.3: Distribution of Costs per Component (Euros) – Without Taxes**

Item	Description	Comp 1	Comp 2	Comp 3	Comp 4	Total
A	Goods				70,000	70,000
B	Services	31,000	1,083,000	146,000	236,000	1,496,000
C	Works	350,000				350,000
D	Project Management			25,000	288,00	313,000
	Total	381,000	1,083,000	171,000	474,000	2,229,000
	Contingency (5%)	19,050	54,150	8,550	23,700	111,450
	Grand total	400,050	1,137,150	179,550	594,000	2,340,450
	AWF Support	400,050	1,137,150		459,900	
	% AWF Support	100%	100%	0%	74%	

2.5.5 All the taxes related to the expenditures and activities of this project are the Government of Zimbabwe's responsibility.

### 3 PROJECT IMPLEMENTATION

#### 3.1 Grant Recipient and Executing Agency

The Republic of Zimbabwe will be the grant recipient whereas the Ministry of Water Environment and Climate will be the executing agency. The Ministry will execute the project for Marondera Municipality as the does not have the necessary technical capacities and fiduciary systems in place to execute a project of this nature.

## 3.2 Implementation Arrangements

3.2.1 A **Project Management Team (PMT)** will be established part of which will be partly housed within the Ministry of Environment Water and Climate, and at the Municipality in Marondera. The project team will comprise: (i) A Project Coordinator; (ii) Project Engineer; (iii) Marondera town engineer; (iv) part-time procurement expert; (iv) Procurement Officer; (v) Communication officer; and (vi) Finance Officer.

3.2.2 The MoEWC will assign the following staff to the project (i) A project co-ordinator, (ii) procurement officer and (iii) Finance officer. To fully embody the Municipality into the project, Marondera Town's engineer will be part of the PMT, and will provide strategic insight. The town engineer's full participation will be required at all regular PMT meetings.

3.2.3 The Project will recruit: (i) a Project Engineer; (ii) a part-time procurement expert; (iii) a communications officer; and (iv) an office assistant.

3.2.4 The Project Co-ordinator will have the overall responsibility for the PMT and will report directly to the Director Water Resources and Planning at the MoEWC. The PMT will also be required to report to the Municipality of Marondera on a monthly basis. The PMT ToRs are presented in Annex 5.

3.2.5 A **Technical Advisory Committee (TAC)** consisting of representatives from various stakeholder entities will provide technical support and guidance to the Executing Agency (EA) and to the PMT during project implementation. It is anticipated that appointed representatives from the various institutions will have the technical capabilities to fully contribute to steering the project in the right direction. The proposed stakeholders to be represented on the TAC are: (i) MoEWC; (ii) Ministry of Local Government, Public Works and National Housing; (iii) Urban Council Association of Zimbabwe; (iv) ZINWA; (v) Universities' representatives; (vi) GWP; and (vii) Marondera Municipality.

## 3.3 Performance Plan

3.3.1 The supervision of the project will be based on the results-based management model in which the principles of the logical framework approach play a crucial role. The logical framework matrix of the project indicated in this report describes the purpose, objectives and expected results. Table 3.1 below indicates the expected performance of the project.

**Table 3.1. Global Performance Plan of the Project**

<b>DELIVRABLES</b>	<b>Time</b>
Grant allocation notification	Mo
Establishment of the PMT and TAC	Mo + 1
Signature for the allocation of the Grant	Mo + 2
Satisfaction of pre-conditions	Mo + 2
Launching of the Project	Mo + 3
Recruitment of the consultant and acquisition of vehicle	Mo + 12
Undertaking critical assessment for the immediate works	Mo+16
Undertaking immediate WSS repairs	Mo+22
Additional Studies, Master Plan Development and Capacity Development	Mo + 24
Donor Round Table and finalization of Investment Plan	Mo + 30

3.3.2 The main performance indicators of each study are specified in their terms of reference attached in the Annex 8.

### **3.4 Project Implementation Schedule**

3.4.1 The project will be implemented over a period of 30 months from the date the grant is declared effective. The provisional schedule is presented in Appendix 4. The estimated project duration includes periods of submission of reports, observations, conducting workshops and finalization of reports.

3.4.2 The main tasks and timing of events are presented in Table 3.1 above to guide achievement of the main outputs. The Executing Agency will initiate advanced procurement actions in the recruitment of the consulting firm and the project manager to fast track implementation of the project activities. This will allow launching of the project as soon as the Grant is declared effective.

### **3.5 Procurement Arrangements**

3.5.1 Public procurement in Zimbabwe is regulated by Procurement Act No. 2/99 (Chapter 22:14), which was enacted in March 1999 and the accompanying Procurement Regulations of 2002 – issued under Statutory Instrument 171 of 2002. The Act establishes a State Procurement Board (SPB) as the apex body and provides for its functions; to make provisions for the procurement goods, construction work and services by the state, statutory bodies and other persons. A National Competitive Bidding (NCB) assessment carried out by the Bank in 2011 revealed the following; the Act and Regulations have inherent weaknesses, there are no national SBDs for procurement of Goods and Small Works, and the internal control of procurement processing would not be effective due to the deviations and omissions of critical provisions in the Procurement Act and Regulations. The assessment therefore concluded that the National Procurement Procedures for NCB in Zimbabwe are not fully consistent with the Bank’s Rules and Procedures and do not comply with the international best practice. In view of the foregoing, all procurement of goods, and acquisition of consulting services financed by the Bank will be in accordance with the *Bank’s Rules and Procedures: “Rules and Procedures for Procurement of Goods and Works”, dated May 2008 (revised July 2012); and “Rules and Procedures for the Use of Consultants”, dated May 2008 (revised July 2012);* as amended from time to time, using the relevant Bank Standard Bidding Documents, and the provisions stipulated in the Financing Agreement

3.5.2 The responsibility for the management of the project activities, including procurement processes, shall rest with the Project Management Team (PMT) to be established within the MoEWC, which will also provide procurement oversight.

3.5.3 An assessment of the capacity of the MoEWC to carry out procurement activities under the project was carried out. The assessment reviewed the organizational structure and resource capacity within the MoEWC. The assessment revealed that the MoEWC does not have a procurement unit and staff dedicated for procurement activities. To that end, an experienced Procurement Officer will be recruited under the project to carry out procurement activities. Further, A Project Implementation Manual will be developed to clearly outline roles and responsibilities of the various actors and control environment. Detailed procurement arrangements are presented in Technical Annex 6.

### **3.6 Disbursement Arrangements**

3.6.1 The AWF support for consultancy services and the immediate repairs civil works, estimated at Euro **1,537,200** (including 5% contingencies), shall be disbursed through the Direct



Payment Method upon verification and certification of invoices by the PMT, in accordance with the Bank’s disbursement rules and procedures.

3.6.2 The other AWF supported expenses related to payment of the PMT staff (Project Coordinator, Project Engineer, Procurement Expert, Finance Officer, Communication Officer), office supplies, TAC and NAC meetings and seminars, estimated at Euro 459,900 (including 5% contingencies), will be disbursed through the Special Account method in two tranches. The Recipient will open a Special Account for the AWF grant, denominated in Euros in a bank and on terms and conditions acceptable to the AWF. The Special Account will be replenished on the condition that the first advance has been utilised and justified up to at least 50%, and that a work plan acceptable to the Bank is submitted. The proposed disbursement arrangement for the project is indicated in the Table 3.2 below will be under the Special Account Method.

**Table 3.2 Disbursement Schedule for Special Account (Euro)**

Item	Disbursement Method	Disbursement Tranches	Amount	% of Total
1.	Direct Payment		1,537,200	77%
2.	Disbursement to Special Account	1 <sup>st</sup> Tranche	229,950	11.5%
		2 <sup>nd</sup> Tranche	229,950	11.5%
3.	Total		1,997,100	100.00%

3.6.3 Conditions precedent to first disbursement of the grant: The obligation of the Bank to make the first disbursement of the grant shall be conditional upon the entry into force of the Protocol of Agreement and (i) upon submission of evidence of the opening of a foreign currency denominated Special Account for the Project in a bank acceptable to the Bank for the deposit of the proceeds of the Grant and, (ii) assigning a project coordinator, a procurement officer and finance officer from the MoEWC to support project implementation.

3.6.4 Other Conditions: The Recipient shall, in form and substance satisfactory to the Bank, fulfil the following condition: (i) provide evidence within two (2) months of entry into force of the Protocol Agreement the establishment of a Technical Advisory Committee whose composition will be in line with section 3.2.5 above; (ii) submission of evidence of ZIMRA tax exemption to the Bank

### **3.7 Payment Modalities**

The MoEWC will also make an in-kind contribution to the project Management Team to be housed within the Ministry. Whereas Marondera Municipality will provide office space for the project consultants and the recruited project engineer.

### **3.8 Financial Management Arrangements**

3.8.1 The project’s FM will be managed within MoEWC’s existing National Coordinating Unit (NCU) set-up for donor projects. The Chief Accountant would coordinate all FM issues in line with Bank requirements using the existing fiduciary systems, under the overall responsibility of the Director of Finance. The NCU is currently implementing other donor-funded (UNDP, UNICEF etc.) projects, and the outcome from FM reviews of various documents and reports revealed that

adequate control exists and functioning effectively as required. There sound computerised FM systems based on Pastel Accounting Software operated by well qualified and experience dedicated accounting personnel. The overall conclusion of the assessment is that MoEWC's capacity to handle the FM aspects of the project, satisfies the Bank minimum requirements as per the Bank FM guidelines. The overall FM risk for the project is assessed as Moderate. Detailed results from the assessment and the agreed FM, disbursement and auditing arrangements for the proposed Project are presented in the annexes.

3.8.2 The MoEWC will liaise with the Ministry of Finance and Economic Development (MoFED) for appropriate tax exemptions to be granted by the Zimbabwe Revenue Authority (ZIMRA). To ensure compliance with this requirement, the granting of tax exemption by ZIMRA and the submission of appropriate evidence by Government to the Bank, will be included as a condition to subsequent disbursements.

3.8.3 Financial Reporting and Monitoring: In accordance with the Bank's financial reporting and audit requirements, the NCU/MoEWC will be required to prepare and submit to the Bank unaudited interim financial quarterly progress report no later than forty-five (45) days after the end of each calendar quarter. The quarterly financial reports will include a statement of sources and uses of funds, with the uses of funds analysed by activities/components and categories, comparing actual expenditure with budget and notes explaining significant variations in expenditures. Progress reporting templates will be provided to MoEWC's project team to adapt for their use.

3.8.4 External Audit: As indicated by MoEWC and collaborated by the OAG, the Ministry is up to date with its annual audit obligations; and there were no significant adverse findings against the Ministry on both the Ministry's annual appropriations audits as well previous and on-going donor-funded projects. In accordance with Bank financial reporting mandatory requirements, and AWF audit requirement practices, two audits (interim audit and final audit) would be carried out by an independent private audit firm to be appointed by the AWF at intervals to be agreed between the AWF and MoEWC (GoZ). The costs of the audits will be borne by AWF. In this regard, MoEWC would ensure financial records and statements are prepared and updated at all times in readiness for audits. The Bank has already shared a copy of the draft audit TOR with MoEWC as a guide.

### **3.9 Monitoring, Evaluation and Reporting**

3.9.1 A monitoring and evaluation plan for the Project will be implemented by the PMT based on the matrix and the logical framework of the project. This monitoring and evaluation plan will be part of the national framework for monitoring and evaluation of projects and programs to be strengthened.

3.9.2 The consultants will submit interim reports to the coordinator of the PMT, which will be also presented at the TAC for observations.

3.9.3 The supervision and monitoring of project activities at the Ministry and in Marondera will be subject to a quarterly report submitted to the AWF. This will maintain regular connections with the recipient, and will conduct a diligent review of Quarterly Progress Report of the recipient.

3.9.4 The AWF may consider at any time the need to undertake field supervision missions. A project completion report will be prepared by the recipient, which will focus on the activities and financial position of the project. The quarterly progress and completion report will, among others, document the performance indicators recorded in the logical framework describing the achievements and products.

## **4. PROJECT BENEFITS**

### **4.1 Environmental Aspects**

4.1.1 This project aims to create the conditions necessary to ensure the efficient, sustainable and equitable access to safe water and adequate sanitation in the Municipality of Marondera through an integrated approach that considers the whole water cycle, from the sub catchment area, to the water treatment, water supply, wastewater treatment and safe disposal of wastes.

4.1.2 The activities proposed in the various studies require consideration of environmental aspects and impacts of climate change.

### **4.2 Climate Change**

4.2.1 Zimbabwe is exposed to climate variability, which also pre-disposes to the high vulnerability to climate change impacts. According to the National Climate Change Response Strategy adopted in 2014, Zimbabwe is already feeling the impacts of climate change where there is increased variability in rainfall patterns, few cold days and increased hot days and extreme events. In most cases, these predictions are made at a larger scale and therefore do not take into account local variations that can be very important over time.

4.2.2 The Terms of Reference for the studies proposed for this project, recommend:

- Consideration of the time series of climate parameters (temperature, rainfall, frequency of floods and droughts);
- the development of climate scenarios and,
- Evaluating the impacts of variability / climate scenarios on water resources, the environment and the services related to water and sanitation in Marondera. The impacts of variability / climate scenarios on water infrastructure and the beneficiaries will also be assessed.

### **4.3 Gender**

4.3.1 The project aims to create the conditions to increase the participation of women, youth and other vulnerable groups in the management of water supply and sanitation services in the Municipality of Marondera and their participation in the consultative process of the different proposed studies.

4.3.2 Studies will propose concrete measures in the direction of enhancing the role of women in the sustainable management of infrastructure to be designed. The capacity building sessions to be organized at project start will give priority gender issues.

### **4.4 Social Equity**

The project aims to create the conditions necessary to improve living conditions in the Municipality of Marondera; including:

- Permanent/sustainable access to drinking water and adequate sanitation services;
- Improvement of living conditions, health and safety and the consequent reduction in the prevalence and spread of waterborne diseases;
- Strengthening social cohesion through outreach activities of the structures that will be responsible for managing WSS services;
- The possible creation of jobs through the introduction of innovative processes in sanitation and productivity gains.

## **4.5 Effectiveness and Efficiency**

4.5.1 The use of the integrated planning approach to develop the Master Plan for urban water management in Marondera will ensure efficiency in project management.

4.5.2 The choice of the appropriate base scenario for the development of the Master Plan will be based on an appropriate range of assessment criteria approved by all stakeholders and key partners of the project. This approach ensures the ownership of the integrated projects of investment that will flow from the implementation of the project by all stakeholders and funding by donors. The comprehensive and integrated approach to planning will ensure the effectiveness of WSS investments in Marondera favoring larger impact activities and cost.

## **4.6 Financial Sustainability**

4.6.1 The financial sustainability of the planned interventions will be provided by appropriate financial and economic assessment of scenarios and the Master Plan.

4.6.2 The PMT will actively engage with donors at the beginning and at all stages of the implementation of the project, and will coordinate the organization of the donor round table at the end of the project.

4.6.3 The financial sustainability of the project will be enhanced by awareness raising and capacity building of key actors on the one hand; and on the other hand through the establishment of appropriate technical assistance that will provide the required expertise to support the PMT and the TAC in the integrated planning of urban water management in Marondera.

## **4.7 Overall Sustainability**

4.7.1 The mobilization and participation of partners for the financing of technical and financial issues arising from the implementation of the project is one of the major pillars for the sustainability of project achievements.

4.7.2 It will be developed throughout the project implementation process by their systematic involvement in all stages of the implementation of the Project.

4.7.3 Improving the performance of the Municipality of Marondera will be taken into account in the studies to be conducted by the Project. The relevance of the chosen technical solutions to payment capacity and financial management of the Municipality will be also a factor of financial performance and long-term sustainability of these services.

# **5 CONCLUSIONS AND RECOMMENDATIONS**

## **5.1 Conclusions**

5.1.1 The project will contribute to improving the well-being of the population of Marondera through the provision of equitable and sustainable WSS services, strengthened resilience to effects related to climate change; and consolidated capacity of the town of Marondera to achieve the National Municipal performance targets as set by the Government of Zimbabwe as well as achieve the water-related targets as defined in the Sustainable Development Goals.

5.1.2 In order to reach these objectives, the project aims at developing a Master Plan for the management of water and sanitation services in the municipality of Marondera that includes an investment plan and an analysis of the availability of water resources at the sub catchment area at

the horizon 2035. In addition, the project could be considered as a pilot case for the introduction of an integrated urban water management approach.

5.1.3 It is suggested to introduce the principles of integrated urban water management for the improvement of water supply and sanitation in Marondera, which will lead to better coherence, coordination and communication between the various bodies responsible for urban planning and the entities responsible for the management of water supply, as well as with the sanitation services at the national, catchment/sub-catchment, municipal, and community level.

5.1.4 The total cost of the project (without taxes) is estimated to be 2,340,450 Euros. It will be financed through a grant from the African Water Facility amounting to 1,997,100 Euros representing 85% of the total amount, and co-financing of 179,550 Euros from GWP and other donors representing 8% of the total project cost. The Government of will make an in-kind contribution 165,800 Euros, representing 7% of the total project cost.

## 5.2 Recommendation

Based on the analysis of the relevance, efficiency and sustainability of the project, it is recommended that the African Water Facility approves a 1,997,100 Euros grant to the Republic of Zimbabwe, to help finance the studies of the Master Plan for the Integrated Urban Water Management for Marondera Municipality.

## ANNEXES

### ANNEX 1: DETAILED PROJECT COSTS

N.	Components and items	Unit	'000 €			Sources of financing		
			Quantity	Unit Cost	Total Amount	AWF	GWP & Donors	Gov. of Zimbabwe
<b>Component 1: Immediate Needs</b>								
<b>1.1</b>	<b>Consultant fees</b>							
1.1.1	Head of mission	Month	1	16	16	16		
1.1.2	National Water Supply and Sanitation Supply Expert	Month	2	6	12	12		
1.1.3	National Expert Environmentalist	Month	0.5	6	3	3		
	<i>Sub-total 1.1</i>				<b>31</b>	<b>31</b>		
<b>1.2</b>	<b>Works</b>							
1.2.1	Rejuvenating waste stabilization ponds	Lumpsum	1	180	180	180		
1.2.2	Replacement of selected pipelines, valves, broken trans-sewers pipes to the waste stabilization ponds	Lumpsum	1	70	70	70		
1.2.3	Repairs to the leakages of the water tanks	Lumpsum	1	100	100	100		
	<i>Sub-total 1.2</i>				<b>350</b>	<b>350</b>		
	<b>Total component 1</b>				<b>381</b>	<b>381</b>		
<b>Component 2 : Sustaining the Future</b>								
<b>2.1</b>	<b>Consultant fees</b>							
2.1.1	Head of mission	Month	11	16	176	176		
2.1.2	International Sanitation Expert	Month	6	12	72	72		
2.1.3	National Water Supply Expert	Month	10	6	60	60		
2.1.4	National Expert Rural and Urban Planner	Month	3	6	18	18		
2.1.5	National Expert Hydrogeologist	Month	3	6	18	18		
2.1.6	International Expert Climate Change	Month	3	12	36	36		
2.1.7	International Expert in Agriculture and Waste Reuse	Month	3	12	36	36		
2.1.8	National Expert Environmentalist	Month	3	6	18	18		
2.1.9	National Expert in Financial Management	Month	3	6	18	18		
2.1.10	International Solid Waste Management Expert	Month	3	12	36	36		

2.1.11	National Expert Economist Statistician	Month	3	6	18	18		
2.1.12	National Expert Sociologist	Month	3	6	18	18		
2.1.13	National Expert Institutional and Legal Expert	Month	6	6	36	36		
2.1.14	National Expert Drawer	Month	3	5	15	15		
2.1.15	National Support Staff	Month	12	3	36	36		
	<b>Sub-total 2.1</b>				<b>611</b>	<b>611</b>		
<b>2.2</b>	<b>Renting of offices and lodging</b>							
2.1.1	Office	Month	24	5	120	-		120
2.1.2	Long term lodging of international staff	Men-Month	80	1.5	120	120		
	<b>Sub-total 2.2</b>				<b>240</b>	<b>120</b>		<b>120</b>
<b>2.3</b>	<b>Transport</b>							
2.3.1	International trip	Flight	14	2	28	28		
2.3.2	Per Diem	Day	540	0.2	108	108		
	<b>Sub-total 2.3</b>				<b>136</b>	<b>136</b>		
<b>2.4</b>	<b>Other costs</b>							
2.4.1	Communication (Telephone, fax and internet)	Month	12	0.5	6	6		
2.4.2	Printing and distribution	Lumpsum	10	1	10	10		
2.4.3	Inspection of water supply and sanitation network (camera, pressure test, sampling, surveys)	Lumpsum	100	1	100	100		
2.4.4	Surveys (Topography / Geography) for the Strategic Plan and Master Plan	Lumpsum	40	1	40	40		
2.4.5	Monitoring of water source quantity and quality	Lumpsum	60	1	60	60		
	<b>Sub-total 2.4</b>				<b>216</b>	<b>216</b>		
	<b>Total Components 2</b>				<b>1203</b>	<b>1083</b>		<b>120</b>
<b>Component 3 : Capacity Development</b>								
<b>3.1</b>	<b>Fees</b>							
3.1.1	International Expert in IUWM	Month	2	16	32		32	
3.1.2	International Expert on Institutional Development	Month	2	12	24		24	
3.1.3	National Sociologist	Month	2	5	10		10	

3.1.4	Local Capacity Building and Institutional Professional	Month	6	5	30		30	
	<b>Sub-total 3.1</b>				<b>96</b>		<b>96</b>	
<b>3.2</b>	<b>Transport</b>							
3.2.1	International Trips	Flight	8	2	16		16	
3.2.2	Per Diem	Day	85	0.2	17		17	
3.3.3	Local Transport (renting of vehicle)	Day	85	0.2	17		17	
	<b>Sub-total 3.2</b>				<b>50</b>		<b>50</b>	
3.3	<b>Renting space</b>							
3.3.1	Training rooms	Day	<b>50</b>	<b>0.5</b>	<b>25</b>		25	
	<b>Sub-total 2.2</b>				<b>25</b>		<b>25</b>	
	<b>Total Component 3</b>				<b>171</b>		<b>171</b>	
<b>Component 4 : Project Management</b>								
<b>4.1</b>	<b>Project Management Team (PMT)</b>							
4.1.1	Project Engineer	Month	24	6	144	144		
4.1.2	Procurement Officer	Month	10	6	60	60		
4.1.3	Communication Officer	Month	6	3	18	18		
4.1.4	Office Assistant	Month	24	1	24	24		
4.1.5	Office	Month	24	1	24			24
4.1.6	Electricity - Telecommunication - Internet	Month	24	0.5	12			12
4.1.7	Media/communication coverage	Lumpsum	10	1	10	10		
4.1.8	Project Vehicle (CIF, handling, charges etc..)	Lumpsum	32	1	32	32		
4.1.9	Vehicle maintenance incl. insurance and registration	Lumpsum	15	1	15	15		
4.1.10	Fuel Supply	Month	0,5	24	12	12		
	<b>Sub-total 4.1</b>				<b>351</b>	<b>315</b>		<b>36</b>
4.2	<b>Office Equipment and Supplies</b>							
4.2.1	Laptop Computer	No.	1	2	2	2		
4.2.2	Desktop Computers for MIS and Hydraulics Software	No.	2	8	16	16		
4.2.3	Office furniture	Lumpsum	1	10	10	10		
4.2.4	Office Supplies	Lumpsum	10	1	10	10		
	<b>Sub-total 4.2</b>				<b>38</b>	<b>38</b>		
<b>4.3</b>	<b>Meetings</b>							
4.3.1	Meetings of the Technical Advisory Committee	Number	10	0.5	5	5		



4.3.2	Meetings of the NAC	Number	6	2.5	15	15		
4.3.3	Launch meeting and final evaluation meeting	Number	2	10	20	20		
4.3.4	Training sessions for Government staff	Number	2	15	30	30		
4.3.5	Donor Round Table	Number	1	15	15	15		
	<b><i>Sub- total 4.3</i></b>				<b>85</b>	<b>85</b>		
	<b><i>Total Component 4</i></b>				<b>474</b>	<b>438</b>		<b>36</b>
	<b>Total components 1,2,3,4</b>				<b>2229</b>	<b>1902</b>	<b>171</b>	<b>156</b>
	<b>Unforeseen (5 %)</b>				<b>111</b>	<b>95</b>	<b>9</b>	<b>8</b>
	<b>TOTAL PROJECT COST</b>				<b>2340</b>	<b>1997</b>	<b>180</b>	<b>164</b>

## ANNEX 2: PROJECT COSTS BY CATEGORY

### Estimated Project Cost by Category of Expenditures (in Euros with 5% cont.)

Item	Category	Amount and Sources			Total
		AWF	GWP & Donors	Gov. of Zimbabwe	
<b>A</b>	<b>Goods</b>				
1	Project Vehicle	32,000			32,000
2	Office furniture and equipment	38,000			38,000
	<b>Total – Goods</b>	<b>70,000</b>			<b>70,000</b>
<b>B</b>	<b>Services</b>				
<b>B.1</b>	<b>Consultancy Services</b>				
3	International consultants	372,000	56,000		428,000
4	National consultants	270,000	40,000		310,000
5	Air travel, allowances and lodging	256,000	33,000		289,000
6	Surveys and investigation	200,000			200,000
7	Communication	6,000			6,000
8	Report Preparation , printing and distribution	10,000			10,000
9	Local Transportation		17,000		17,000
	<b>Subtotal consultancy services</b>	<b>1,114,000</b>	<b>146,000</b>		<b>1,260,000</b>
<b>B.2</b>	<b>Project Management Staff</b>				
10	Project Engineer	144,000			144,000
11	Procurement Officer	50,000			50,000
12	Communication Officer	18,000			18,000
13	Office Assistant	24,000			24,000
	<b>Subtotal Project Management Services</b>	<b>236,000</b>			<b>236,000</b>
	<b>Sub-total Services</b>	<b>1,350,000</b>	<b>146,000</b>		<b>1,496,000</b>
<b>C</b>	<b>Works</b>		-		
14	Replacement of selected pipelines, valves, broken trans-sewers pipes to the waste stabilisation ponds	180,000	-		180,000
15	Rejuvenation of waste stabilisation ponds	70,000			70,000
16	Repairs to the leakages of the water tanks	100,000			100,000
	<b>Subtotal Works</b>	<b>350,000</b>			<b>350,000</b>
<b>D</b>	<b>Project Management</b>	-			
18	Workshops, meetings and seminars	95,000	25,000		120,000
19	Project office support	37,000			37,000
20	Office space and utilities			156,000	156,000
	<b>Subtotal Service (Project Management)</b>	<b>132,000</b>	<b>25,000</b>	<b>156,000</b>	<b>313,000</b>
<b>E</b>	<b>Total</b>	<b>1,902,000</b>	<b>171,000</b>	<b>156,000</b>	<b>2,229,000</b>
	<b>Contingency (5%)</b>	<b>95,100</b>	<b>8,550</b>	<b>7,800</b>	<b>111,450</b>
	<b>Grand Total</b>	<b>1,997,100</b>	<b>179,550</b>	<b>163,800</b>	<b>2,340,450</b>

### ANNEX 3: DISTRIBUTION OF COSTS PER COMPONENT

Item	Description	Comp 1	Comp 2	Comp 3	Comp 4	Total
<b>A</b>	<b>Consultancy Services</b>					
1	International consultants	16,000	356,000	56,000		428,000
2	National consultants	15,000	255,000	40,000		310,000
3	Air travel, lodging and allowance		256,000	33,000		289,000
4	Cost of onsite transport			17,000		17,000
5	Survey and investigation		200,000			200,000
7	Report preparation		16,000			16,000
8	<b>Subtotal - Consultancy Services</b>	<b>31,000</b>	<b>1,083,000</b>	<b>146,000</b>		<b>1,260,000</b>
<b>B</b>	<b>Works</b>					
1	Immediate civil works	350,000				350,000
	<b>Subtotal – Works</b>	<b>350,000</b>				<b>350,000</b>
<b>C</b>	<b>Project Management</b>					
1	Project Vehicle				32,000	32,000
2	Project Implementation Staff				236,000	236,000
3	Workshops, meetings and seminars			25,000	95,000	120,000
4	Office furniture and equipment				38,000	38,000
5	Project office support				37,000	37,000
6	Office space and utilities				156,000	156,000
	<b>Subtotal Project Management</b>				<b>594,000</b>	<b>594,000</b>
<b>D</b>	<b>Total</b>	<b>381,000</b>	<b>1,083,000</b>	<b>171,000</b>	<b>594,000</b>	<b>2,229,000</b>
<b>E</b>	<b>Contingency (5%)</b>	<b>19,050</b>	<b>54,150</b>	<b>8,550</b>	<b>29,700</b>	<b>111,450</b>
<b>F</b>	<b>Grand total</b>	<b>400,050</b>	<b>1,137,150</b>	<b>179,550</b>	<b>623,700</b>	<b>2,340,450</b>
<b>G</b>	<b>AWF Support</b>	<b>400,050</b>	<b>1,137,150</b>		<b>442,827</b>	
<b>H</b>	<b>% AWF Support</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>	<b>71%</b>	



## **ANNEX 5: PROJECT MANAGEMENT TEAM'S TERMS OF REFERENCE**

- 1. The Project Coordinator** – will be based in the MoEWC, will be a Senior Professional appointed by the MoEWC with a solid experience in project management. His or her CV will be submitted to the AWF for a no-objection. He will be responsible for coordinating the following activities:
  - Participate in launching and in the recruitment process of the internal consultants who will be undertaking the bulk of the work.
  - Provide an oversight role on the management and implementation of all project-related activities, and preparing a work plan at the beginning of each fiscal year for the 2 year period.
  - Provide a monthly report to the MoEWC and AWF on administrative, financial, accounting, contracting, implementation and monitoring issues, and ensuring the liaison with the African Water Facility.
  - Organize meetings of the Technical Advisory Committee (TAC) every 3 months, ensuring the good relationship between all actors involved, using existing inter-institutional coordination mechanisms, and organizing round table of donors to present the progress reports / proposals and submit them for their consideration for funding.
  - Organize monthly meetings of the complete Project Management Team in order to review progress and resolve bottlenecks.
  - Facilitate the capacity building activities with the support of the consultants recruited for Component 3.
  - Coordinate and monitor the performance of consultants.
  
- 2. The Project Engineer** - will be based at the Marondera Municipality. Marondera Municipality has agreed to provide office space for project engineer and the team of consultants. He/she will be a senior Engineer with at least a master's degree in a civil engineering-related field and a minimum of 10 years' experience in municipal engineering with a particular focus on water supply and sanitation. He/she should have demonstrable experience in the planning, design and construction of water and sewer reticulations, operation of water sewage treatment plants, and management of municipal refuse. He/she should be a Chartered Engineer register with the Engineering Council of Zimbabwe or equivalent. The Project Engineer will be :
  - Collaborating closely with the project consultants whose Terms of References are detailed in Annex 8. The Consultants will also be based in Marondera.
  - Reporting to the Project Coordinator, on a monthly basis, on progress of all project activities.
  - Liaising with council, provincial government and other local stakeholders on meetings/workshops required by the project consultants.
  - Providing technical assistance to Marondera Municipality on the implementation of short-term projects under Immediate Needs and advising the council on all water supply and sanitation projects undertaken during the Project Implementation period

so that they would dovetail smoothly with the spirit and intention of the wider IUWM project.

- Assisting in needs identification and selection of local participants for the Capacity Building component.
- Assist the council in documentation and water information management systems so that such data will be easily available for the IUWM consultants and for future efficient management of council data for all future purposes.
- Ensuring that senior staff of the Municipality of Marondera are fully involved and informed of project progress. It is important to note that the success of the project will depend greatly on the ownership and involvement of staff from the Municipality.

**3. The Procurement Officer** – will be based at the MoEWC headquarters in Harare. He/she will have at least a bachelor's degree in supply chain management, logistics or business administration and at least 5 years proven working experience in a procurement management role. He/she should demonstrate familiarity with sourcing and vendor management software, a knack for negotiation and networking, and ability to gather and analyse data and to work with figures. The Procurement Officer will report to the Project Coordinator and will receive initial support and training from a part-time procurement expert during the first year of the project and will be responsible for:

- Achieving the planned acquisitions, and recruitment of consultants and reporting to the Project Coordinator on all progress through a monthly report.
- Ensuring approval of expected end products of the project by the appropriate bodies of the Ministry in charge of water in accordance with the guidelines of national policies and strategies in the sector.
- Assisting the Project Coordinator in developing, implementing and reviewing the Project's procurement policies, strategy and procedures in support of the Project's aims and objectives
- The provision of an effective and efficient supplies, procurement and stores function, ensuring they are adequately resourced and organised to meet Project requirements and achieve best value.
- Undertaking tender and quotation exercises in accordance with Project procurement procedure and rules
- Tracking and reporting key functional metrics to reduce expenses and improve effectiveness
- Performing cost and scenario analysis, and benchmarking
- Assessing, managing and mitigating risks

**4. The Communication Officer**, will be based at the MoEWC headquarters in Harare and will report to the Project Coordinator. He/she should have at least 5 years in-house or agency experience and a bachelor's degree in a communications-related area. He/she should have a

demonstrable passion for public relations and excellent writing skills and the ability to form great relationships with external and internal stakeholders and also the wider media. The responsibilities will include:

- Ensuring communication among stakeholders and visibility of project activities.
- Facilitating participatory consultations with the relevant communities, municipal and provincial authorities and other stakeholders.
- Organizing project meetings for the Technical Advisory Committee and the Project Management Team.
- Writing a monthly report on progress of activities to be submitted to the Project Coordinator.

**5. The Finance Officer will** based at the MoEWC headquarters in Harare with frequent visits to Marondera, and will be seconded from the Ministry staff. He/she will be:

- Keeping track of and register all financial transactions related to the implementation of the project in accordance with the financial procedures as determined by the Government of Zimbabwe, and the understanding that accounts will be audited on a yearly basis by an externally appointed and independent auditor.
- Preparing a financial monthly report to be submitted to the Project Coordinator.
- Building the capacity of the financial department of the Municipality of Marondera. It is important to note that the current financial capacity of the Municipality of Marondera is weak, and it is expected that the Financial Officer will work with the Director of Finance of the Municipality in order to strengthen municipal accounting and financial procedures.

## ANNEX 6: PROCUREMENT ARRANGEMENTS

### 1. Introduction

1.1 The estimated project cost is EUR 2,340,500 funded by the Bank and Government of Zimbabwe. Procurement of goods, works and acquisition of consulting services financed by the Bank will be in accordance with the Bank's Rules and Procedures: "Rules and Procedures for Procurement of Goods and Works", dated May 2008, revised July 2012; and "Rules and Procedures for the Use of Consultants", dated May 2008, revised July 2012, using the relevant Bank Standard Bidding Documents, and the provisions stipulated in the Financing Agreement. *Procurement of goods and services financed by the Government shall be done using Government Procedures.*

1.2 The various items under different expenditure categories and related procurement arrangements are summarized in Table 3.1 below. Each contract to be financed under the Project, the different procurement methods or consultant selection methods, the need for prequalification, estimated costs, prior-review requirements, and time frame are agreed between the Borrower and the Bank project team and are provided in the attached Procurement Plan.

**Table 3.1 Summary of Procurement Arrangements**

No	Project Categories	Euro'000				
		NCB	Shortlist	Other*	Non-Bank Funded	Total
<b>1.0</b>	<b>Goods</b>					
1.1	Vehicle			32		32
1.2	Office furniture and equipment			38		38
<b>2.0</b>	<b>Works</b>					
2.1	Rejuvenation of waste stabilization ponds			70		100
2.2	Replacement of selected pipelines, valves, broken trans-sewers pipes to the waste stabilization ponds	180				200
2.3	Repairs to the leakages of the water tanks			100		100
<b>3</b>	<b>Consultancy Services</b>					
3.1	Consultancy Services for the Development of an Integrated Urban Water Management Masterplan for Marondera		1,114		146	1,286
3.2	Project Engineer		144			144
3.3	Procurement Officer		60			60
3.4	Office Assistant			24		
3.5	Communications Officer		18			18
<b>4</b>	<b>Other Expenditures</b>					
4.1	Workshops, meetings and seminars			85	25	110
4.2	Operating Expenditures (Project Office Support)			37		37
4.3	Office Space & Utilities				156	156
	Sub Total	200	1,336	366	327	2,229
	Contingency (5%)	10	66.8	18.3	16.4	111.5
	Total	210	1,402.8	384.3	343.4	2,340.5
	Total AWF Funded		1,997			

\* Others refers to shopping or Government of Zimbabwe Procurement Procedures acceptable to the Bank.



## **2. Goods**

- Procurement of contracts for goods above UA 0.3 million per contract will be carried out under International Competitive Bidding (ICB) procedures, using the Bank's Standard Bidding Documents (SBDs). *There shall be no procurement under this threshold*
- Procurements for contracts for goods above UA 0.1 million but below UA0.3 shall be carried out under National competitive Bidding procedures, using the Bank's Standard Bidding Documents (SBDs). *There shall be no procurement under this threshold*
- Contracts for goods valued below 0.1 million shall be procured using shopping. *These would include procurement of vehicle and office furniture and equipment packages.*
- Other expenditures related to workshops, meeting and seminars and operating expenses valued (including vehicle maintenance, insurance, shall be procured using the Governments procedures, acceptable to the Bank.

## **3. Works**

- Procurement of contracts for works above UA 1.5 million per contract will be carried out under International Competitive Bidding (ICB) procedures, using the Bank's Standard Bidding Documents (SBDs). *There shall be no procurement under this threshold*
- Procurements for contracts for works above UA 0.1 million but below UA1.5 shall be carried out under National competitive Bidding procedures, using the Bank's Standard Bidding Documents (SBDs). *These shall include Replacement of selected pipelines, valves, broken trans-sewers pipes to the waste stabilization pond.*
- Procurements for contracts for works below UA 0.5 million but below UA1.5 shall be carried out using Shopping procedures, using the Bank's Standard Bidding Documents (SBDs). *These shall include Rejuvenation of waste stabilization ponds, and Repairs to the leakages of the water tanks packages*

## **4. Consulting Services**

- Acquisition of consultancy services related to the Development of an Integrated Urban Water Management Masterplan for Marondera, shall be done through shortlisting of firms, using Quality and Cost Based Selection (QCBS).
- When the amount of the contract is less than UA 200,000, the Borrower may limit the Publication of a Specific Procurement Notice (SPN) requesting for expressions of interest to national or regional newspapers. However, if foreign firms express interest they shall be considered

## **5. Other Expenditures**

Incremental recurrent expenditures during project implementation, including Project Staff, maintenance of vehicles, fuel, office supplies, , consumables, , advertising expenses, internet service, car insurance, travel, per diems, and accommodations, but excluding salaries of civil and public servants, will be procured using the Government of Zimbabwe procurement procedures acceptable to the Bank.

## **6. Assessment of the Executing Agency**

6.1 An assessment of the capacity of the Executing Agency to implement procurement actions for the project has been carried out by the Bank. The objectives of the assessment was to (a)

evaluate the capability of the implementing agency and the adequacy of procurement and related systems in place; (b) assess the institutional and procedural risks that may negatively affect the ability of the agency to carry out the procurement process; (c) identify risks, develop and incorporate mitigation measures to address the identified deficiencies to minimize the identified risks.

6.2 The assessment reviewed the organizational structure and resource capacity within the MoEWC. The assessment revealed that the MoEWC does not have a procurement unit and staff dedicated for procurement activities. The MoEWC has inadequate capacity to carry out procurement activities such as those envisaged under this Project. In addition, the MoEWC has no experience in handling procurement activities under a Bank (or similar MDB) funded project. To that end, a PMT will be established within the MoEWC to carry out project activities. The project team will comprise: (i) A Project Coordinator, (ii) Project Engineer, (iii) Part-time procurement expert, (iv) Procurement Officer, (v) Communication officer (vi) the town’s Engineer and, (vi) Finance Officer. The responsibility for the management of the project activities, including procurement processes, shall rest with the Project Management Team. The Ministry of Environment Water and Climate will provide oversight.

6.3 The issues concerning the procurement component for implementation of the project have been identified and the corrective measures which have been agreed are indicated in Table 3.2 below.

## 7 Risk Mitigation Measures

7.1 The capacity and risk assessment of the Executing Agency has been done and is rated high. The increased workload resulting from this project will require technical support to compliment MoEWC capabilities to mitigate against implementation risks. This will be done through the engagement of Individual Consultants as indicated in Para 6.2 above, including an experienced procurement officer to be dedicated for procurement activities. In addition regular supervision missions will include training sessions related to procurement activities. Once all the planned measures are addressed, the risk assessment is expected to reduce to Low. The detailed assessment and mitigation measures are in the Procurement Risks and Mitigation Table below.

**Table 7.1 Procurement Risks and Mitigation Table**

	<b>Issue</b>	<b>Risk Mitigation/Corrective Measure</b>	<b>Responsible</b>	<b>When</b>
1	Delays in procurement processing, due to limited experience and knowledge of Bank Rules & procedures	- Recruitment/Nomination of an experienced Procurement Expert to carry out procurement activities under the project  - Training Sessions and clinics	MoEWC  AfDB	Three months within Project effectiveness  From Project Launching and throughout the project implementation period
2	Ambiguous or unclear procedures and roles during project implementation	Development of an implementation manual	MoEWC	Six months within Project effectiveness

The Project Implementation Manual will include, in addition to the procurement procedures, the SBDs to be used for each procurement method, as well as model contracts for works and goods procured.

## **8 General Procurement Notice**

The GPN text will be discussed and agreed with the MoEWC upon approval of the Financing by the Bank's President, and will be issued for publication<sup>1</sup> in UNDB online and in the Bank's Internet Website.

## **9 Procurement Plan**

The Borrower will prepare a Procurement Plan which will also be available in the Project's database and in the Bank's external website. This Procurement Plan will be updated by the Borrower's Project Team annually or as required to reflect the actual project implementation needs and improvements in institutional capacity. Any revisions proposed to the Procurement Plan shall be submitted to the Bank prior no objection. The Borrower shall implement the Procurement Plan in the manner in which it has been agreed with the Bank.

## **10 Review Procedures**

For packages subject to prior review, the following documents are subject to review and approval before promulgation:

- Specific Procurement Notices;
- Tender Documents;
- Requests for Proposals;
- Tender Evaluation Reports;
- Reports on Evaluation of Consultants' Proposals, including recommendations for Contract Award.
- Draft Contracts will also be subject to the Bank's approval if they have been amended from the original drafts included in the tender documents.
- The Bank's no-objection for consultancy technical proposals' evaluation report will be required before the financial evaluation is carried out.

## **11 Review Thresholds**

### **11.1 Goods and Works**

**Prior Review Threshold:** Procurement Decisions exceeding UA **100,000** for goods shall be subject to Prior Review by the Bank.

### **11.2 Selection of Consultants**

**Prior Review Threshold:** Prior review shall be required for all selection decisions related to consulting firms and for individual consultants.

## **12 Frequency of Procurement Post Review Mission**

Due to the risks identified, the Project will require close supervision to ensure that the identified fiduciary safeguards are effective. Further, in addition to the prior review, supervision missions, bi-annual procurement post review missions will be conducted by the Bank Group. However, the

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<sup>1</sup> The General Procurement Notice is prepared by the Borrower and submitted to the Bank, which will arrange for its publication in the United Nations Development Business (UNDB online) and in Bank's Internet Website.

Bank Group preserves the right to conduct its procurement audit at any time during the project implementation. The Executing Agency will maintain all relevant procurement records in accordance with Bank requirements for all procurements subject to post review. Information on procurement processing will be collected by the Executing Agency quarterly and shall be included in detail in the Project Quarterly Progress Report to be submitted to the Bank.

## **ANNEX 7: FINANCIAL MANAGEMENT ASSESSMENT REPORT**

### **1. Background**

1.1 A Financial Management (FM) assessment of the Ministry of Water, Environment and Climate (MoEWC) was carried out by Bank's Fiduciary Services Division (ORPF.2) in accordance with the Financial Management Policy in African Development Group financed operations (2014), the Financial Management manual for Bank Group Public Sector Operations (2014), the and Financial Management Implementation Guidelines for Bank Group Operations (2014). The objective of the assessment was to determine whether MoEWC as the designated Project Executing Agency, has acceptable FM arrangements, capable of (i) correctly and completely recording all transactions and balances relating to the project; (ii) facilitating the preparation of regular, timely and reliable financial statements; (iii) safeguarding the project's assets; and (iv) can be subjected to auditing arrangements acceptable to the Bank.

1.2 This FM assessment was done during the month of June 2015 as part of the project preparation mission. The initial results of the assessment and the agreed financial management, disbursement and auditing arrangements for the proposed project are documented below.

### **2. Use of Country Systems**

2.1 In 2009 the Government of Zimbabwe instituted action to stabilize the economy through the Short Term Emergency Recovery Programme (STERP) and the Three Year Macro-economic Policy and Budget Framework: 2010-2012 (STERP II). Key public sector management challenges include the need to develop a clear strategy for public sector reform, improve the efficiency, effectiveness, transparency and accountability of public expenditure management (particularly budgeting, procurement, and tax administration), and human resources management. A World Bank Country Integrated Fiduciary Assessment (CIFA) carried out in 2012 found that good progress has been made since 2009 in re-establishing a functioning budget process and in restoring macroeconomic and fiscal discipline. Particular changes in the law have been the enactments of the Public Finance Management (PFM) Act 2010, Audit Office Act, and the simplification of the Income Tax Act to provide a sound legal framework for a smooth PFM reform take-off. Despite these progress, there are a number weaknesses the CIFA highlighted which GoZ with the support of Country Partners (including the Bank) are seeking to address through various interventions.

2.2 To strengthen accountability in the use of public and other donor-funded project resources whiles there are on-going efforts to address the overall weaknesses in the country's PFM system at the macro level, the MoEWC has created a coordination unit to focus on implementing donor-funded projects. In line with Bank's commitment to Paris Declaration (2005) to make use of existing country systems to the maximum extent possible, the proposed project would therefore make use of various aspects of the existing system including budgeting, accounting, internal controls, funds flow, and financial reporting.

### **3. Harmonization with Other Donors**

Even though the MoEWC has received and continue to receive various forms of support from development partners including the UNDP, UNICEF, and the Global Environment Facility (GEF) etc. in support of the Ministry's activities, there has been little effort by MoEWC towards

harmonizing the support and interventions from these partners. The proposed project is therefore a stand-alone intervention to be financed and implemented solely by the Bank aimed at improving water, waste-water, and solid waste management services in Zimbabwe. Consequently, FM-related and reporting issues are tailored in line with the Bank using the existing Government of Zimbabwe (GoZ) fiduciary systems.

#### **4. Executing Agency**

4.1 The MoEWC has been designated as the Executing Agency to coordinate the implementation of the project using their existing system. Through the NCU the MoEWC has implemented and continue to implement donor-funded projects; and reviews carried out during this FM capacity assessment (including review of respective donor project implementation reports etc.) revealed MoEWC's performance has so far been satisfactory. The Department of Finance, Human Resource and Administration is headed by Director of Finance who is assisted by the Chief Accountant and a team of seven (7) accountants and accounting assistants with varied qualifications and years of work experience in implementing both government and small-sized donor-funded projects (including UNICEF, UNDP etc.). The assessment further revealed separate Bank accounts are opened for separate donors and operated in line with specific donor financial requirements and guidelines. There is sound FM system which is computerized and based on Pastel Accounting software package for recording and processing financial transactions, and operated by a well-trained and experience accounting personnel to generate financial reports to donor-specific requirements.

4.2 In line with the requirements of the Public Finance Management Act (Chapter 22:19) of 2010, there is a functional Internal Audit department within MoEWC, to ensure transparency and accountability of public funds and assets. Outcome from review of sample processed transactions revealed adequate internal controls exists and appears to be functioning well; and further reviews of Spot Check Reports carried out by Ernst & Young (private auditors for on-going UNICEF projects within MoEWC) did not highlight any adverse findings. A meeting held between the Bank's assessment team and the Office of the Auditor General (OAG) on fiduciary performance of the Ministry also confirmed, MoEWC has consistently received clean audit opinions for the past six (6) years on both the Ministry's annual audited financial statements on the national appropriations votes as well as on-going donor-funded projects audited by the OAG.

#### **5. Summary of Assessed Financial Management Arrangements**

5.1 The results of the assessment (that included a review of the budgeting, accounting, internal controls, funds flow, financial reporting and auditing arrangements) revealed the existing arrangements meet the Bank's minimum requirements to ensure that project funds will be used in economic and efficient manner and for the intended purpose. Overall FM residual risk rating is assessed as Moderate. Detailed outcome from analysis of the FM question and interviews held with key MoEWC officials regarding the various FM elements are documented below.

5.2 **Planning and Budgeting:** MoEWC currently prepares its annual budget in line with laid-down Government annual budget process and procedures which requires all budget holders to prepare their annual budget for consolidation. Budgeting and planning for donor-funded projects

are done in line with specific donor requirements. Adequate budgetary control procedures exist over utilization of votes disbursed to the Ministry, as well as those received from donors. The proposed operation will follow the existing donor budgeting principles and taking into account Government laid down budgeting processes. As part of the annual budgeting process, the NCU within MoEWC will prepare an annual work plan and budget for implementing project activities taking into account the specific components of this project, and submit to the Bank for review and endorsement.

**5.3 Accounting Policies, Procedures and Information Systems:** There is a functional computerised accounting system for recording, processing transactions and reporting purposes. Government accounting is based on SAP accounting system, whereas donor-funded projects accounting is based on Pastel accounting software, using separate account codes to record and process specific donor financial transactions for reporting purposes. The current reports prepared from the system were found to be comprehensive in line with specific donor reporting requirements. Accounting for the proceeds of the proposed project will therefore follow MoEWC's existing donor internal transaction processing procedures, payment voucher preparation, authorization and approval processes. Agreed reporting formats for IQFRs was discussed with the MoEWC's Finance team and copies would be made available to the team for adoption and customization into the computerized donor accounting system once the project is approved.

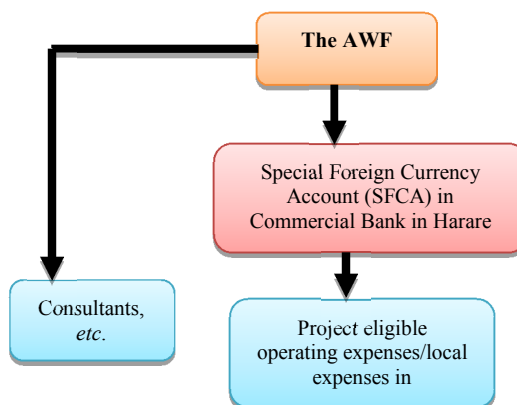
**5.4 Internal Control and GAC:** The day to day financial operations within MoEWC is guided by GoZ's approved internal control rules and regulations as contained in the PFM Act (Chapter 22:19) of 2010. There is a functional Internal Audit which seeks to ensure transparency and accountability in the utilization of public funds and assets. On-going projects are also subjected to periodic reviews by the respective donor staff or appointed inspecting teams during project supervisions. The proposed project would be covered by the existing internal control rules and regulations. Various bank rules and guidelines (including procurement rules, FM guidelines and disbursement handbook etc.) and Bank supervision missions would provide additional guidance.

**5.5 Funds Flow and Disbursements Arrangements:** MoEWC currently maintains various bank accounts to receive funding from various donors to finance on-going project activities. Cash book as well as monthly bank reconciliations are prepared for these bank accounts, which are properly reviewed and signed-off by the Chief Accountant. All Bank funds to be disbursed under the project would be in accordance with rules and procedures as set out in the Bank's Disbursement Handbook (that can be accessed from the Bank's website) as applicable. While larger contract amounts will be paid using the direct payment, special account will be used only for payment of small eligible expenditure items under the project. Specifically, MoEWC would open one Special Account in foreign currency at a local Bank in Harare acceptable to the Fund to finance eligible operating and other recurring costs under the project. The operation of the bank accounts will be in line with MoEWC existing procedures. The Bank will issue a Disbursement Letter providing further details on disbursement methods and all other relevant guidelines. Figure 1 below summarizes funds flow arrangement for the Bank resources under the project.

**5.6 Counterpart Contribution:** All counterpart contribution would be in-kind including, MoEWC project staff salaries (for the project co-ordinator, Procurement officer and project accountant), office supplies, utilities etc. Consequently, no separate Bank account would be

opened for purpose of beneficiary contribution. MoEWC will endeavour to keep appropriate records documenting the value of GoZ's in-kind contribution under the project.

**Fig 1: Funds Flow Diagram (AWF Resources)**



**5.7 Financial Reporting and Monitoring:** MoEWC currently generate monthly management reports covering the Ministry's appropriation votes using the SAP system for senior management's decision making. In addition, periodic financial reports are produced using the project accounting system (the Pastel accounting software) in line with specific donor requirements. These reports includes receipts and payments statement, budgetary control reports showing budgets, actual and variances etc. Reviews of existing reports revealed they are comprehensive and adequate. In this regard, the overall responsibility for financial reporting (including preparation and submission of withdrawal applications and payment requests to the Bank, preparation and submission of periodic progress reports etc.) will rest with the Director of Finance, MoEWC. In accordance with the Bank's financial reporting and audit requirements, the NCU/MoEWC will be required to prepare and submit to the Bank unaudited interim financial quarterly progress report no later than forty-five (45) days after the end of each calendar quarter. The quarterly financial reports will include a statement of sources and uses of funds, with the uses of funds analysed by activities/components and categories, comparing actual expenditure with budget and notes explaining significant variations in expenditures. Progress reporting templates will be provided to MoEWC's project team to adapt for their use.

**5.8 External Audit:** As indicated by MoEWC and collaborated by the OAG, the Ministry is up to date with its annual audit obligations; and there were no significant adverse findings against the Ministry on both the Ministry's annual appropriations audits as well previous and on-going donor-funded projects. In accordance with Bank financial reporting mandatory requirements, and AWF audit requirement practices, two audits (interim audit and final audit) would be carried out by an independent private audit firm to be appointed by the AWF at intervals to be agreed between the AWF and MoEWC (GoZ). The costs of the audits will be borne by AWF. In this regard, MoEWC would ensure financial records and statements are prepared and updated at all times in readiness for audits. The Bank has already shared a copy of the draft audit TOR with MoEWC as a guide.

## 6. FM Action Plan

To further strengthen the FM systems for the proposed project, the following actions were discussed and agreed with MoEWC to be undertaken, as indicated in Table 1.



**Table 1: FM Action Plan**

#	Required Actions	By Whom	By When	Comment
1	Assign a dedicated Project Accountant whose experience is acceptable to the Fund	Director of Finance, MoEWC	Before first disbursement	Accounts personnel already exists and awaiting assignment.
2	Create separate codes in the existing computerized accounting system to record and process project transactions.	Chief Accountant	Before first disbursement	Agreed with Chief Accountant, MoEWC
3	Provide training in Bank FM and disbursement procedures to MoEWC's NCU Finance team.	Financial Management Specialist, AfDB	Project technical launching	FM and disbursement guidelines/handbook shared with MoEWC FM team and FM training will take place during project technical launching.

**6.1 FM Conditionality. There is no FM effectiveness condition.** However, MoEWC and the Bank would ensure timely completion of all the above FM actions at the indicative dates to facilitate timely start of project activities. In addition, to ensure timely compliance with the requirement to grant full tax exemption for the project, it was discussed and agreed with GoZ that granting of tax exemption by ZIMRA and submission of appropriate evidence by GoZ to the Bank, would be included as part of conditions precedent to first disbursement.

The frequency of FM supervision is determined by the outcome of the assessed risk rating. The overall FM risk rating for the MoEWC under the proposed project is assessed as “Moderate” and hence subject to one supervision per year. Other supervision activities would be desk reviews of the IQFRs, annual audit reports, and management letters for follow-up actions. The outcome of these reviews would inform the intensity of subsequent FM supervisions.

**Table 2: Detailed FM Risk Assessment**

Risk Type	Rating Risk	Risk Mitigation Measures Incorporated into the Project Design	Risk after Mitigation
<b>Inherent Risk</b>			
<b>Country Level</b> Various diagnostic work reports (including the 2012 WB CIFA) highlighted a number of weaknesses in the Country's PFM system following a decade of economic decline etc.	<b>S</b>	<ul style="list-style-type: none"> <li>There is on-going PFM reform supported by cooperating partners to address various weaknesses.</li> </ul>	<b>S</b>
<b>Entity Level</b> Weak FM capacity at the decentralized levels	<b>H</b>	<ul style="list-style-type: none"> <li>All project FM will be handled within MoEWC and no funds will be handled at the decentralized level.</li> </ul>	<b>S</b>

<b>Risk Type</b>	<b>Rating Risk</b>	<b>Risk Mitigation Measures Incorporated into the Project Design</b>	<b>Risk after Mitigation</b>
<b>Project Level</b> No prior experience in Bank FM and disbursement procedures.	<b>S</b>	<ul style="list-style-type: none"> <li>▪ Bank FM team will provide relevant FM and disbursement training; and provide relevant templates as guidance.</li> </ul>	<b>M</b>
<b>Overall Inherent Risk</b>	<b>S</b>		<b>S</b>
<b>Control Risk</b>			
<b>Budgeting</b> <ul style="list-style-type: none"> <li>▪ No material risks identified</li> </ul>	<b>L</b>	<ul style="list-style-type: none"> <li>▪ N/A.</li> </ul>	<b>L</b>
<b>Accounting</b> MoEWC lacks prior experience in Bank FM procedures	<b>S</b>	<ul style="list-style-type: none"> <li>▪ The project will benefit from the team's prior experience with other donors</li> <li>▪ Bank FM team will provide training to the FM team</li> </ul>	<b>M</b>
<b>Internal Control</b> <ul style="list-style-type: none"> <li>▪ No material risks identified</li> </ul>	<b>L</b>	<ul style="list-style-type: none"> <li>▪ N/A</li> </ul>	<b>L</b>
<b>Funds Flow</b> MoEWC has no prior experience in Bank FM and disbursement procedures.	<b>S</b>	<ul style="list-style-type: none"> <li>▪ Bank will provide disbursement training to MoEWC FM team; and appropriate templates and guidance for use by the project team.</li> </ul>	<b>M</b>
<b>Reporting and Monitoring</b> Lack of familiarity with Bank reporting requirements by the NCU/MoEWC could delay reports submission.	<b>S</b>	<ul style="list-style-type: none"> <li>▪ Relevant FM reporting template and guidelines and training to the project FM team.</li> </ul>	<b>M</b>
<b>External Audit and Oversight</b> <ul style="list-style-type: none"> <li>▪ No material risk identified.</li> </ul>	<b>L</b>	<ul style="list-style-type: none"> <li>▪ N/A</li> </ul>	<b>L</b>
<b>Overall Control Risk</b>	<b>S</b>		<b>M</b>
<b>Overall Project Risk Rating</b>			<b>M</b>

*H – High*

*S - Substantial*

*M – Moderate*

*L – Low*

## **ANNEX 8: TERMS OF REFERENCES FOR THE CONSULTANCY**

The proposed terms of references are divided into two parts but are to be implemented within the framework of the same consultancy agreement.

Part 1, is about the development of an Integrated Urban Water Management Master Plan for the City of Marondera.

Part 2, is about the development of a Sub Basin Water Resources Management strategic Plan

**The results of Part 2 are to be integrated into the Master Plan.**

# **PART 1: TERMS OF REFERENCE FOR THE DEVELOPMENT OF AN INTEGRATED URBAN WATER MANAGEMENT MASTERPLAN FOR MARONDERA**

## **1. INTRODUCTION**

### **1.1. Background**

- 1.1.1 At the African Water Facility (AWF) Governing Council meeting held in Harare, Zimbabwe in November 2013, the Government of Zimbabwe expressed its interest to be included in the roll out of the “Cities of the Future” Program. This concept encompasses “Integrated Urban Water Management (IUWM) principles which the AWF is pursuing with selected countries and partners. At the Government’s request the AWF subsequently fielded an identification mission to work with the Ministry of Environment, Water, Climate (MoEWC), and with other relevant agencies to identify an urban center to which IUWM planning principles could successfully be applied in Zimbabwe. IUWM seeks to develop efficient, flexible, urban water systems by adopting a holistic view of all components of the urban water cycle (water supply, sanitation, storm water management) in the context of the wider watershed. The Municipality of Marondera was selected by the Government.
- 1.1.2 The project will contribute to improving the well-being of the population of Marondera through the provision of equitable and sustainable water and wastewater management, strengthened resilience to effects related to climate change; and consolidated capacity of the town of Marondera to achieve the National Municipal performance targets as set by the Government of Zimbabwe as well as achieve the water related targets as defined in the Sustainable Development Goals.
- 1.1.3 In order to reach these objectives, the project aims at developing a Master Plan for the management of water and wastewater in the municipality of Marondera that includes an investment plan and an analysis of the availability of water resources at the sub catchment area at the horizon 2035. In addition, the project could be considered as a pilot case for the introduction of an integrated urban water and wastewater management approach.
- 1.1.4 It is suggested to introduce the principles of integrated urban water management for the improvement of water supply and sanitation in Marondera, which will lead to better coherence, coordination and communication between the various bodies responsible for urban planning and the entities responsible for the management of water supply and sanitation services at the national, catchment/sub-catchment, municipal, and community level is necessary.

### **1.2. The Municipality of Marondera**

- 1.2.1 Marondera is the provincial capital of Mashonaland East Province of Zimbabwe, located about 70 km east of Harare and has a population of around 65,000 according to the Zimbabwe national population census of 2012. Up until the economic decline of the new millennium, Marondera used to be a key centre of Zimbabwe's large forestry and farming district and market for timber, tobacco, maize, beef, and dairy products.
- 1.2.2 The annual population growth of Marondera (current population 70,000 inhabitants) was of 2.9% between 1992 and 2002, but is now reduced to 1.7% between 2002 and 2012. The failure to provide for housing needs has seen urban fringe developments spearheaded by rural district councils and these developments do not have proper urban infrastructure such as roads, refuse disposal, water supply and sewerage reticulations.

- 1.2.3 A combination of economic decline and devastating successive years of droughts since the year 2000 has seen rapid de-industrialisation of Marondera, with the major industrial firm in town, Cold Storage Commission, closing down in 2006. This greatly affected revenue inflows for the Marondera Municipality, resulting in an unprecedented collapse of local infrastructure due to little or no maintenance. Some of the key projects that were already underway, such as the construction of a 4,000 m<sup>3</sup>/d biological nutrient removal plant, had to be abandoned although it was nearly completed.
- 1.2.4 The administrative capacity of the council was also affected as skilled staff left the country and vital supporting facilities such as accounting/engineering software could not be maintained or improved. The last master plan of 1985 to 2005 was not renewed and a strategic plan was only developed recently in line with the ongoing Integrated Results-based Management system.

### **1.3. Water Supply Status in Marondera**

1.3.1. Marondera relies on raw water supplied by four dams, two of which are owned by ZINWA (Rufaro and Wenimbi) while the two others by the Municipality (Nyakambiri & Nyambuya). Although water from the recently connected Wenimbi is relatively clean, its pumping costs are too heavy because of the lengthy delivery main. The existing water treatment plant has a capacity of 13,500 m<sup>3</sup>/d, but is only treating about 8,600 m<sup>3</sup>/d due to plant and pumping limitations. Apart from the aged infrastructure, the intermittent power supply has its own toll in limiting the production capability of the treatment system and pumping and distribution of treated water. The daily average water supply of 136 l/cap.d is generally enough for the town, but this is affected by very high non-revenue water of about 48%. Almost every property in Marondera (97%) is directly connected to the municipal water supply network, but do not benefit from a 24 hours supply service, because of power cuts, and poor performance of the system.

1.3.2. The contribution of groundwater in Marondera is very limited as the town is located on a watershed, with the Mazowe, Manyame and Save catchments all starting from the town. This geographical aspect also makes pumping of water and sewage over the ridge to the other side of the town very costly. This also explains why most areas in the town do not receive consistent water supply water with low-lying areas most likely to receive water compared to those at higher elevations. The Municipality of Marondera has been levying very low tariffs on treated water supplies at about US\$0.21/m<sup>3</sup>, resulting in poor cost recovery efficiency of 46%.

### **1.4. Wastewater Management Status in Marondera**

1.4.1. The sanitation situation in Marondera is critical. Although 91% of the properties in the town have access to a toilet, and a very good sewer network exists, the lack of maintenance and system overload have had their toll on the network. Collected untreated sewage is flowing into vleis and, eventually, into rivers and water bodies such as Rufaro Dam. Rufaro Dam is one of the most polluted water bodies in Zimbabwe yet it is a vital cost-effective source of water supply for Marondera.

1.4.2. A 4,000 m<sup>3</sup>/d capacity sewage treatment plant was constructed in the late 90's but was abandoned when almost complete due to lack of funds. The plant could have discharged good quality effluent into Rufaro Dam, thus promoting indirect recycling as the dam is a source of raw water supply for the town. A pump station closer to Rufaro Dam has not been working for some years but was recently rehabilitated and is waiting for commissioning. However, no sewage is coming to the pump station as the trunk sewers have long collapsed and rehabilitation is very slow due to lack of funds.

1.4.3. A sewage stabilisation pond system used to serve the town of Marondera until 2006 when it was decommissioned due to disrepair and lack of sewage inflows. The rehabilitation of these ponds is going on very slowly. The ponds have a design capacity of about 4,500 m<sup>3</sup>/d with the effluent used for pasture irrigation. However, the irrigation facility is now dysfunctional and the cattle head at the farm has greatly dwindled.

## **1.5. Solid Waste Management Status in Marondera**

1.5.1. The Municipality of Marondera has only one old refuse compactor and a few tractors to share with the Engineering Department. The coverage of solid waste collection through door-to-door collection is very high at 96% whilst about 62% of the generated solid waste in the town is collected. The rest is either burnt at source or disposed of in undesignated areas in the town.

1.5.2. The recycling of solid waste in the town is very minimal and is carried out by unlicensed scavengers who sell it to waste collectors mainly from Harare. The council does not give any support to these waste pickers. However, only about 3 tonnes of waste per month is estimated to be recycled from the dumpsite. Only about 16% of the properties are using acceptable and prescribed types of refuse receptacles. The rest are using unconventional receptacles such as cardboard boxes, grain bags, etc.

## **1.6. The Institutional Framework**

1.6.1. The water and sanitation sector in Zimbabwe has been characterized by a fragmented institutional framework where there is a multitude of stakeholders.. The Government decided to transform and enhance the old National Action Committee (NAC) on rural water supply and sanitation which had hitherto focused on rural areas only. The new NAC has three subcommittees, each looking at specific issues: **1)** Rural Water Supply and Sanitation Sub Committee; **2)** Urban Water Supply and Sanitation Sub Committee, and **3)** Water Resources Management Sub Committee.

1.6.2. The institutional problems identified through a stakeholders workshop include conflicting laws and policies, policy inconsistencies, lack of Inter-sectoral dialogue leading to institutions working independently(silo mentality), political interferences, and the institutional setup itself. This shows that the impact of recent reforms is not being felt on the ground by key sector players.

## **1.7. The Integrated Urban Water Management Approach**

1.7.1 With increasing threats of climate change, water security is now a key issue in urban areas. Unfortunately most of the current models of urban planning and water management have shown inadequacy from the point of view of financial profitability and technical performance, as well as social equity and environmental sustainability. A paradigm shift is now imperative, going beyond conventional performance indicators and incorporating innovative ways of managing water in urban areas. It is proposed to adopt a new approach in Marondera as a pilot for future water management in Zimbabwean towns: Integrated Urban Water Management (IUWM). This approach is not a prescriptive model but a development process that encourages cities to adjust certain practices of planning and effective management, taking into account their own hydrological realities and the local socio-economic and political contexts.

1.7.2 The proposed IUWM approach is based on effective participation of key municipal partners from the public, private and social sectors, and with each having an interest in good water management. Not everyone has the same role and the same responsibility, but

all can contribute to improvement. The justification for the involvement of key partners may include the following benefits:

- reaching a consensus on the challenges and a common understanding of the activities to be undertaken;
- strengthening cooperation between partners and increasing the sense of ownership of a project;
- better understanding and balancing the interests and needs of different stakeholders, and breaking the "silos" between different sectors;
- optimizing resources and capabilities that are available at various levels, and ensuring the selection of appropriate solutions;
- facilitating a possible need for behaviour change;
- and an agreement with Marondera Municipality representatives as the main host of the IUWM project.

1.7.3 The IUWM approach contributes to improved water security through the adoption of an holistic approach. This involves designing the water management as a system within a catchment, taking into account the entire water cycle in general, and in particular the following points:

- (i) assessing and developing all potential sources of water (surface water, groundwater, rainwater, reuse of wastewater, and floods);
- (ii) matching the level of water quality with the type of water use (the quality of the domestic water should not necessarily be the same as the quality of water to irrigate crops);
- (iii) promoting better use of water in production and consumption process, which involves changes in behaviour;
- (iv) striving for a better distribution of water resources among different industries, between rural and urban, and between human activities and surrounding ecosystems;
- (v) strengthening the resilience of urban water systems subjected to more frequent extreme weather.

1.7.4 Wastewater and faecal sludge are important resources. There are significant opportunities to generate income and employment through the productive use of wastewater and faecal sludge, besides the positive impact on the environment and the resultant improvements in the quality of life. This implies realizing that wastewater and faecal sludge are not a waste but a resource. Indeed, greywater can be reused for irrigation of green areas (with some health precautions), urban agriculture and industrial processes, according to the regulations on the use of wastewater. In addition to nutrients, faecal sludge can be used for energy production (methane, biogas), fuel production (dried sludge) and fertilizer production.

1.7.5 Technological choices must be made concerning the supply of water, wastewater treatment and sanitation, based on a multi-criteria decision-making system, integrating a wide range of both financial (investment and maintenance costs), technical (population size, water quality, possibility of using natural systems, low cost technology, or high technology, centralized or decentralized units), and social (poverty index, gender aspects and price of water).

1.7.6 Finally, integrated management principles are also based on good water governance, whose main elements are:

- adopting a new mind-set, including a holistic and cross-sectoral system, and linking water management to overall urban planning;
- clarifying the roles and responsibilities of key actors, promoting collaboration between the different services;
- determining a pricing policy in a participatory manner under the control of a regulatory body;
- adjustment of policies and legislation on the use of water and reuse of wastewater;
- analysis of the possibilities of centralized and decentralized management;
- evaluation of the economic and financial impact of adopting an approach to IUWM::;
- strengthening of technical and management staff capabilities and;
- sharing information with the public and users.

## **2. CONSULTANCY SCOPE**

### **2.1. Main Project Objectives**

- 2.1.1. It is expected that the project will help contribute to the following : a) improved well-being of the population of Marondera through the provision of equitable and sustainable water and wastewater management; b) strengthened resilience of the population of Marondera and Municipal services to effects related to climate change; and c) consolidated capacity of the town of Marondera to achieve the National Municipal performance targets as set by the Government of Zimbabwe as well as achieve the water related targets as defined in the Sustainable Development Goals (SDGs).
- 2.1.2. On the medium term, it is expected that the Integrated Urban Water Management approach will be accepted and promoted by key sector stakeholders of the Municipality of Marondera and by the Government of Zimbabwe as a feasible, cost effective, and sustainable alternative to the existing water management model. It is also expected that the Government of Zimbabwe will be ready to mobilize finances either directly or through donors for the rehabilitation and extension of the water and wastewater system of the Municipality of Marondera.

### **2.2. Expected Results and Deliverables of this Consultancy**

- 2.2.1. It is expected that this consultancy will lead to the following results:
- The development of a Master Plan for the management of water and wastewater in the municipality of Marondera, that includes an investment plan and an analysis of the availability of water resources at the sub catchment area at the horizon 2035.
  - The technical design of immediate needs to improve the water supply and wastewater network to a standard that allows the system to avoid further deterioration on a short term.
  - The improved capacity of municipal authorities and sector professionals to plan and coordinate water and wastewater management in an integrated way.
  - National sector authorities and donors understand and accept the integrated approach that is being promoted in the project.
- 2.2.2. The essential deliverable is a Master Plan for the Integrated Management of Urban Water and Waste Water for the municipality of Marondera that includes bankable projects and detailed technical designs of the retained option. The Master Plan will include the following parts:



- Part 1: Current situation. Analysis of the water, wastewater, and sanitation services in the Municipality of Marondera within the sub-catchment area. This will also include an overview of the development of other sectors and of a physical plan.
- Part 2: Scenarios for 2035. Analysis of scenarios for the development of water and waste management in Marondera and fundamental orientations for the retained choice of scenarios.
- Part 3: Investment Plan and accompanying measures. A detailed Investment Plan and accompanying measures will be proposed together with a financing plan and monitoring and evaluation mechanism.
- Part 4: Environmental and Climate Change Impact Statement.
- Part 5: IUWM Synthesis for the Municipality of Marondera and possible scaling up for Zimbabwe.

### 3. ACTIVITIES

#### 3.1. Components

- 3.1.1 The requested activities in this consultancy are part of a whole project that includes interconnected four components: 1) Immediate Needs; 2) Sustaining the Future; 3) Capacity Development; 4) Project Management. This consultancy will mainly focus on the two first components.
- 3.1.2 Component 1: Immediate needs. The current water and wastewater infrastructure could greatly benefit from immediate repairs, while waiting for major interventions to be implemented; this will allow also to have some quick results that would benefit all, however, they do not represent by any means a permanent solution to the problems of water and wastewater management in the Municipality of Marondera. It is therefore suggested that the consultant carries out a critical assessment of the status of water supply and sanitation infrastructure with a view to prepare detailed designs and detailed cost estimates, including drawings, bill of quantities and technical specifications in each case, based on a very limited budget given for this purpose. In their work, the Consultants will also make use of previous studies and documents that are available from council. The actual work could be carried out by the council or hired contractors. The envisaged work involves the following proposed activities:
- Undertake repairs to the leakages of the water tanks, selected pipelines, and valves.
  - Undertake repairs to the broken trans-sewers pipes to the waste stabilization ponds and other critical sections.
  - Rejuvenate the ponds system.
- 3.1.3 Component 2 – Sustaining the Future. One of the main objectives of this consultancy is to develop a Master Plan that will pave the way to the sustainable water and wastewater management in the Municipality of Marondera. It will try to integrate other aspects of development in the Municipality in order to avoid of having a separate vision for water that does match the development of housing, roads, etc. This component includes mainly the following main activities:
- Develop a Master Plan for the management of water, wastewater and solid waste considering a 20 year horizon and possible scenarios of the extension of the town.
  - Elaborate an investment plans looking at the short, medium and long term horizons.
  - Undertake full feasibility and detailed designs for the selected Masterplan option.
  - Prioritize the investment projects to be presented to various cooperating partners, and to the National and Local Governments.

- Undertake an economic appraisal of Marondera to allow for the development of realistic projections that would inform the development of the Master Plan.
- Undertake an Environmental Impact Assessment for the proposed investment projects
- Developing a sub-catchment Water Resources Development Strategic Plan for the sub catchments directly impacting/impacted by the Marondera town. This part will involve working closely with ZINWA sub-catchment councils in the Marondera area. The tasks include an assessment of water availability, spatial and temporal demands, current and future storage, water allocation criteria, institutional systems and coordination, environmental impact, economic sustainability, etc. including an analysis of seasonal and intra-seasonal variations and resilience to climate change It will also consider how the system would be affected and respond to climate change scenarios.. The sub-catchments include: Upper Manyame, Nyagui, and Macheke.
- Concerning water supply, it is suggested to assess causes of high non-revenue water, including real and apparent losses, to propose measures of mitigation, to consolidate the hydraulic model of the network, and to analyze possible reuse of water for agriculture, greening of parks and – or industry.
- Undertake feasibility studies including opportunities for resource recovery and re-use, as well as propose an optimal and financially sustainable model that takes into account the analysis of the various options of rejuvenating the ponds and or the BNR. The re-use and recovery studies will also explore the water quality standards and uses aligned to these standards.
- Undertake feasibility studies for the scientific management/disposal of solid waste and identify options of possible business opportunities that go beyond the first step of the chain. In addition the study will also consider potential development towards job creation.
- Undertake an institutional analysis which would include reviewing the roles and responsibilities of the various stakeholders at local and national level and suggest ways to improve their interaction or coordination. The analysis will also include a review the capacity of the Council to technically and financially manage the water, waste water and solid waste management systems, including cost recovery processes. Different business models, including community-based organizations (CBO) involvement, public-private partnerships, etc., will also be reviewed and the most appropriate suggested.

### **3.2. Methodology**

- 3.2.1 The success of this study depends in particular on the establishment of a participatory process throughout its implementation, to ensure greater ownership of the project by stakeholders including donor funds. This participatory process will include not only the consultation of stakeholders at national, municipal and community levels, but also their consultation at key moments in the analysis, planning and validation of results.
- 3.2.2 Several studies have already been completed, as listed in the Annex, it is advisable to use these first existing information. The study also requires: (i) the exploitation of data aerial or satellite photographs if necessary; (Ii) rapid physico-chemical analysis of water quality; (Iii) interviews with management and technical officers and the communities in ensuring the representation of women's groups, youth and vulnerable people.

- 3.2.3 It is also recommended to organize workshops: an inception workshop announcing the initiation of the study and a workshop to validate the final products of the study.
- 3.2.4 Finally, it is recommended to set up a working schedule of meetings with the Project Management Team and Technical Assistance Committee. The project as a whole also provides, through its Capacity Development component (not subject of this consultancy), the establishment of a monitoring technical assistance regarding aspects related to integrated management, including at the start of consultation, mid-term and then at the end of the project.

### **3.3. Specific activities concerning immediate needs**

- 3.3.1 Definition of immediate needs. The following were identified as issues requiring urgent attention under this project:
- i. Undertaking repairs to the leakages of the water tanks, selected pipelines, valves and check for immediate potential repairs within the water treatment plant.
  - ii. Undertaking repairs to the broken trans-sewers pipes to the waste stabilization ponds and other critical sections
  - iii. Rejuvenating the ponds system.
- 3.3.2 A more detailed diagnostic study is required to come out with the best way to solve the problems, undertake detailed designs, engineering drawings and technical specifications, and to prioritize the work and produce bills of quantities and detailed cost estimates within budget limits provided by the project. The actual construction work may be carried out by council labour or hired contract workers. The Consultant will have an initial look at what the local authority has already done in terms of studies and costing as a start.
- 3.3.3 Cost estimation and designs. The identified immediate needs, after detailed diagnostic studies, would require detailed designs, cost estimates and draft tender documents to enable urgent procurement of works.

### **3.4. Specific Activities Concerning Sustaining the Future**

- 3.4.1 This series of activities constitute the main body of this consultancy, and they are divided in to 3 distinct phases: 1) Diagnostic Phase; 2) Analysis of scenarios; c) Master Plan.

#### **3.4.2 Phase 1: Diagnostic**

- 3.4.2.1 Analysis of the institutional framework. (City planning and growth, link with other sectors, actors involved with mandates and roles, WSS management and staff involved, regulations, existing contracts, cost recovery, consumers satisfaction including gender perspective, stakeholders involvement, gaps and challenges). The institutional context is an important aspect of the implementation of the project. The main tasks of the consultant in connection with the institutional aspects are as follows:
- Analyze the current division of responsibilities, mandate, performance and capacity of various key sector actors at national and municipal levels involved in the management of the water and sanitation sector. Identify gaps and bottlenecks.
  - Review the institutional, existing legal and regulatory sector and the role of organizational structures involved (government, parastatals, and municipalities, etc.) in the management of the water sanitation.
  - Produce a plan for a better integration, coordination and communication between the institutions involved in water management and sanitation.

3.4.2.2 Water balance study. (Data, demand with projections, supply in quality and quantity, seasonal variations and projection to 2035, identification of gaps and challenges from source to consumer, sub-catchment plan). The establishment of the water balance requires in particular the following elements concerning the demand and supply for water:

- The current demographic data and estimates for 2030, with several growth scenarios (low, medium and high), and average number of inhabitants per household;
- Socioeconomic data by municipality and type of inhabitants;
- Data and information on the categories of consumers and consumption volume per capita and type of consumers and point of sale;
- Data and information on the different types of water use, highlighting the differences in water quality by usage;
- Levels and pricing methodology by type of use and consumer demand elasticity with respect to price;
- The collection rate of invoices and analysis of the causes for the non-payment of bills, including the level of payment of invoices by type of consumer,
- A review of demand management policies underway or planned, including activities related to induce a culture of water, better use of water, and the protection of catchment areas and riverbanks. Estimation of possible gains from a demand management of water.
- The estimated water demand per household, type of consumer, type of usage, by town and for all.
- An analysis of the average rainfall in the Marondera area including seasonal variations, it will also be necessary to clarify the current practice in the collection of rainwater through the roof, storm water management and carbon capture and storage, and importance. The capture of rainwater has additional effects: reducing the volume of water to drainage systems; reducing the volume of wastewater that can make some rough treatment plants or wastewater unsustainable.
- With regard to surface water, an estimate of their volume, expense, physicochemical nature, turbidity, level and source of pollution, seasonal changes, and ease of capture will be performed for the whole of the city and area, and common.
- As regards groundwater, an estimate of their volume, depth, speed, character physicochemical, level and source of pollution, seasonal changes, and ease of capture will be performed for the whole of the city and area and town. An analysis of diffusion and the geological nature of the soil will define soil absorption capacity and the type of drilling necessary.
- Reuse of grey water is a particularly promising option to supplement water resources. Greywater is all domestic wastewater from the kitchen, laundry, sinks, tub, shower, except the toilet water. Greywater represent about 2/3 of the domestic wastewater effluents, and have the advantage of being near continuous source of water supply, treatment can reduce the load pollution but also generate income thanks irrigation of agriculture widely practiced in the Municipality of Marondera. But the grey water recycling requires the separate collection of different waste water streams in the household. The grey water recycling therefore has a number of institutional and social challenges, including: investment costs for separate collection and treatment, the need for public awareness and adequate legal and regulatory framework concerning the sound use and saves wastewater.
- The estimate of possible gains from a reduction in leakage or physical losses of water. A principle of IUWM is to consider the management of leakages in the water distribution system as an option in water resource planning. The term refers here to escape physical losses of water in the distribution system, not to the administrative

losses. Physical losses are usually linked to broken pipes, leaking joints, fittings and connections of houses and illegal connections.

- The estimate of possible gains from better management of demand and reduced water consumption thanks to its rational use as releasing a volume of water for other uses. These estimates are usually made at the household level to middle and high income or industries that can invest in improving internal water distribution systems.
- Estimation of water supply per household, type of consumer, type of usage, by town and across the Municipality of Marondera.

3.4.2.3 Analysis of the hydraulics of the water supply system (coverage, performance of the system, water intake, water treatment, pressure profiles, diameters, reservoirs, pumps, energy needs and availability, operation and maintenance, non-revenue water with estimation of physical and administrative losses, and analysis of gaps and challenges). The analysis of hydraulic flows includes among others:

- An analysis of the volumes of water produced and distributed by the network
- An analysis of the current production capacity relative to demand and the resource
- An analysis of the volumes of water produced and distributed in communities or enterprise
- An analysis of all the hydraulic flows from the catchment area, to the distribution of water by analyzing different hydraulic flow by zone, the pressure levels, dimensioning pipelines, storage capacities, needs pumping energy requirements and opportunities for distribution by gravity.
- A modeling several options taking into account the growth of the municipality.

3.4.2.4 Analysis of the wastewater and solid waste system: analysis of the systems in place and current practices in terms of sanitation, wastewater and solid waste management, and impact of system and well-being; cost of no intervention; recommendations on possible alternatives and their financial / cost recovery implications; identification of gaps and challenges. The consultant will analyze possible benefits obtained from use of waste through the re-use of treated water, the production of fertilizer for agriculture and the production of energy (biogas, electricity). The consultants could propose specific pilot projects concerning the use of waste water and-or solid waste for income generation, businesses and job creation, as well as highlight the positive impacts on habitat, environment and health.

3.4.2.5 Environmental impact assessment and climate change impact. The evaluation of potential positive and negative impacts of water use and climate risks such as floods on the physical environment in the city of Marondera will need to be made in the following way:

- The development of environmental management measures according to the environmental safeguard policies of the country.
- Identifying capacity building needs of key actors for a better implementation of environmental management measures.
- A review of existing policies related to climate change in Zimbabwe with a focus on the catchment and sub catchment area if possible, with highlighting weaknesses and strengths regarding procedures and regulations;
- Assessing climate variability in the sub catchment area with a particular focus on (i) the temperature, (ii) evapotranspiration, (iii) rainfall, (iv) the hydrology and (v) incidents extreme weather events; and the probabilities of various scenarios description;
- Thorough review of hydrologic data and its modeling to identify trends and changes in the river flow regimes and rivers as a result of climate change.

- The estimate of additional costs required to modify or adapt the waterworks of the city to the new conditions and constraints resulting from climate change.

3.4.2.6 Additional on-going studies: the above mentioned studies will need to carry out a regular inspection of the water supply and sanitation network through pressure testing, camera, sampling and surveys and monitoring of the water quantity and quality at various points of the network including catchment area right to the final delivery points.

### 3.4.3 Phase 2: Analysis of scenarios

3.4.3.1 Identification of possible scenarios (1) Business as usual; (2) Integrated approach. The integrated approach includes:

- a better understanding of all the possible water resources, both in terms of surface water, groundwater, but also gains from wastewater reuse;
- a plan to reduce water losses and efficient management of demand;
- a need to protect receiving waters from sewage and solid waste pollution, thereby enhancing the quality of service and financial viability of water services;
- ability to use different levels of water quality for different uses, including urban agriculture, green areas and some industrial processes;
- awareness and community involvement in the management of water, land use and waste management could have complementary benefits;
- a balanced win-win situation for the three catchments as their future developments and water needs will be factored in;
- a combination master plan is required for Marondera involving the municipal council, Government and the surrounding rural-district councils as all three have significant urban settlements within and around the town. The town will also have to develop a physical master plan to deal with land use planning so that this will guide any future water developments;
- in addition, the current complex institutional puzzle will have to be addressed conclusively so that roles, responsibilities and mandates are clear at every level;
- focus should be on community involvement, private sector involvement, rehabilitation and maintenance of storm water drains (+ponds, BNR), maintenance of public toilets, good hygiene practices, and empowerment of youths and women groups;
- waste management and garbage collection goes beyond treatment, and should consider decentralization and possibilities of recovering fertilizer and energy. This could help to create jobs and income, providing new revenue streams for the council.

3.4.3.2 Unit cost estimations that include the cost estimations for each scenario, and definition of several pilot projects in the cost estimation.

3.4.3.3 Choice of most viable option, on the basis of the above mentioned studies, describe a detailed outline of the chosen system for Marondera.

### 3.4.4 Phase 3 : Master Plan

- Based on the scenario used during Phase 2, the consultant will develop a Master Plan for the integrated urban water and wastewater management in the Municipality of Marondera. An investment plan supported by accompanying measures at the horizon 2035 will also be developed. The period 2016 - 2035 coincides with the implementation

of the new Sustainable Development Goals (SDGs) with indicators that have a certain relevance to the establishment of a monitoring plan for this Master Plan.

- Strategic planning priority investments will flow from the scenario selected in Phase 2. Starting from this strategic planning, the consultant will develop a detailed blueprint of the activities that need to be implemented and their estimated implementation costs.
- Priority investments (institutional rearrangements for better coordination and harmonization of interventions in the sector, capacity building of REGIDESO and other institutional stakeholders, work, conservation measure quality and quantity of water communication, awareness , education, exchange of experiences, ...) should be sequenced in time, bearing in mind the optimal use of available resources; and promote synergies with other sectors. The result will be an investment plan for a period of 2016 – 2035 concerning the implementation of an IUWM plan in the Municipality of Marondera in harmony with the current priorities and implementation capabilities.
- The Master Plan will therefore include the following main elements:
- An implementation strategy and investment plan that fits into the broad strategies of the country;
- A vision of the water resources mobilized and water needs for 2035 and an overview of the a critical analysis;
- An Identification the major phases for the implementation of the investment plan with the assessment of necessary financial resources;
- Miscellaneous provisions and accompanying measures;
- Monitoring mechanism for the implementation of the Master Plan. As suggested above, one option would be to match some monitoring of this Master Plan indicators with those proposed in the context of Sustainable Development Goals of the United Nations presented in Annex 12.

## 4 DURATION AND TIME SCHEDULE

4.4.1 The estimated duration of the total project is 24 months, including periods of submission of reports, observations, conducting workshops and finalization of reports. The following table describes the proposed time schedule for the whole life of the project.

Activities	Year 1				Year 2				Year 3	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Establishing PMT and TAC										
Acquisition of services and Consultants										
Start-up period - signing of the grant agreement										
Inception Workshop										
Institutional Framework Analysis										
Water Balance and network analysis										
Sanitation analysis										
Scenario analysis for components										
Feasibility analysis and development of bankable project proposals										
Final validation of the project										
Reference Study and capacity building needs										
Stakeholder engagement and regular meetings with the Project Steering committee										
Round Table of Donors										
Training sessions – Awareness										
Technical Assistance Mission										
Project management										

## 5 REPORTING

The Consultant and his team will be based in Marondera will be reporting to the Project Coordinator, Head of the Project Management Team, based at the Ministry of Environment, Water and Climate. He will be sending quarterly reports to the PMT and participate in a Coordination Meeting every 3 months in Harare or more if needed.

## 6 CONSULTANTS' PROFILE

The research commissioned must have expertise in the development of IUWM and the conducting the feasibility studies to develop bankable project plans. Preferably, the consulting firm must have the following specific complementary skills:

### **Head of Mission**–Senior Expert in Urban Water Supply and Sanitation

*Qualifications:* Specialized in urban water supply and sanitation and strategic planning with at least a master's degree (water engineering, water supply and sanitation, water resources management or equivalent) with at least twenty (20) years' experience in: (i) the preparation of development plans; (ii) water services management and sanitation and IWRM; (iii) institutional arrangements of schemes for the management of water resources and water and sanitation services including projects involving private participation (PPP, management contracts, service delegation, etc ). A degree and specific experience in economics will be an added advantage. Having worked in the water and sanitation sector and a good knowledge of current WASH development processes in Zimbabwe will be a distinct advantage.

*Responsibilities:* the Head of Mission provides overall coordination of collaboration in the consultation mission with Marondera Municipality, the PMU and the Project Steering Committee. He/She will ensure, among others: (i) management, coordination and quality assurance for submission of deliverables on time; (ii) the supervision and guidance of other experts of the Consultant Team in the execution of their individual tasks to contribute to a smooth implementation, consistent and collective activities of the mission and achieving expected results; (iii) the management and coordination of technical studies in connection with the diagnosis, definition and analysis of scenarios and production of the masterplan and feasibility study.

**Sanitation Expert** –Sanitary engineering or equivalent, 15 years of experience, including at least 10 in planning and development of urban management in sub-Saharan Africa: (i) Sound knowledge of Conventional sewers or "condominium" systems, (ii) conventional and alternative technologies for the reuse of resources (nutrients, organic matter, energy, water) sanitation systems; (iii) wastewater treatment units and technologies; (iv) Onsite systems such as pit latrines, pour-flush systems, septic tanks, or ecological sanitation. Experience in hydraulic modelling of sewer systems is essential.

**Water Supply Expert**–Hydraulic Engineer or equivalent, 15 years of experience, including at least 10 years in sub-Saharan Africa in the areas of: (i) water development and drinking water supply in urban areas; (ii) wastewater reuse (industry, household, etc.); (iii) management of demand and supply of drinking water in urban areas; (iv) the development, implementation and management of rainwater harvesting structures. Having participated as hydraulics expert in at least 2 studies of development projects in the urban water sector in towns larger than 500,000 inhabitants is an asset. Experience in hydraulic modelling of water systems is essential.

**Expert Rural and Urban Planner-** At least a master's degree in physical planning with work experience of at least 10 years in the development of layout plans, masterplans, local plans, subdivisions and consolidations, development permits, water supply and sanitation projects, solid waste management, etc. He/she must be familiar with the planning system used in Zimbabwe and the relevant regulatory provisions. Knowledge of use of CAD in physical planning will be a distinct advantage.



**Expert Hydrogeologist-** Scientist/engineer in hydrogeology, 15 years of experience, including at least 10 years in sub-Saharan Africa in the areas of hydrological databases, data processing, modelling, simulations, etc ..., related studies. Other areas include geological, geophysical and groundwater recharge.

**Expert Hydrologist and Climate Change** - Engineer in hydrology, climatology and water projects, 15 years of experience, including at least 10 years in sub-Saharan Africa in the areas of hydrological databases, data processing, modelling, simulations, etc., in connection with studies of projects on water and sanitation infrastructure. He/she should have proven knowledge of the policies, instruments, guidelines and opportunities for adaptation and mitigation of climate change.

**Expert in Agriculture and Waste Reuse** - Specialist agricultural development and sanitary engineering with a minimum experience of 15 years in rural development project studies in the sub-Saharan region. His/her experience should be to related activities of waste recovery and wastewater reuse in urban agriculture.

**Expert in Economic or Financial Management** -Financial and tariff studies for water resources management and water use, with at least a master's degree in economics and finance and 10 years of experience in the abovementioned fields and in the coordination of water infrastructure development projects and sanitation. He/she should also have relevant experience in the financing of water infrastructure projects with multiple goals, business plans and PPP schemes.

**Expert Environmentalist-** At least a bachelor's degree in environmental sciences, with at least 10 years' experience in environmental risk assessment, preparation of development plans, the environmental and social impacts of WSS projects and environmental education. He/she should have a good understanding of water issues and climate change in sub-Saharan Africa.

**Solid Waste Management Expert**– A Civil Engineer, Public Health Engineer or equivalent, with 10 years of relevant working experience, including at least 10 years in sub-Saharan Africa in the following areas: digestion, incineration, treatment and reuse of sewage sludge and organic waste.

**Socio economics Expert** –A development planning specialist, with a gender perspective experience and at least a bachelor's degree in Economics/Sociology and a minimum experience of 15 years in socio-economic surveys and studies in sub-Saharan Africa in the areas of (i) evaluation and management of social and economic impacts of water and sanitation infrastructure projects; (ii) assessing capacity-building needs; and (iii) awareness and communication for behaviour change.

**Expert Economist statistician-** At least a master's degree in the relevant field with work experience of at least 10 years in economic analysis related to the environment and the development of a prospective share documents ; and estimation of the costs of water infrastructure on the other projects.

**Expert Geographer forester and forest manager cartographer-** Expert Geographer and Cartographer level Bachelor's level at least, expert (s) in GIS with a professional experience of at least 10 years in achieving mapping, d; analysis and interpretation of digital data and restitution program operating on sites of facilities of water and sanitation facilities.

**Expert designer** - A level diploma Bachelor's level at least in the field of technical drawing with a professional experience of at least five (5) years in drafting plans and blueprint drawings and water infrastructure and sanitation.

## **PART 2: Sub-Basin Water Resources Management Strategic Plan**

### **Terms of references**

#### **1. Introduction**

##### **1.1. Context**

Marondera municipality is the provincial capital of Mashonaland East Province of Zimbabwe. It is located about 70km east of Harare and has a population of around 65,000 (Zimstats 2012). It sits on a highveld watershed which is the origin of some of the major rivers in Zimbabwe such as Manyame, Ruzawi, Mupfure, Nyagui and Save.

The town has a mean annual rainfall of 817mm per annum. It is surrounded by three subcatchments main Macheke, Nyagui and Upper Manyame draining into Save, Mazowe and Manyame catchments respectively

Table 1: Subcatchments of Marondera Municipality

<b>Subcatchment</b>	<b>Area (km<sup>2</sup>)</b>	<b>MAR (mm)</b>	<b>Dams Supplying Marondera</b>
Macheke	6 613	135	Wenimbi
Nyagui	4 900	186	Rufaro, Nyakambiri, Nyambuya
Upper Manyame	3 786	130	

In terms of raw water supplies, Marondera relies on four dams, two of which are owned by the Zimbabwe National Water Authority (ZINWA) while the two others by the Municipality. The existing water treatment plant has a capacity of 13,500m<sup>3</sup>/d, but is only treating about 8,600m<sup>3</sup>/d due to plant and pumping limitations. Apart from the aged infrastructure, the intermittent power supply has its own toll in limiting the production capability of the treatment system and pumping of treated water.

The contribution of groundwater in Marondera is very limited as the town is located on a watershed, with the Mazowe, Manyame and Save catchments all starting from the town. This geographical aspect also makes pumping of water and sewage over the ridge to the other side of the town very costly. This also explains why most areas do not received water with low-lying areas mostly like to receive water most of the time and those on higher ground struggling.

The sanitation situation in Marondera is critical with most of the collected sewage not being treated. The town had a very good sewer network which is now suffering from overloading and lack of maintenance. Solid waste is not regularly collected and even when collected is not properly treated and dumped. This has resulted in sewage and solid waste finding its way into vleis and open spaces, eventually, into rivers and water bodies such as Rufaro dam increasing potable water treatment costs and also attracting heavy fines from the Environmental Management Agency (EMA).

##### **1.2. Objectives**

The objective of the study is to develop a Marondera Sub basin Water Resources Development Strategic Plan for the 3 sub catchments directly impacting/impacted by the Marondera town including an analysis of seasonal and intra-seasonal variations and resilience to climate change. The 3 sub catchments are Macheke, Nyagui and Upper Manyame. The plan will ensure sustainable utilisation of the subcatchment water resources without jeopardizing the environment and downstream water users.

It should be noted that River System Outline Plans (RSOPs) for all catchments and sub catchments in Zimbabwe were produced and enacted in 2010 according to the provisions of sections 12 & 13 of the Water Act (20:24) of 1998. The plans were done specifically for the individual 7 catchments in Zimbabwe. Although Marondera requirements were taken into consideration in Mazowe (Nyagui sub catchment) and Save (Macheke sub catchment), the plans were not specific for Marondera and also did not take into consideration the effects of climate change. For the 3 sub catchments which impact on Marondera, this particular integrated Strategic plan specifically seeks to:

- i) Develop an inventory of water resources available for Marondera municipality and the 3 subcatchments including groundwater resources, their quality and, identify and quantity other competing needs in the subcatchments that might impact on future Marondera water requirements
- ii) Carry out yields of existing and planned/potential sources taking into account
  - Plans and projections for Marondera municipality growth
  - Economic, social and environmental sustainable utilization of the resource
  - Climatic change projections over the agreed time horizon
  - Environmental and other downstream water requirements for the subcatchments' ecosystems
- iii) Produce a GIS based archival and retrieval system for Marondera water resources
- iv) Phasing and timing of development of Marondera water sources according to needs and Propose a an optimum raw water supply strategic option based on the availability, quality and cost of water delivery to Marondera town
- v) Build capacity of stakeholders to ensure sustainable water resources management for Marondera and its environs

It must be noted that the development of the strategic plan shall not in any way replace the RSOPs already developed for the catchments and subcatchments. This strategy should actually complement the enacted RSOPs bringing in extra detail and strategies such as the impact of climate change on water resources

### **1.3. Expected Results**

The main project output is the development and implementation of Marondera Sub basin Water Resources Development Strategic Plan which will encompass

- i) Water resources and use inventory for the 3 subcatchments
- ii) Environmental water requirements for the 3 subcatchments
- iii) GIS system for Marondera Water supply and use
- iv) Catchment & dam yield assessments to match demand & growth projections
- v) Optimised water supply system for Marondera municipality and its environs
- vi) Capacity development of stakeholders

The results of this exercise are to be integrated inside the Master Plan developed for the city of Marondera.

## **2. Approach**

It is envisaged that the production of the Marondera Sub basin Water Resources Development Strategic Plan will take the following approach but the whole process can be iterative

- a) An inventory of the existing situation in the 3 Subcatchments
- b) Yields to match demand assessment and growth projections.
- c) Elaborations of development options to meet projected growth in demand
- d) Elaboration of allocation strategies and management measures
- e) Capacity Development

Throughout the different phases stakeholders have to be consulted to ensure the strategy captures their inputs and addresses their concerns, so a close working relationship has to be established between the consultant's office and Ministry of Environment, Water and Climate, Marondera Municipality, ZINWA, EMA and the three Subcatchment Councils i.e. Macheke, Nyagui and Upper Manyame

### **2.1. An Inventory of the Existing Situation in the Subcatchment**

This will detail the subcatchment potential, developed water resources, and their current use, any perceived development requirements and options. This phase is to include extensive Stakeholder (Marondera, subcatchments, water users) involvement in identifying their needs and what options will adequately meet these needs. The study of the existing situation must indicate the subcatchment potential, developed water resources, existing water use by sector, and identification potential raw water supply and water polluting activities in the subcatchment and measures in place to curb that pollution.

Outputs of this phase will be an inventory of

- The subcatchments hydrological potential for surface and groundwater, dam and catchment yields included. Surface water resources for the 3 subcatchments were documented in 2010. Additional work is required to take into account effects of climate change available on available water resources and then also map out the groundwater potential.
- Developed resources, what portion they are of each subcatchment potential, their location, capacity, and all water uses and sectors in the subcatchment that they serve and also indicating what portion of the Mean Annual Runoff (MAR) is already committed
- Portion of the MAR being used by each sector. Water productivity levels of different sectors and their impact on the environment, economy and social sectors
- Establish efficiency of use and potential for water demand management
- Activities in the subcatchments that are polluting the water resources and environment and measures put in place to contain the pollution
- A GIS system of the 3 subcatchments
- Quantification of environmental flow requirements
- Any conservation measures in place to maximise utilisation efficiencies

## **2.2. Yields to match demand assessment and growth projections.**

*This activity is to detail water resources yields from the sub catchments that can be used to match the growth prospects of the different sectors, identify any sectors not currently serviced and their likely demands, any likely sources to meet those un-serviced demands from existing developed sources. The yields, demand and growth prospects which shall take into account impacts of climate change are to be elaborated in consultation with the relevant sector Stakeholders. Demand management measures and strategies will also be identified and matched to the appropriate sectors.*

*The outputs of this activity include:*

- Present demand assessment and growth prospects of the identified water use sectors in the subcatchment for 5, 10, 20year planning horizons and any sectors currently not served as proposed from the different regional development plans taking into account effects of climate change
- Different demand level scenarios for the various demand management strategies and time lines

**NB.** The aggregated demand may also include water requirements even from downstream subcatchments, regional/basin requirements or any anticipated inter catchment transfers

## **2.3. Elaborations of phased development options to meet projected growth in demand**

In this phase water resources projects that are financially, economically, and environmentally viable must be identified. The consultant is to screen which of the listed options can be developed economically to meet the identified growth in demand. Development priorities are to be set with Stakeholders consultation indicating the reasons for the priorities.

The outputs of this phase to include:

- List of Dam sites, aquifers, catchment transfers or any other options that can be developed to meet present demand if any and projected growth in demand based on any relevant regional plans and consultations with relevant authorities and Stakeholders with specific emphasis on Marondera. Indicate development time lines, alternatives and phasing options where possible. Match the different demand scenarios elaborated above to development options. Indicate what portion of the subcatchment potential must be developed to meet the growth in demand at the various plan periods
- List reserved national dam sites and any sites needing to be reserved indicating demands they are able to service
- What regional plans impact on the each subcatchment projected water demands e.g. are any of the reserved national sites intended to meet demand outside the subcatchment (Catchment Transfers) and any anticipated impact on the subcatchment s own demands and have regard of regional plans prepared in terms of the Regional Town and Country Planning Act [Chap 29: 121].
- For the Plan's different planning periods what portion of the MAR is to be allocated to what sector. The list of options determined to be viable will be presented to the Stakeholders before being adopted as the resources to be exploited by the Catchment.

## **2.4. Optimised Water Supply System for Marondera Municipality and its environs**

The town is currently drawing water from its sources based on costs of portable water production. More issues such as sustainability, other water requirements, sector priority and need to be taken into consideration when utilising raw water uses.

The output of this phase will be elaborated in consultation with the Stakeholders and shall include:

- (i) Drawdown scenarios from existing and future water supplies to meet Marondera municipality demands taking into account environmental flow requirements and other prioritised needs
- (ii) Specific measures to be taken to safeguard water quality, quantity and the environment for both surface and ground water
- (iii) Specify cut back levels for different water use sectors as per agreed priorities e.g. primary use for both urban and rural populations has priority and perennial versus annual crops within the agricultural sector for the various water availability levels.
- (iv) Elaborate measures for improving effluent quality for activities currently causing pollution of the water resources to allow for expansion and growth of the sector and what quality and volumes of the effluent the system can take without deleterious effects on the river quality.
- (v) An optimised Water Supply System for Marondera municipality elaborated on a GIS based system including future optional strategies based on climate smart demand and sources. The system must also indicate levels of pollution (including solid waste) in the water sources

## **2.5. Capacity Development**

During project implementation, build capacity on all of the above strategies to the identified stakeholders mainly from Marondera Municipality, the 3 sub-catchments, ZINWA and the Ministry of Environment, Water and Climate

## **3. Project Execution**

### **3.1. Time frame**

The time estimated for carrying out the assignment is 1.5years or less. The consultant shall submit his proposed program of works. Unless mutually agreed, the consultant shall be penalised for not completing the task within the agreed time.

Work should commence as soon as the agreement has been signed

### **3.2. Consultant(s) Profile**

The consultant(s) or company shall be knowledgeable of Zimbabwean laws and requirements of ADB and GWP. They shall possess the following minimum proficiencies

- (i) MSc in Water resources management/ Engineering/Hydrology/Management,
- (ii) 10 years in water resources, planning, management and development.
- (iii) Experience in stakeholder management and engagement
- (iv) Proven practical implementation of GIS systems, basin/catchment management
- (v) Capacity Development
- (vi) Specific experience of at least three similar assignments involving development of strategic plans for water resources management and development
- (vii) Availability of appropriately skills among staff in the following areas: (i) water resources development; (ii) international water resources management; (iii) infrastructure investment planning; (iv) economic and financial analysis.

## **ANNEX 9: TECHNICAL ASSISTANCE TERMS OF REFERENCE**

### **1. INTRODUCTION**

#### **1.1 Background**

- 1.1.1 At the African Water Facility (AWF) Governing Council meeting held in Harare, Zimbabwe in November 2013, the Government of Zimbabwe expressed its interest to be included in the roll out of the “Cities of the Future” Program. This concept encompasses “Integrated Urban Water Management (IUWM) principles which the AWF is pursuing with selected countries and partners. At the Government’s request the AWF subsequently fielded an identification mission to work with the MoEWC, and with other relevant agencies to identify an urban centre to which IUWM planning principles could successfully be applied in Zimbabwe. IUWM seeks to develop efficient, flexible, urban water systems by adopting a holistic view of all components of the urban water cycle (water supply, sanitation, storm water management) in the context of the wider watershed. The Municipality of Marondera was selected by the Government.
- 1.1.2 The project will contribute to improving the well-being of the population of Marondera through the provision of equitable and sustainable water and wastewater management, strengthened resilience to effects related to climate change; and consolidated capacity of the town of Marondera to achieve the National Municipal performance targets as set by the Government of Zimbabwe as well as achieve the water related targets as defined in the Sustainable Development Goals.
- 1.1.3 In order to reach these objectives, the project aims at developing a Master Plan for the management of water and wastewater in the municipality of Marondera that includes an investment plan and an analysis of the availability of water resources at the sub catchment area at the horizon 2035. It is suggested to introduce the principles of integrated urban water management for the improvement of water supply and sanitation in Marondera, which will lead to better coherence, coordination and communication between the various bodies responsible for urban planning and the entities responsible for the management of water supply and sanitation services at the national, catchment/sub-catchment, municipal, and community level is necessary.
- 1.1.4 The Integrated Urban Water Management approach is a new approach that will require some capacity building not only of the Municipal Team but also of National staff coming from the relevant Ministries as well as University staff who could in the future carry out similar activities using local expertise. Finally, it is suggested that the capacity building team will provide support to the consultant recruited to develop a Master Plan for the Municipality of Marondera. Targeted capacity strengthening of the Engineering Department of the Municipality during the implementation of the project.

#### **1.2 The Municipality of Marondera**

- 1.2.1 Marondera is the provincial capital of Mashonaland East Province of Zimbabwe, located about 70 km east of Harare and has a population of around 65,000 according to the Zimbabwe national population census of 2012. Up until the economic decline of the new millennium, Marondera used to be a key centre of Zimbabwe's large forestry and farming district and market for timber, tobacco, maize, beef, and dairy products.
- 1.2.2 The annual population growth of Marondera (current population 70,000 inhabitants) was of 2.9% between 1992 and 2002, but is now reduced to 1.7% between 2002 and 2012. The

failure to provide for housing needs has seen urban fringe developments spearheaded by rural district councils and these developments do not have proper urban infrastructure such as roads, refuse disposal, water supply and sewerage reticulations.

- 1.2.3 A combination of economic decline and devastating successive years of droughts since the year 2000 has seen rapid de-industrialization of Marondera, with the major industrial firm in town, Cold Storage Commission, closing down in 2006. This greatly affected revenue inflows for the Marondera Municipality, resulting in an unprecedented collapse of local infrastructure due to little or no maintenance. Some of the key projects that were already underway, such as the construction of a 4,000 m<sup>3</sup>/d biological nutrient removal plant, had to be abandoned although it was nearly completed.
- 1.2.4 The administrative capacity of the council was also affected as skilled staff left the country and vital supporting facilities such as accounting/engineering software could not be maintained or improved. The last master plan of 1985 to 2005 was not renewed and a strategic plan was only developed recently in line with the ongoing Integrated Results-based Management system.

### 1.3 **The Institutional Framework**

- 1.3.1 The water and sanitation sector in Zimbabwe has been characterized by a fragmented institutional framework where there is a multitude of stakeholders. The Government decided to transform and enhance the old National Action Committee (NAC) on rural water supply and sanitation which had hitherto focused on rural areas only. The new NAC has three subcommittees, each looking at specific issues: **1)** Rural Water Supply and Sanitation Sub Committee; **2)** Urban Water Supply and Sanitation Sub Committee, and **3)** Water Resources Management Sub Committee.
- 1.3.2 The institutional problems identified through a stakeholders workshop include conflicting laws and policies, policy inconsistencies, lack of Inter-sectoral dialogue leading to institutions working independently(silo mentality), political interferences, and the institutional setup itself. This shows that the impact of recent reforms is not being felt on the ground by key sector players.

### 1.4 **The Integrated Urban Water Management Approach**

- 1.4.1 With increasing threats of climate change, water security is now a key issue in urban areas. Unfortunately most of the current models of urban planning and water management have shown inadequacy from the point of view of financial profitability and technical performance, as well as social equity and environmental sustainability. A paradigm shift is now imperative, going beyond conventional performance indicators and incorporating innovative ways of managing water in urban areas. It is proposed to adopt a new approach in Marondera as a pilot for future water management in Zimbabwean towns: *Integrated Urban Water Management (IUWM)*. This approach is not a prescriptive model but a development process that encourages cities to adjust certain practices of planning and effective management, taking into account their own hydrological realities and the local socio-economic and political contexts.
- 1.4.2 The proposed IUWM approach is based on effective participation of key municipal partners from the public, private and social sectors, and with each having an interest in good water management. Not everyone has the same role and the same responsibility, but all can contribute to improvement. The justification for the involvement of key partners may include the following benefits:



- reaching a consensus on the challenges and a common understanding of the activities to be undertaken;
- strengthening cooperation between partners and increasing the sense of ownership of a project;
- better understanding and balancing the interests and needs of different stakeholders, and breaking the "silos" between different sectors;
- optimizing resources and capabilities that are available at various levels, and ensuring the selection of appropriate solutions;
- facilitating a possible need for behaviour change;
- and an agreement with Marondera Municipality representatives as the main host of the IUWM project.

1.4.3 The IUWM approach contributes to improved water security through the adoption of a holistic approach. This involves designing the water management as a system within a catchment, taking into account the entire water cycle in general, and in particular the following points:

- (i) assessing and developing all potential sources of water (surface water, groundwater, rainwater, reuse of wastewater, and floods);
- (ii) matching the level of water quality with the type of water use (the quality of the domestic water should not necessarily be the same as the quality of water to irrigate crops);
- (iii) promoting better use of water in production and consumption process, which involves changes in behaviour;
- (iv) striving for a better distribution of water resources among different industries, between rural and urban, and between human activities and surrounding ecosystems;
- (v) strengthening the resilience of urban water systems subjected to more frequent extreme weather.

1.4.4 Wastewater and faecal sludge are important resources. There are significant opportunities to generate income and employment through the productive use of wastewater and faecal sludge, besides the positive impact on the environment and the resultant improvements in the quality of life. This implies realizing that wastewater and faecal sludge are not a waste but a resource. Indeed, greywater can be reused for irrigation of green areas (with some health precautions), urban agriculture and industrial processes, according to the regulations on the use of wastewater. In addition to nutrients, faecal sludge can be used for energy production (methane, biogas), fuel production (dried sludge) and fertilizer production.

1.4.5 Technological choices must be made concerning the supply of water, wastewater treatment and sanitation, based on a multi-criteria decision-making system, integrating a wide range of both financial (investment and maintenance costs), technical (population size, water quality, possibility of using natural systems, low cost technology, or high technology, centralized or decentralized units), and social (poverty index, gender aspects and price of water).

1.4.6 Finally, integrated management principles are also based on good water governance, whose main elements are:

- adopting a new mind-set, including a holistic and cross-sectoral system, and linking water management to overall urban planning;
- clarifying the roles and responsibilities of key actors, promoting collaboration between the different services;

- determining a pricing policy in a participatory manner under the control of a regulatory body;
- adjustment of policies and legislation on the use of water and reuse of wastewater;
- analysis of the possibilities of centralized and decentralized management;
- evaluation of the economic and financial impact of adopting an approach to IUWM.;
- strengthening of technical and management staff capabilities;
- and sharing information with the public and users.

## 1.5 **Justification for an Integrated Urban Water Management in Marondera**

- 1.5.1 Given the situation described above, it is suggested to introduce the principles of integrated urban water management for the improvement of water supply and sanitation in Marondera, the relevance and feasibility of which will be demonstrated through studies proposed in this project.
- 1.5.2 Institutionally, better coherence, coordination and communication between the various bodies responsible for urban planning and the entities responsible for the management of water supply and sanitation services at the national, catchment/sub-catchment, municipal, and community level is necessary. It will not only allow better analysis and understanding, but also more ownership of current activities and better coordination of investment plans among the various sectors concerned.
- 1.5.3 In terms of water management, it is vital to have for Marondera: (i) a better understanding of all the possible water resources, both in terms of surface water, groundwater, but also gains from wastewater reuse; (ii) a plan to reduce water losses and efficient management of demand. There is also a need to protect receiving water from sewage and solid waste pollution thereby enhancing the quality of service and financial viability of water services. A better analysis of the demand for water and its uses could also demonstrate the ability to use different levels of water quality for different uses, including urban agriculture, green areas and some industrial processes. Awareness and community involvement in the management of water, land use and waste management could have complementary benefits.
- 1.5.4 Marondera sits on a watershed where three catchments of Mazowe, Manyame and Save start from. The town affects and is affected by these three catchments. In the current situation it gets water from the Wenimbe Dam in the Save catchment and discharges it, after polluting it, to the Rufaro Dam which is in the Mazowe catchment. The implementation of IUWM principles would ensure a balanced win-win situation for the three catchments as their future developments and water needs will be factored in.
- 1.5.5 A combination master plan is required for Marondera involving the municipal council, Government and the surrounding rural-district councils as all three have significant urban settlements within and around the town. In essence, the project should go beyond a mere water master plan to deal with future physical developments of these key players. The town will also have to develop a physical master plan to deal with land use planning so that this will guide any future water developments. In addition, the current complex institutional puzzle will have to be addressed conclusively so that roles, responsibilities and mandates are clear at every level.
- 1.5.6 Waste management in Marondera requires urgent attention. Focus should be on community involvement, rehabilitation and maintenance of storm water drains, maintenance of public

toilets, good hygiene practices, and empowerment of youths and women groups. Waste management and garbage collection goes beyond treatment, and should consider decentralisation and possibilities of recovering fertiliser and energy. This could help to create jobs and income, providing new revenue streams for the council.

## **2 SCOPE OF THE CONSULTANCY**

### **2.1 Main Project Objectives**

- 2.1.1 It is expected that the project will help contribute to the following : a) improved well-being of the population of Marondera through the provision of equitable and sustainable water and wastewater management; b) strengthened resilience of the population of Marondera and Municipal services to effects related to climate change; and c) consolidated capacity of the town of Marondera to achieve the National Municipal performance targets as set by the Government of Zimbabwe as well as achieve the water related targets as defined in the Sustainable Development Goals (SDGs).
- 2.1.2 On the medium term, it is expected that the Integrated Urban Water Management approach will be accepted and promoted by key sector stakeholders of the Municipality of Marondera and by the Government of Zimbabwe as a feasible, cost effective, and sustainable alternative to the existing water management model. It is also expected that the Government of Zimbabwe will be ready to mobilize finances either directly or through donors for the rehabilitation and extension of the water and wastewater system of the Municipality of Marondera.

### **2.2 Expected Results and Deliverables of this Consultancy**

- 2.2.1 The project aims to increase the capacity for strategic IUWM planning and investment management in the short, medium and long term for the Municipality of Marondera. This Technical Assistance will be mobilized to assist the Project Management Team (PMT), the Technical Advisory Committee (TAC), other key project stakeholders and the consultant to achieve the purpose and results of the project
- 2.2.2 The main project outcomes for this consultancy are as follows:
- awareness and mobilization of key stakeholders including ministries, donors, on the concept and the added value associated of the adoption of an integrated approach to urban water management in the city of Marondera, is acquired;
  - government and sector stakeholders adopt an innovative and holistic tool for planning and urban water management in the Municipality of Marondera but also with possible other municipal councils;
  - transfer of knowledge on IUWM is transferred to a University and / or a research center, with possible demonstration projects being planned;
  - donors commit to finance bankable project documents for the implementation of the master plan for integrated urban water management;
  - national capacity for planning, coordination and monitoring of the sector is strengthened.
- 2.2.3 The essential deliverables of this consultancy are as follows:
- 3 training events based on the above mentioned capacity building needs: with a focus on UWM issues.

- 1 on the job training on Governance and financial issues within the Municipality of Marondera
- Support to the initial Launching Workshop for the introduction of the IUWM principles and methodology.
- Support to the Consultant's team, PMT and TAC when on mission to Zimbabwe.

### 3 ACTIVITIES

3.1 For all key activities described below, the Technical Assistance (TA) must propose and describe the strategy and implementation methodology in the bid. The integration of activities of technical assistance in driving the development of IUWM in the Municipality of Marondera and to other stakeholders should be clarified in the offer.

3.2 **Awareness and capacity building events.** The TA will contribute to raising awareness technical, financial and IUWM issues at the Municipality of Marondera on the basis of the findings of the capacity building needs, and through several training events:

- Conducting 3 training workshops for capacity reinforcement of stakeholders at various levels, local and national, as well as knowledge transfer to universities and/or a research center in Zimbabwe, including the design of an information system, as follows (training will follow the IUWM Modules methodology developed jointly by GWP, USF and the world bank and will be adjusted to the local context): (a) A 3 days training on IUWM approach at the occasion of the launch of the project; target group: all the team that will be involved in the project at national and local levels, including the consultants, the town engineer, and TAC members; (b) Training of trainers with a reputable National University taking the case of Marondera on IUWM approaches, 6 months after the launch; (c) Training of other relevant staff members of other municipalities on IUWM approach 12 months after the launch of the project.
- One on the job training activity to provide governance support to Marondera Municipality including its councilors managerial, financial, cost recovery and transparency issues. The appraisal mission has highlighted the poor level of financial management of the Marondera Municipality, and a specialized consultant on financial and administrative matters will be working with the Municipality during a period of 3 weeks in order to: (a) To review existing financial and administrative practices, book keeping, billing, tariff setting, payments, treatment of non-payments; (b) To propose a new and more effective financial and administrative system (hardware and software) in line with the current regulations and procedures prevailing in Zimbabwe; (c) To apply the new system for a first period.

3.3 **Support activities.** The TA will support the PMT, Technical Consultants and TAC in the performance assessment of the project during on IUWM specific issues during the visit of the team in Zimbabwe. In addition it will collaborate in the design and implementation of the initial launching work for the project and final round table with the donors.

### 4 DURATION AND TIME SCHEDULE

4.1 The work of this TA will be spread out during the 30 months of the life of the project , at different intervals as suggested in the following time schedule:

Activities	Year 1				Year 2				Year 3	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Establishing PMT and TAC										
Acquisition of services and Consultants										
Start-up period - signing of the grant agreement										
Launching Workshop										
3 Training events										
On the job Training in Marondera										
Support to PMT and TAC										
Support to Donor Round Table										

## 5 REPORTING

The Consultant and his team will report to the Project Coordinator and AWF after each mission.

## 6 CONSULTANT'S PROFILE

### Head of Mission–International Expert on IUWM

*Qualifications:* Specialized in urban water supply and sanitation and strategic planning with at least a master's degree (water engineering, water supply and sanitation, water resources management or equivalent) with at least twenty (20) years' experience in: (i) the preparation of development plans; (ii) integrated urban water management; (iii) institutional arrangements of schemes for the management of water resources and water and sanitation services including projects involving private participation (PPP, management contracts, service delegation, etc ); (iv) experience in capacity building assessment and in training at all levels. A degree and specific experience in economics will be an added advantage. Having worked in the water and sanitation sector and a good knowledge of current WASH development processes in Zimbabwe will be a distinct advantage.

**International Expert on Institutional Development** –A development planning specialist, and or lawyer, socio economist with at least a Master's degree in Planning/ Institutional Development/ Economics/Sociology and a minimum experience of 15 years in institutional development studies in sub-Saharan Africa in the areas of (i) design of institutional arrangements and regulations for the water sector; (2) the facilitation of participatory processes with multi stakeholders engagement; (iii) the evaluation and management of social and economic impacts of water and sanitation infrastructure projects; (ii) and assessing capacity-building needs.

**National Socio economics Expert** –A development planning specialist, with a gender perspective experience and at least a bachelor's degree in Economics/Sociology and a minimum experience of 15 years in socio-economic surveys and studies in sub-Saharan Africa in the areas of (i) evaluation and management of social and economic impacts of water and sanitation infrastructure projects; (ii) assessing capacity-building needs; and (iii) awareness and communication for behaviour change.

**Local capacity building and institutional expert** – Experienced trainer with proven experience and knowledge on capacity building processes, training of professional in short courses, participatory approaches, linked to water and sanitation issues, with at least a Bachelor's degree and 10 years' experience.

## **ANNEX 10: GUIDELINES ON AWF COMMUNICATION AND VISIBILITY**

Communication and branding are very important to the AWF. Indeed, the AWF considers communication as a strategic function firmly linked to its business strategies and objectives. Regular communication with stakeholders helps strengthen the credibility of FEF and ensuring their confidence and esteem, which in turn help to strengthen and protect the reputation of the AWF. Communication is also an activity related to access to information. The AWF is a multilateral fund that is accountable to a board of directors who expects FEF complies with the highest standards of accountability and transparency. Thus, the AWF has committed to make every effort to communicate, share and report to its stakeholders and the general public all the information that will be useful and relevant. This commitment requires effective and regular communication on achievements, progress and results of the AWF using all available means, in a timely manner. All these are part of good business conduct AWF, and are essential to attract and retain donors, and maintain its "social license" of operation.

The branding is to ensure that the public knows the existence of the AWF and can distinguish it from other funds or organizations in the field of water. Branding is the use of a recognizable visual marker, logo, which embodies the AWF and carries his identity. The brand recognition is achieved over time, through activities designed to increase brand visibility, for repeated use and exposure logo at strategic locations and times. The AWF logo is used as a seal or a signature to indicate the financial support of AWF or a special collaboration.

The AWF has prepared guidelines on communication and visibility to the attention of partners, AfDB Regional Offices and grantees to help FEF more effectively achieve its goals of communication and visibility, as provided in the long-term communication strategy of the AWF in 2006 voted by its Board of Directors in 2006.

### **1. GENERAL CONDITIONS**

- 1.1 Before embarking on any process for the preparation of communication activities on the project funded by AWF, it is strongly recommended to contact the communications officer to the secretariat of the AWF, taking also informed the project manager of the AWF.
- 1.2 As a minimum, and to the extent possible, the logo of the AWF is to be applied to all communication documents regarding the project funded by the AWF. The proper use of the logo must be discussed with the head of communications of the AWF.
- 1.3 The AWF should be mentioned orally as a donor of the project it funds at public events in which the project is involved, and should also be mentioned as a donor in all PowerPoint presentations on projects funded by the AWF, using the name and logo of the AWF appropriately.
- 1.4 The logo should be obtained on request from the head of communications of the AWF.
- 1.5 The relevant documents and publications of the project must contain the logo of the AWF, and this sentence on the cover page: "This project / program / study is funded (e) by the African Water Facility."
- 1.6 Implementing agencies and implementation must always have a link to the AWF website on the page of their website on the project / activity funded (es) by the AWF. The website is: [www.africanwaterfacility.org](http://www.africanwaterfacility.org).

## **2. VALIDATION PROCESS**

- 2.1 The management of the AWF is responsible for the final validation of any communication product of the AWF.

## **3. PRESS RELEASES AND MEDIA ADVISORY**

A press release of the AWF is broadcast at launch (approval or signature) and completion of the project.

- 3.1 Press releases AWF should always include a quote from the Coordinator of the AWF, which must also be validated.
- 3.2 The AWF appreciates and encourages any initiative to produce joint press releases with its partners (between the start and end of the project).
- 3.3 Where the gift recipient wants to produce a press release, it is necessary to coordinate this activity with the head of communications of the AWF in order to receive a quote from the Coordinator of the AWF, as appropriate, and obtain approval.
- 3.4 The AWF should be included in the title and / or the first paragraph of the press release, if any.
- 3.5 The press release should include the logo of the AWF, in addition to mention that funding was provided by the AWF and the amount of such financing.
- 3.6 If a press conference is planned, the press release should include the name of a high-level representative of the AWF will be present at the press conference, if appropriate.
- 3.7 All press releases must bear the name and contact information for the communications of the AWF and the head of communications / media relations of the gift recipient.
- 3.8 The text description of the AWF ("About FEF") must be added to the text, including the address of the AWF website. Please contact responsible for communications AWF to get the latest version, if needed.
- 3.9 The MEF is responsible for the final validation of all press releases following an editorial process involving publishers.
- 3.10 The above rules also apply to media advisories

## **4. PRESS CONFERENCES**

- 4.1 The press conference to launch the projects funded by the AWF to be organized in cooperation with the AWF, as far as possible.
- 4.2 The invitations should bear the logo of the AWF.
- 4.3 The AWF logo must appear conspicuously with any banner or poster used during the conference.

- 4.4 Press kits should include a press release with the logo of the AWF.
- 4.5 If possible, a banner AWF must be available and implemented to serve as a backdrop for meetings television and photography.

## **5. PRESS VISITS**

- 5.1 Journalists are invited to visit the project funded by the AWF, accompanied by representatives of the AWF or focal point FEF housed within the authority / government of the gift recipient.

## **6. VISITS BY REPRESENTATIVES OF GOVERNMENTS, DONORS OF AWF**

- 6.1 The project visits by government officials and AWF donors are encouraged. These should be prepared in coordination with the AWF and focal points of the AWF host government. This may also include meetings with local beneficiaries.
- 6.2 These visits may also include the participation of government representatives and donors AWF in roundtables and other events.

## **7. CARDS, BROCHURES AND NEWSLETTERS**

- 7.1 All relevant pamphlets and brochures of the project / program financed by the AWF should incorporate the basic elements of the visual identity of the AWF, i.e. the logo of the AWF with or without its slogan.
- 7.2 Leaflets and brochures produced by the gift recipient must also incorporate a definition of the AWF, or descriptive text, see section "Press releases and media advisories."
- 7.3 The cover page of all documents relating to the project financed by the AWF must clearly identify the activity as part of an activity funded by the AWF.
- 7.4 Copies of publications including electronic copies should be made available to the AWF.

## **8. ELECTRONIC COMMUNICATION**

- 8.1 Any electronic communication disseminating information on projects funded by the AWF, including websites, newsletters and social media must include a link to the website of the AWF.

## **9. SAFETY**

- 9.1 The executing agency must produce billboards, posters or banners to promote their activities funded by the AWF or related to the AWF at exhibitions and other events, which will be placed at strategic locations visible to all.

## **10. VEHICLES, SUPPLIES AND EQUIPMENT**

- 10.1 The AWF generally requires that vehicles, supplies and equipment financed by the AWF are clearly identified, and visibly carry the logo of the AWF and the phrase "Provided with the support of the African Water Facility" in English, French or Portuguese, or any official language of the country or institution, if applicable.



- 10.2 This condition can be the subject of negotiations between AWF and the gift recipient since some supplies and equipment may be exempted.
- 10.3 The gift recipient must provide proof of compliance with this rule (emailing digital photos is recommended).

## **11. PHOTOGRAPHS AND AUDIOVISUAL PRODUCTIONS**

- 11.1 High-resolution professional digital photographs (300 dpi) project funded by AWF must be provided to the AWF throughout the different phases of the project to document the progress of actions and events related to the project, which will be used in print or electronic publications.
- 11.2 All photos must be submitted with a complete legend, and the information needed to assign ownership.
- 11.3 The AWF will be permitted to use or reproduce photos submitted to it without payment of royalties.
- 11.4 Whenever required, audio-visual materials must acknowledge the support of the AWF, highlighting the AWF logo at the beginning and / or end of the movie / documentary.
- 11.5 Copies of the film (s) / document (s) must be provided to the AWF.

## **12. COMMEMORATIVE PLATES OR SAFETY**

- 12.1 If relevant, the gift recipient must place a permanent plaque or other type of commemorative signs in the most visible part of the building, infrastructure or near the project site has been funded by AWF, next to the name the implementing agency and / or the name of the project visible to visitors.
- 12.2 If necessary, the plate or signalling may contain the following sentence: "This [Infrastructure's name] was funded by the African Water Facility" next to the logo of the AWF.

## **13. PROMOTIONAL ITEMS**

- 13.1 Before taking any decision on the production of these items, it is necessary to consult the Communications Officer of the AWF.
- 13.2 Promotional items bearing the logo of the AWF can be distributed in support of communication activities for the project financed by the AWF. It may be T-shirts, caps, pens, notebooks, USB sticks, etc.

## ANNEX 11: AVAILABLE DOCUMENTS

1. African Development Bank Group (2011), Infrastructure and Growth in Zimbabwe An Action Plan for Sustained Strong Economic Growth.
2. Economic Consulting Associates (2013) Zimbabwe: Water Sector Investment Analysis Working Paper 1 – Data Sources and Availability
3. Economic Consulting Associates (2013) Zimbabwe: Water Sector Investment Analysis Working Paper 2 – Preparation of a preliminary project database
4. Economic Consulting Associates (2013) Zimbabwe: Water Sector Investment Analysis Working Paper 3–Rapid assessment of institutional and technical capacity in the water sector
5. Economic Consulting Associates (2013) Zimbabwe: Water Sector Investment Analysis Working Paper 5 – Water-dependent Growth and Development
6. Economic Consulting Associates (2013) Zimbabwe: Water Sector Investment Analysis Working Paper 6 – Analysis of the economics of water use and development
7. Economic Consulting Associates, Zimbabwe: Water Sector Investment Analysis (WSIA), Summary Presentation.
8. Economic Consulting Associates (2013) Zimbabwe: Water Sector Investment Analysis; Draft Inception Report
9. Economic Consulting Associates (2013) Zimbabwe: Water Sector Investment Analysis Full Technical Report Final
10. Economic Consulting Associates (2013) Zimbabwe: Water Sector Investment Analysis Summary Report
11. Economic Consulting Associates (2014) Review of Water Supply, Sanitation and Hygiene Coordination Mechanism in Zimbabwe, Inception Report.
12. Economic Consulting Associates (2011), Zimbabwe Urban Water Tariff Study Final Report.
13. Government of Zimbabwe (2013), Zimbabwe Agenda for Socio-Economic Transformation (Zim Asset): October 2013-December 2018.
14. GWP, Integrated Urban Water Management - Briefing note
15. Klas Ringskog (2013), World Bank Consultant, Zimbabwe infrastructure policy review
16. Millennium Development Goals Status Report Zimbabwe (2010), Government of Zimbabwe
17. Ministry of Water Resources Development and Management (2012), National Water Policy, Government of Zimbabwe
18. Municipality of Marondera proposed organogram for town clerks department
19. Marondera Municipality, Strategic plan: 2013 -2018
20. Municipality of Marondera (2014), Water and Sanitation Progress Report
21. Poverty Reduction and Economic Management Unit Africa Region (2010), Zimbabwe Public Expenditure Notes: Financial and Regulatory Challenges in Infrastructure Parastatals and Sectors,
22. Regional Town and Country Planning Act, Marondera Master Plan 1976
23. The NEPAD African Water Centres of Excellence Final Workshop of the European Commission support project, 2013.
24. UNICEF, Power and Water Security in Zimbabwe: How to Reduce the Impact of Power Outages on Water Services
25. Water and Sanitation Program–Africa Region, An AMCOW Country Status Overview, Water Supply and Sanitation in Zimbabwe Turning Finance into Services for 2015 and Beyond, The World Bank, [www.wsp.org](http://www.wsp.org)

26. World Bank (2012), Consolidated Recommendations for a National Water Policy for Zimbabwe Water Resources Development and Management Background Paper Towards a Water Secure Zimbabwe: Improving Governance and Utilization of Water Resources
27. Zimbabwe National Statistics Agency (2012), Zimbabwe Demographic and Health Survey, 2010/11, ICF International, Inc, Calverton, Maryland, USA
28. Zimbabwe National Statistics Agency, Poverty and Poverty Datum Line Analysis in Zimbabwe 2011/12
29. Zimbabwe National Statistic Agency, Poverty Income Consumption and Expenditure Survey, 2011/12 report.
30. Zimbabwe National Water Policy, Recommendations Framework
31. Zimbabwe Population Census (2012) National Report
32. Zimbabwe Rural Water Supply (2012), Sanitation and Hygiene Policy Background paper national
33. Zimbabwe (2012), Urban Water Supply and Sanitation Policy background paper national action committee subcommittee on urban water supply and sanitation,
34. The Zimbabwe Water Forum (2012), Policy Note 1
35. The Zimbabwe Water Forum (2012), Policy Note 2
36. The Zimbabwe Water Forum (2013), Policy Note 3
37. The Zimbabwe Water Forum (2013), Policy Note 4

## ANNEX 12: SDG INDICATORS

This table is not the complete list of the indicators proposed by the United Nations Joint Monitoring Work. Only those directly or indirectly related to water management and sanitation were included. The list has not been confirmed to date, but should be in late 2015.

Goal 1		End poverty in all its forms everywhere.
Target	1,5	by 2030 build the resilience of the poor and those in vulnerable situations, and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters
Goal 2		End hunger, achieve food security and improved nutrition, and promote sustainable agriculture
Target	2,3	by 2030 double the agricultural productivity and the incomes of small-scale food producers, particularly women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets, and opportunities for value addition and non-farm employment
	2,4	by 2030 ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters, and that progressively improve land and soil quality
Goal 3		Ensure healthy lives and promote well-being for all at all ages
Targets	3,9	by 2030 substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water, and soil pollution and contamination
Goal 4		Ensure inclusive and equitable quality education and promote life-long learning opportunities for all
Targets	4,4	by 2030, increase by x% the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship
	4,7	by 2030 ensure all learners acquire knowledge and skills needed to promote sustainable development, including among others through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship, and appreciation of cultural diversity and of culture's contribution to sustainable development
Goal 5		Achieve gender equality and empower all women and girls
Targets	5,5	ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic, and public life
Goal 6		Ensure availability and sustainable management of water and sanitation for all
Targets	6,1	by 2030, achieve universal and equitable access to safe and affordable drinking water for all
	6,2	by 2030, achieve access to adequate and equitable sanitation and hygiene for all, and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations
	6,3	by 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater, and increasing recycling and safe reuse by x% globally
	6,4	by 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity, and substantially reduce the number of people suffering from water scarcity

	6,5	by 2030 implement integrated water resources management at all levels, including through transboundary cooperation as appropriate
	6,6	by 2020 protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes
<b>Goal 7</b>		<b>Ensure access to affordable, reliable, sustainable, and modern energy for all</b>
Targets	7,1	by 2030 ensure universal access to affordable, reliable, and modern energy services
<b>Goal 8</b>		<b>Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all</b>
Targets	8,3	promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage formalization and growth of micro-, small- and medium-sized enterprises including through access to financial services
<b>Goal 9</b>		<b>Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation</b>
Targets	9,4	by 2030 upgrade infrastructure and retrofit industries to make them sustainable, with increased resource use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, all countries taking action in accordance with their respective capabilities
<b>Goal 11</b>		<b>Make cities and human settlements inclusive, safe, resilient and sustainable</b>
Targets	11,1	by 2030, ensure access for all to adequate, safe and affordable housing and basic services, and upgrade slums
	11,3	by 2030 enhance inclusive and sustainable urbanization and capacities for participatory, integrated and sustainable human settlement planning and management in all countries
	11,5	by 2030 significantly reduce the number of deaths and the number of affected people and decrease by y% the economic losses relative to GDP caused by disasters, including water-related disasters, with the focus on protecting the poor and people in vulnerable situations
	11,6	by 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality, municipal and other waste management
	11,7	by 2030, provide universal access to safe, inclusive and accessible, green and public spaces, particularly for women and children, older persons and persons with disabilities
<b>Goal 12</b>		<b>Ensure sustainable consumption and production patterns</b>
Targets	12,2	by 2030 achieve sustainable management and efficient use of natural resources
	12,4	by 2020 achieve environmentally sound management of chemicals and all wastes throughout their life cycle in accordance with agreed international frameworks and significantly reduce their release to air, water and soil to minimize their adverse impacts on human health and the environment
	12,5	by 2030, substantially reduce waste generation through prevention, reduction, recycling, and reuse
	12,6	encourage companies, especially large and trans-national companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle
<b>Goal 13</b>		<b>Take urgent action to combat climate change and its impacts</b>
Targets	13,1	strengthen resilience and adaptive capacity to climate related hazards and natural disasters in all countries
	13,2	integrate climate change measures into national policies, strategies, and planning
	13,3	improve education, awareness raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction, and early warning
<b>Goal 14</b>		<b>Conserve and sustainably use the oceans, seas and marine resources for sustainable development</b>

Targets	14,1	by 2025, prevent and significantly reduce marine pollution of all kinds, particularly from land-based activities, including marine debris and nutrient pollution
Goal 16		Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
Targets	16,5	substantially reduce corruption and bribery in all its forms
	16,6	develop effective, accountable and transparent institutions at all levels
Goal 17		Strengthen the means of implementation and revitalize the global partnership for sustainable development
Targets	17,6	enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation, and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, particularly at UN level, and through a global technology facilitation mechanism when agreed
	17,7	promote development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favorable terms, including on concessional and preferential terms, as mutually agreed
	17,9	enhance international support for implementing effective and targeted capacity building in developing countries to support national plans to implement all sustainable development goals, including through North-South, South-South, and triangular cooperation
	17,15	respect each country's policy space and leadership to establish and implement policies for poverty eradication and sustainable development
	17,16	enhance the global partnership for sustainable development complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technologies and financial resources to support the achievement of sustainable development goals in all countries, particularly developing countries
	17,17	encourage and promote effective public, public-private, and civil society partnerships, building on the experience and resourcing strategies of partnerships