



1. Project Data

Project ID P154861	Project Name Zimbabwe National Water Project	
Country Zimbabwe	Practice Area(Lead) Water	
L/C/TF Number(s) TF-A1823	Closing Date (Original) 30-Jun-2019	Total Project Cost (USD) 9,970,959.68
Bank Approval Date 29-Jan-2016	Closing Date (Actual) 30-Jun-2020	
	IBRD/IDA (USD)	Grants (USD)
Original Commitment	10,000,000.00	10,000,000.00
Revised Commitment	9,970,959.68	9,970,959.68
Actual	9,970,959.68	9,970,959.68

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2. Project Objectives and Components

a. Objectives

The Project Development Objective (PDO) of the National Water Project (NWP) as articulated in the Project Appraisal Document (paragraph 17) was identical to the one stated in the Grant Agreement (GA, page 7) and aimed to:

"improve access and efficiency in water services in selected growth centers and to strengthen planning and regulation capacity for the water and sanitation sector."



According to the PAD (paragraph 19) the project beneficiaries included: (a) a total of about 52,000 direct beneficiaries whom would benefit from improved and expanded services and benefit from the rehabilitation and upgrading of water supply systems in seven growth centers and rehabilitation of sanitation systems in three growth centers; and (b) seven local governments in the growth centers, the national government, and ZINWA would all benefit through TA and training.

b. Were the project objectives/key associated outcome targets revised during implementation?

Yes

Did the Board approve the revised objectives/key associated outcome targets?

No

c. Will a split evaluation be undertaken?

Yes

d. Components

The PDO was supported by the following three components:

1. Growth Center Water and Sanitation Improvements (appraisal estimate: US\$14.04 million, actual cost: US\$5.90 million). This component would finance investments in Water Supply and Sanitation (WSS) rehabilitation and upgrading in seven growth centers: (a) Guruve, (b) Gutu, (c) Lupane, (d) Madziwa, (e) Mataga, (f) Nembudziya, and (g) Zimunya. Detailed designs (including bills of quantities and tender documents) and preliminary Environmental Impact Assessments were completed for all seven growth centers in 2014 to address short-, medium-, and long-term investment needs. These plans were further updated in October 2015 by the Zimbabwe National Water Authority (ZINWA). Investments were to include expanding and rehabilitating water treatment works, boreholes, transmission mains, storage and service reservoirs, distribution systems, connections, and meter installation and replacement. The works also would include restoring wastewater treatment systems in some project areas where centralized wastewater systems are in place but not functional (for instance, clearing and de-sludging, repairs of inlet works, fencing, and restoring operator facilities).

2. Technical Assistance (appraisal estimate: US\$5.11 million, actual cost: US\$3.35 million). TA would be provided to strengthen the capacity of the relevant national and local institutions to ensure the sustainability of investments and improve the overall planning, regulation, and reform of the sector in line with the National Water Policy. The following five sub-components were included:

2.1. National Water Resources Master Plan (appraisal estimate: US\$3.00 million, actual cost: not reported). The government requested TA to develop a National Water Resources Master Plan, building on the Water Resources Management Strategy of the mid-1990s and the subsequent River System Outline Plans (RSOPs). The master plan is expected to provide (a) a full analysis of the quantity, quality, and spatial distribution of the water resources; (b) a detailed characterization of the current use of water resources and the spatial distribution of the demand for water; (c) a detailed characterization of demand by type of user; (d) an assessment of the varying demands; (e) a projection of future demand; (f) an assessment of the



resilience of the water resources to climatic variability and indicative adaptation measures to climate change; (g) an assessment of in-stream environmental flows and other key environmental considerations in water resource management; (h) the gap between supply and demand; and (i) an institutional and investment needs assessment to bridge the supply-demand gap.

2.2. Technical Assistance for a Water Services Regulator (appraisal estimate: US\$0.25 million, actual cost: not reported). This TA would provide the government with support to establish a single economic regulator for both water supply and water resources. The specific set of activities for which the government requested support included: the preparation of background papers to inform the government on the institutional and financing options available and any start-up funds that may be needed for first-year investments (office furniture, personnel costs, and so on). This support would be split between this TA and the WSP TA as follows: (a) WSP TA—background papers on (i) the appropriate type of institutional structure, (ii) the most appropriate business model for financing the regulator, and (iii) defining a roadmap for establishing the regulator, including timeframes, the nature of stakeholder consultations, south-south learning exchanges, and estimates on the full cost of establishing the regulator and support some of the key first-year investments for the established regulator and some capacity support and training, as appropriate.

2.3. Technical Assistance to Local Authorities (appraisal estimate: US\$0.4 million, actual cost: not reported). This sub-component would finance three activities proposed by the Ministry of Rural Development and Preservation of Cultural Heritage (MRDPCH) and the Ministry of Local Government, Public Works and National Housing (MLGPWNH): (a) TA to support the LAs and ZINWA for formalizing Water Service Agreements, (b) updating spatial plans for the growth centers, and (c) sanitation promotion and hygiene education.

2.4. Institutional Strengthening of ZINWA (appraisal estimate: US\$1.25 million, actual cost: not reported). In 2014, at the request of ZINWA, the Bank financed a skills audit and strategic gap analysis to identify key areas to strengthen ZINWA. Three key areas were identified as priorities: (a) separating ZINWA's utility and water resources functions, (b) improving commercial orientation, and (c) improving customer focus and poor stakeholder management. This subcomponent would also help ZINWA to carry out a sanitation needs assessment for growth centers, including developing options for sanitation in these areas.

2.5. Training (appraisal estimate: US\$0.21 million, actual cost: not reported). The project would support a training plan developed by the MEWC, together with ZINWA and other relevant agencies. The training plan would include training needs of all project implementing entities, such as the Ministry of Environment, Water and Climate (MEWC), Ministry of Local Government, Public Works, and National Housing (MLGPWNH), Ministry of Rural Development and Preservation of Cultural Heritage (MRDPCH), Ministry of Agriculture, Mechanization, and Irrigation Development, and the LAs in the project areas, but would focus on the operational training needs required by ZINWA to implement the project and ensure sustainability of the investments beyond the project. There would also be on-the-job training through mentoring by consultants hired to support the Project Implementation Unit (PIU).

3. Project Management (appraisal estimate: US\$0.85 million, actual cost: 0.52 million). ZINWA would set up a PIU to manage the project. The PIU would directly manage component 1 and act as secretariat to the various lead ministries for sub-components 2.1, 2.2, and 2.3. The PIU would be staffed with 5–7 staff, including a project manager and staff with expertise in engineering, procurement, financial management (FM), safeguards, and monitoring.



and evaluation (M&E). The PIU might also include focal point officers from other entities participating in the project.

Revised Components. During the May 2020 restructuring, the scope of the project's components was reduced to reflect a US\$10 million financing gap: the target growth centers under component 1 were reduced from seven to three (and associated financing reduced from \$14.04 million to \$5.90 million); under Component 2, the scale of the TA activities was reduced (financing went from \$5.11 million to \$3.6 million), including dropping TA for ZINWA's institutional strengthening and the training components (including training to improve hygiene and sanitation practices).

e. **Comments on Project Cost, Financing, Borrower Contribution, and Dates**

Project Cost. The total project cost was estimated to be US\$20.00 million. The actual cost according to the ICR (Annex 3) was US\$9.97 or 49.8% of the estimated cost at appraisal (see below for explanation).

Financing. The project was fully financed through a US\$20 million Grant from the Zimbabwe Reconstruction Fund (ZIMREF). The actual disbursed amount according to the ICR (Annex 3) was US\$9.97 million. According to the ICR (paragraph 6) "a shortfall in funds raised under the overall ZIMREF trust fund meant that only \$10 million was available from ZIMREF at approval and this was captured as such in the Grant Agreement. Thus, the project was approved with a financing gap of \$10 million. The remaining US\$10 million was expected to become available from contributing donors to ZIMREF within a few months of approval, upon which the Grant Agreement was to be amended." This financing gap was not addressed and continued till project completion.

Borrower Contribution. The project was fully financed through ZIMREF and no borrower contribution was expected.

Dates. The project was approved on January 29, 2016 and became effective five months later on June 16, 2016. The Mid-Term Review (MTR) was conducted on March 1, 2018, which was three months earlier than the expected date in the PAD- two years after effectiveness. The project closed on June 30, 2020, which was one year later than the original closing date on June 30, 2019. According to the ICR (paragraph 18) the extension was to "allow the Bank to continue providing TA on unfinished institutional strengthening activities."

The project was restructured three times, all level two restructurings as follows:

1. On June 15, 2018, when the amount disbursed was US\$5.59 million, in order to reflect a change in safeguard policies as Involuntary Resettlement (OP/BP 4.12) safeguard policy was triggered.
2. On June 24, 2019, when the amount disbursed was US\$9.12 million, in order to extend the loan closing date by one year from June 30, 2019 to June 30, 2020.



3. On May 5, 2020, when the amount disbursed was US\$9.52 million, in order to introduce changes to the Results Framework (RF) as well as changes to the components and costs.

While the first two restructurings were logical and justified, this review questions the timing of the third restructuring which was about two months prior to project closing. It could have been done earlier in the implementation cycle to reflect the financing gap that the project experienced.

3. Relevance of Objectives

Rationale

Context at Appraisal. Zimbabwe was a low-income, fragile state with a population of 14 million. It experienced an economic crisis from 2000 to 2009; nearly a decade of negative growth and a 50% decline in gross domestic product per capita. The economic crisis severely affected infrastructure which was key to future growth and poverty reduction. Water supply and sanitation (WSS) access and quality deteriorated sharply. In small towns, service providers became unable to operate and maintain infrastructure and there was an urgent need to revive infrastructure and management systems in these areas to restore service delivery. The Bank, through this project, aimed to support the WSS sector in growth centers and support the creation of an independent regulator, as stipulated by the National Water Policy.

Previous Bank Experience. The Zimbabwean government was in arrears to the Bank, and there were no Bank-funded investment operations in the country for over 15 years. That said, the Bank had a close partnership with the Government in the water sector over the past five years (prior to the appraisal of this project). The Bank also provided extensive support to the Government in reviewing its own investment in the water sector through public expenditure reviews of the Public Sector Investment Program from 2009–2013.

Consistency with Government Strategies. At appraisal, the project objectives were in line with government priorities as stated in the Zimbabwe Agenda for Sustainable Socioeconomic Transformation (ZimASSET) which emphasized the need to rehabilitate and expand the country's infrastructure. At completion, objectives remained in line with Zimbabwe National Water Authority's (ZINWA) most recent strategic plan, which emphasized ensuring sustainable development, equitable distribution, and affordable access for all Zimbabweans to the country's water resources and WSS services. Objectives were also in line with Zimbabwe's National Development Strategy (2021 to 2025) and Transitional Stabilization Programme (2018 to 2020). These plans emphasized water as a key economic enabler in priority sectors, such as agriculture, energy, and mining, and recognize the need for more investment in new WSS infrastructure and rehabilitating and upgrading existing infrastructure.

Consistency with the Bank Strategies. At appraisal, objectives were in line with the Bank's Interim Strategy Note (ISN) for Zimbabwe (FY13-FY15). The ISN focused on measures needed to ensure the



Bank's readiness for eventual reengagement, and lists infrastructure and water and sanitation in particular as a focus sector. The project aimed to address core public health risks from inadequate water and sanitation, especially against the background of the 2008-09 cholera epidemic, consistent with the Bank's and donor's priorities in Zimbabwe. The project objectives were also in line with the Bank's twin goals of eliminating poverty and promoting shared prosperity. At completion, the Bank still did not have a Country Partnership Framework (CPF) or Strategy (CPS) for Zimbabwe. According to the ICR (paragraph 21) the project objectives remained in line with Zimbabwe Reconstruction Fund's (ZIMREF) overarching goal to contribute to the strengthening of Zimbabwe's systems for reconstruction and development with a focus on stabilization and reform development and poverty alleviation. Objectives also remained in line with the World Bank's twin goals of ending extreme poverty and fostering income growth. Finally, the project's objective to improve access and efficiency in water services and planning in the WSS sector was in line with the Sustainable Development Goal #6 (SDG 6) which called for ensuring availability and sustainable management of water and sanitation for all.

The statement of objectives included four PDO-level objectives: (1) to improve access to water services in selected growth centers, (2) to improve efficiency in water services in selected growth centers, (3) to strengthen planning capacity for the WSS sector, and (4) to strengthen regulation capacity for the WSS sector. The statement of objectives was clear and focused and reflected an appropriate level of ambition for the first two objectives. However, objectives 3 and 4 were ambitious.

Overall, Relevance of Objectives is rated High. This rating reflects the alignment between the project objectives and the Government priorities as well as the Bank strategies. Objectives were also realistic, yet ambitious specifically objectives 3 and 4.

Rating

High

4. Achievement of Objectives (Efficacy)

OBJECTIVE 1

Objective

PDO 1: to improve access to water services in selected growth centers.

Rationale

Theory of Change (ToC). To achieve the stated objective, the project would install new piped household water connections and rehabilitate water infrastructure. These activities would improve access to water



services in selected growth centers and people would be provided with improved water sources. Longer-term outcomes included: improved productivity and health in the targeted growth centers.

The stated activities were directly linked to the PDO. However, the ToC did not reflect the key assumptions that underpinned the achievement of the stated PDO.

Outputs

The following information was reported in the ICR (Annex 1) unless referenced otherwise. Targets provided where available.

1. New/rehabilitated water infrastructure in Guruve

- 10 km of clear water reticulation network was completed.
- Rehabilitation of raw water pipelines (no target).
- Water abstraction point rehabilitation
- Bulk raw water meter installations, the ICR did not report on the number of meters installed.
- Clear and raw water pumping stations face lift, the ICR did not clarify the exact meaning of a "facelift".
- Clear water pumping plant
- Raw water pumping plant
- Clear water booster pumps (duty and standby) and MCC starters, exact numbers not reported.
- Clear water booster station face lift.
- Rehabilitation of clarifiers, filters and booster pump house.
- Dosing equipment for alum and chlorine.
- Non-revenue water leak detection equipment (2 DMAs).
- New 23m³ backwash tank.
- Administration block facelift.

2. New/rehabilitated water infrastructure in Lupane

- Construction of three water storage reservoirs, 1 x 2280m³ RC reservoirs, 1 x 500m³ brick reservoir (clear water), and 1 x 500m³ brick reservoir (raw water).
- Reticulation and upgrading of the current pipeline network (5-10km).
- Procurement and installation of leak detection equipment Installation of bulk meters and repairing of all faulty water meters.
- Rehabilitation of leaking reservoirs and installation of water level controls.
- Provision of water quality equipment.
- Construction of 3 houses for operators' accommodation.
- Construction of pump house for the university raw water connection.
- Construction of 2 x 250m³ brick recycling tanks and one sludge drying bed.

3. New/rehabilitated water infrastructure in Zimunya

- Dam and river abstraction points rehabilitation.
- Rehabilitation of existing treatment works.
- Construction a 100m³/hr capacity treatment plant.
- Replacement of the clear water pumping main with a 225mm PVC pipeline (approximately 3.5km).
- Rehabilitation of booster and storage tanks.
- Reticulation network to un-serviced stands (approximately 7km).



- Sewer collection network (2km).
- Rehabilitation and fencing off of sewerage ponds.

Outcome

The project extended access to improved water sources to 34,810 residents (original target: 52,000, target not achieved) in the three growth centers (out of seven) where it was implemented (Guruve, Lupane, and Zimunya). According to the ICR (paragraph 27) the project exceeded the target for these growth centers, despite falling short of the overall target which reflected investments in all seven growth centers. Activities were limited to 3 of the 7 original growth centers because the project received only 50% of the expected project budget (ICR, paragraph 27). Water quality monitoring in the three growth centers showed 100% compliance for critical parameters (ICR, paragraph 27). The project facilitated household connection to water service through charging the connection fee gradually over the course of various billing cycles rather than one upfront connection fee (ICR, paragraph 28).

Based on the above-mentioned assessment, the project achieved only 67% of its target for residents with access to water sources and 43% of its target on growth centers. Therefore, the efficacy of achieving this objective is rated Modest.

Rating
Modest

OBJECTIVE 1 REVISION 1

Revised Objective

PDO1: to improve access to water services in selected growth centers

Revised Rationale

The objective was not changed and the ToC and outputs mentioned above apply.

Outcome

Outcome Indicator	Original Target	Revised target	Actual Result
People provided with access to 'improved water sources' under the project	52,000	12,480	34,810

As seen in the table the outcome target was significantly revised downwards. The project exceeded its revised target. Therefore, efficacy of achieving this objective against the revised target is rated High.

Revised Rating



High

OBJECTIVE 2

Objective

PDO2: to improve efficiency in water services in selected growth centers.

Rationale

Theory of Chang (ToC). To achieve the stated objective, the project would install micro and macro water meters, rehabilitate pipes and install anti-leak features in the system, avail transport vehicles for distributing bills, and following up on unpaid accounts and attend to required repairs. These activities were expected to improve efficiency of water services in selected growth centers, improved collection rates, and reduced non-revenue water (NRW). Anticipated long-term impacts included: enhancing the sustainability of WSS services in Zimbabwe.

The stated activities were directly linked to the PDO. However, the ToC did not reflect the key assumptions that underpinned the achievement of the stated PDO.

Outputs

The following information was reported in the ICR (Annex 1) unless referenced otherwise. Targets provided where available.

- New/rehabilitated water infrastructure (see Outputs under component 1).
- Micro and macro water meters installed. The ICR did not report on the number installed.
- Leak detection equipment in Guruve and Lupane installed.
- Transport vehicles for distributing bills, following up on unpaid accounts and attending to required repairs procured (2 double cab pick-up trucks, 3 single cab pick-up trucks, 1 sedan, 7 motorcycles, and 21 bicycles).

Outcome

The PAD (paragraph 18) defined efficiency as “improving the collection rate and reducing non-revenue water (NRW).” According to the ICR (paragraph 29) the project investments in upgrading delivery mains and distribution, rehabilitating leaking reservoirs and installing leak detection equipment and meters reduced NRW from 48% to 30% (target: 25%, not achieved) in the three beneficiary growth centers. Also, investments in transport vehicles streamlined distributing bills, following up on unpaid accounts, and attending to required repairs, improved ZINWA’s collection rates in the three growth centers, enabling the achievement of the project’s 70% target.

Based on the above-mentioned assessment, the project fell short on achieving its target on NRW (30% vs a target of 25%) and met its target on improving collection rates in 3 out of 7 project areas. Therefore, efficacy of achieving this outcome is rated Modest.



Rating

Modest

OBJECTIVE 2 REVISION 1

Revised Objective

PDO2: to improve efficiency in water services in selected growth centers.

Revised Rationale

The objective was not changed and the ToC and outputs mentioned above apply.

Outcome

PDO Indicator	Original Target	Revised Target
Improved collection rates in ZINWA stations supported by the project	70% in 7 ZINWA stations	70% in 3 ZINWA stations
Reduced NRW in ZINWA stations supported by the project	25% in 7 ZINWA stations	25% in 3 ZINWA stations

As seen in the table the outcome target was revised downwards to 3 stations compared to 7. The project achieved 100% of its target on collection rate and 80% of its target on NRW. Therefore, the efficacy of achieving this objective is rated Substantial.

Revised Rating

Substantial

OBJECTIVE 3

Objective

PDO3: to strengthen planning capacity for the WSS sector.

Rationale

Theory of Change (ToC). To achieve the stated objective, the project would establish sanitation plans for the growth centers, provide institutional strengthening at the national and local level, develop water service agreements template for ZINWA and local authorities (LAs), address increased percentage of complaints, and facilitate signing and implementation of water service agreements. This was expected to strengthen planning capacity for the WSS sector, and the National Water Resources Master Plan to be completed and endorsed. Anticipated long-term outcomes included enhancing the sustainability of WSS services in Zimbabwe.



The stated activities were directly linked to the PDO. However, the ToC did not reflect the key assumptions that underpinned the achievement of the stated PDO.

Outputs

The following information was reported in the ICR (Annex 1) unless referenced otherwise. Targets provided where available.

- Seven sanitation plans were developed for the growth centers.
- Water service agreement template for ZINWA and LAs was developed.
- 11 reports that form the Master Plan were completed (target: 19, not achieved).
- The project developed a paper to inform the GoZ, local authorities, ZINWA, and other service providers on a menu of options for water asset ownership and management modalities.

Outcome

The project aimed to strengthen planning and regulation capacity in the WSS sector through developing a National Water Resources Master Plan (NWRMP). The development of the NWRMP relied on inputs from 19 reports that were expected to be completed by project closure. However, only 11 reports were finalized and the remaining 8 reports "require further fine-tuning, modelling, and analysis to reach completion (ICR, paragraph 30)." The ICR (paragraph 30) attributed the partial completion of this activity to "weakness in the quality of the consulting firm and conditions in Zimbabwe that were beyond the firm's control." As a result, the project only partially completed the associated PDO-level indicator, National Water Resources Master Plan completed and endorsed, as the Plan was neither completed satisfactorily nor endorsed.

Based on the above-mentioned assessment, the project failed to deliver its main target for the outcome (completed and endorsed NWRMP). Therefore, the efficacy of achieving this outcome is rated Modest.

Rating

Modest

OBJECTIVE 3 REVISION 1

Revised Objective

As outlined above.

Revised Rationale

Details apply as above.

Revised Rating



Modest

OBJECTIVE 4

Objective

PDO4: to strengthen regulation capacity for the WSS sector.

Rationale

Theory of Change (ToC). To achieve the stated objective, the project would define the responsibilities and business plan for regulator and develop a roadmap for establishment of regulator. These activities were expected to strengthen the regulation capacity for the water and sanitation sector and develop and endorse a roadmap for establishing the WSS regulator. Anticipated long-term outcomes included enhancing the sustainability of WSS services in Zimbabwe.

The stated activities were directly linked to the PDO. However, the ToC did not reflect the key assumptions that underpinned the achievement of the stated PDO.

Outputs

The following information was reported in the ICR (Annex 1) unless referenced otherwise. Targets provided where available.

- Responsibilities and business plan for regulator were defined.
- Roadmap for establishment of regulator was developed.
- Stakeholder workshop on roadmap with a wide range of stakeholders, including representatives from the Ministry of Environment, Water and Climate (MEWC), Ministry of Local Government, the Ministry of Rural Development, ZINWA and the private sector, conducted.

Outcome

The project developed a roadmap for establishing a regulator that was finalized in 2017. A draft bill for establishing the regulator was developed by the Ministry of Environment, Water and Climate (MEWC). However, by project completion this bill was not yet sent to the Attorney General and subsequently to the Parliament for approval. The process of establishing a regulator was further delayed with the outbreak of COVID-19 in 2020. By project completion, there was no regulatory arrangement in place; and the project only partially met the PDO-level indicator, road map for establishing the regulator endorsed (ICR, paragraph 33). That said, the ICR (paragraph 33) reported that the government "was considering establishing a unit within the Ministry of Lands, Agriculture, Water, Climate and Rural Resettlement (MLAWCRR) or extending the remit of the electricity regulator to include the water sector as well."

Based on the above-mentioned assessment, the project only partially achieved its target to develop and endorse a road map for establishing the regulator. Therefore, the efficacy of achieving this outcome is rated Modest.

Rating



Modest

OBJECTIVE 4 REVISION 1

Revised Objective

As outlined above.

Revised Rationale

Details apply as above.

Revised Rating

Modest

OVERALL EFFICACY

Rationale

Overall efficacy for the original objectives is rated Modest. The project achieved only 67% of its target for residents with access to water sources and 43% of its target on growth centers (PDO#1). The Project also fell short on achieving its target on NRW (30% compared to a target of 25%) and met its target on improving collection rates in 3 out of 7 project areas (PDO#2). The project failed to deliver a completed and endorsed NWRMP (PDO#3), and partially achieved its target to develop and endorse a road map for establishing the regulator (PDO#4).

Overall Efficacy Rating

Modest

Primary Reason

Low achievement

OVERALL EFFICACY REVISION 1

Overall Efficacy Revision 1 Rationale

Overall efficacy is rated Substantial. The project achieved its revised targets for PDO1 and PDO2, but modestly achieved targets on PDO3 and PDO4.

Overall Efficacy Revision 1 Rating

Substantial

5. Efficiency



Economic and Financial Efficiency

ex ante

- The sub-projects for six of the seven growth centers were analyzed to assess their economic viability. The economic rates of return ranged from 11% to 26.8%, and assumed a social discount rate of 10%.
- For households, the main benefits were the following: time saved, mostly for women, reduced health risks, speeding up construction work, and increased food security through gardening.
- For businesses, the main benefits were from employment creation and income increases associated with higher levels of output requiring water as an input.
- Economic benefits were measured as customers' Willingness to Pay (WTP) US\$20 per household per month in 2014 terms. WTP was used as a proxy to estimate project benefits and was a lower-bound estimate. To estimate households' WTP in the six growth centers, two different WTP methods were used: (a) a WTP household survey and (b) a meta-analysis of existing WTP studies. Both methods led to similar results of a WTP of US\$20 per household per month.
- To obtain the total economic benefits, households' WTP per month was multiplied by the total number of households with a functioning connection.

ex post

- The ICR followed the same methodology at appraisal. In order to compare WTP at appraisal to WTP at completion the analysis compared the beneficiary WTP.
- The combined economic net present value (NPV) of the three growth centers at appraisal was US\$4.3 million compared to US\$3.2 million at the ICR stage. The resulting economic rate of return at the ICR stage is 19.0% percent, lower than the economic rate of return at appraisal (26.8%).
- Additional benefits for households and businesses (mentioned above) were not quantified.
- Costs for the project were below those estimated at appraisal. At appraisal, component 1 costs were estimated to be US\$14.04 million across seven growth centers. The three growth centers that remained had combined cost estimates of \$6.24 million. At completion, component 1 costs were \$5.9 million—slightly under the cost estimates, benefiting from efficiencies in packaging the projects together and strong procurement and contract management.

Administrative and Institutional Efficiency

The project experienced a one-year delay. This delay would negatively impact the benefit streams which would materialize later than expected. The project initially experienced procurement difficulties that stemmed from the limited availability of experienced staff at the PIU. According to the ICR (paragraph 40) "by 2017, the PIU had successfully finalized all bidding processes for the three growth centers." Finally, it is worth noting that the project implementation was disrupted by external events including a Presidential transition in 2017, hyper-inflation in 2018, cholera outbreak in 2018-19, a cyclone in 2019, and the outbreak of COVID-19 in 2020. These external events disrupted implementation and led to delays in completion of some activities (ICR, paragraph 55).

Overall, efficiency is rated Modest. The ex post ERR came in at 19%, which was lower than the 26.8% estimated at appraisal, and the project experienced a one-year implementation delay.

Efficiency Rating



Modest

a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal	✓	26.80	0 <input checked="" type="checkbox"/> Not Applicable
ICR Estimate	✓	19.00	0 <input checked="" type="checkbox"/> Not Applicable

* Refers to percent of total project cost for which ERR/FRR was calculated.

6. Outcome

Pre-Restructuring. Relevance of Objectives was rated High. Overall Efficacy was rated Modest. The project achieved only 67% of its target for residents with access to water sources and 43% of its target on growth centers (PDO#1). The Project also fell short on achieving its target on NRW (30% compared to a target of 25%) and met its target on improving collection rates in 3 out of 7 project areas (PDO#2). The project failed to deliver a completed and endorsed NWRMP (PDO#3), and partially achieved its target to develop and endorse a road map for establishing the regulator (PDO#4). Efficiency was rated Modest as the project achieved a lower ERR at completion compared to appraisal and experienced implementation delays.

Based on a High rating for Relevance of Objectives, Modest rating for both Overall Efficacy and Efficiency, Outcome is rated Moderately Unsatisfactory.

Post Restructuring. Relevance of Objectives was rated High. Overall Efficacy was rated Substantial. The project achieved its revised targets for PDO1 and PDO2, but modestly achieved targets on PDO3 and PDO4. Efficiency was rated Modest as the project achieved a lower ERR at completion compared to appraisal and experienced implementation delays.

Based on a High rating for Relevance of Objectives, Substantial rating for Overall Efficacy and Modest rating for Efficiency, Outcome is rated Moderately Satisfactory.

Split Rating

	Pre-Restructuring	Post-Restructuring
Relevance of Objectives	High	High
Efficacy	Modest	Substantial



PDO 1 – Improve access to water services	Modest	High
PDO 2 – Improve efficiency in water services	Modest	Substantial
PDO 3 – Strengthen planning capacity for WSS sector	Modest	Modest
PDO 4 – Strengthen regulation capacity for WSS sector	Modest	Modest
Efficiency	Modest	Modest
Outcome rating	Moderately Unsatisfactory	Moderately Satisfactory
Numerical value of the outcome rating	3	4

The amount disbursed at restructuring was US\$9.52 million or 95% of the total amount disbursed (US\$9.97 million).

Weighted Outcome: $3 \times 0.95 + 4 \times 0.05 = 3.05$ rounds up to 3 which corresponds to Moderately Unsatisfactory.

a. Outcome Rating

Moderately Unsatisfactory

7. Risk to Development Outcome

The ICR discussed the following potential risks that might impact the development outcome:

1. The risk related to the population’s capacity to pay the cost for water services. While ZINWA has competent engineers, a track record of successfully operating WSS systems, and enough human capacity to maintain the infrastructure, continued service will depend on the population’s capacity to pay for the water service. By project completion, collection rates in the three growth centers reached 70%, which reflects strengthening of systems that the project facilitated. However, the COVID-19 pandemic might cause this number to decrease. Also, in the longer-term, an absence of external funding could limit the necessary future infrastructure investments to maintain the systems (ICR, paragraph 82).

2. The risk related to the lack of establishment of a WSS regulator. By project completion, the NWRMP was only partially completed. According to the ICR (paragraph 83) "the National Development Strategy 2021-2025 is expected to include the completion of the Master Plan as a key output." While the likelihood of the Government endorsement of the roadmap to establish the regulator was low at project close, the Government was considering several options for establishing a WSS regulator.



8. Assessment of Bank Performance

a. Quality-at-Entry

The Bank responded to a direct request from Zimbabwe's Ministry of Finance and Economic Development (MoFED). Through this project, the Bank aimed to support the WSS sector in growth centers, areas that were under-supported by other interventions. To finance the project, the Bank established a new multi-donor trust fund, the Zimbabwe Reconstruction Fund (ZIMREF). The project objectives were in line with the Government priorities for the water sector as well as the Bank's priorities outlined in the Zimbabwe's Interim Strategy Note (ISN, FY13-FY15) (see section 3 for more details).

The project was approved with a US\$20 million financing envelope. However, the Grant Agreement reflected only US\$10 million due to a shortfall of funds. The Grant Agreement was expected to be amended at a later stage upon receiving the remaining US\$10 million from donors (PAD, paragraph 32). However, the project closed with a funding gap of US\$10 million that was never filled.

The project design focused on growth centers given the strategic importance of these areas for the government, and the focus of other development bank's and agencies' on large towns and rural areas. Design benefited from the Bank's TA work with other development partners working in the water sector. According to the ICR (paragraph 52) "the Bank's active role in developing technical papers informed the National Water Policy, and the technical knowledge and lessons generated were utilized to design Component 2." Also, the design of component 1 was informed by the experience of the Emergency Beitbridge Project, in which a partnership was formed between the Beitbridge Town Council and ZINWA. Design also benefited from consultations with stakeholders and an inter-ministerial Technical Advisory Committee helped guiding the NWRMP (ICR, paragraph 53). Implementation arrangements could have benefitted from dedicating fulltime staff for the PIU. According to the ICR (paragraph 57) PIU members were stretched between two jobs, their original job duties with ZINWA and the PIU related duties for the project. Also, the project PIU lacked the leverage and incentives to assertively call for the meeting of the project steering committee (ICR, paragraph 58). Also, a notable design shortcoming correctly flagged by the ICR (paragraph 76) was "an overestimation of institutional commitment to sector policy reform and the quality of social screening at project sites."

Eight risks were identified at appraisal with an overall rating of Substantial. Macroeconomic, political and governance, institutional capacity for implementation and sustainability, and fiduciary risks were all flagged. While the PAD (Annex 3) detailed risk mitigation measures, the ICR did not comment on the appropriateness of these measures. The ICR (paragraph 76) correctly pointed out that the PAD did not identify the financing gap as a risk. On the contrary, the PAD reflected a high-degree of confidence at appraisal that the remaining ZIMREF financing would become available in a matter of months. Given the financing gap situation, the project could have been divided into two phases as an acceptable option (ICR, paragraph 76).

Finally, M&E had some design shortcomings that related to the project's investments in meters, transport vehicles, and construction and rehabilitation of water pipes and how these related to NRW (see section 9 a for more details).

Based on the above-mentioned assessment, Quality-at-Entry is rated Moderately Unsatisfactory. This rating reflects significant shortcomings, most notable was the failure to anticipate the impact of the financing gap on the final outcome of the project.



Quality-at-Entry Rating

Moderately Unsatisfactory

b. Quality of supervision

The project was implemented under extremely challenging conditions that included: lack of full project financing, political turmoil, a cyclone impacting part of the project area, cholera and typhoid outbreaks, currency reform and triple digit inflation, and finally the breakout COVID-19 pandemic in 2020. The project implementation benefited from consistency in steering the project as it was led by the same two Task Team Leaders (TTLs) based respectively at HQ and in South Africa. The Bank provided support on different aspects of the project including on Bank procedures, on supervision of works, and on social issues. According to the ICR (paragraph 77) "the task team also hired local expert consultants to support the implementation of various project activities, permitting close supervision and support."

While the task team steered the project through numerous challenging external obstacles and achieved some good results, the Bank's decision to delay the restructuring of the results framework "ultimately reduced the project's overall performance and achievement (ICR, paragraph 77)." The ICR (footnote #31) stated that "the team proposed restructuring at the project's mid-term review; however, the Country Management Unit (CMU) recommended that the restructuring be deferred to allow for additional fundraising as long as possible."

Based on the above-mentioned assessment, Quality of Supervision is rated Moderately Unsatisfactory. This rating reflects significant shortcomings that stemmed from the delay in restructuring the project at an earlier stage during implementation. This delay was a main factor that undermined the project outcome.

Overall Bank Performance is rated Moderately Unsatisfactory.

Quality of Supervision Rating

Moderately Unsatisfactory

Overall Bank Performance Rating

Moderately Unsatisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design

The PAD did not include a Theory of Change as it was not mandated at appraisal. Nonetheless, the ICR (page 7) included one which reflected the relation between the planned project activities, its outputs, outcomes and long-term impacts. However, the ToC did not include the critical assumptions that underpinned the achievement of the PDOs.



The achievement of the PDO was to be assessed through the following six PDO level indicators: 1. Direct project beneficiaries (percentage of which are female), 2. People provided with access to 'improved water sources' under the project, 3. Improved collection rates for seven ZINWA stations supported by the project, 4. Reduced NRW in the seven ZINWA stations supported by the project, 5. National Water Resources Master Plan completed and endorsed, and 6. Roadmap for establishing the WSS regulator endorsed. The first indicator was a core indicator that reflects the total project beneficiaries, but did not tell much about the achievements of the outcomes. The second PDO was directly linked to the PDO#1: to improve access to water services in selected growth centers, it is measurable and had a reasonable target in the RF. Indicators 3 and 4 were linked to PDO#2: to improve efficiency in water services in selected growth centers where efficiency was to be assessed through "improving the collection rate and reducing non-revenue water (NRW) (PAD, paragraph 18)." Both indicators were measurable and had clear targets in the RF. Indicator 5 was linked to PDO#3: to strengthen planning capacity for the WSS sector. While this indicator was linked to the PDO, it only provides a partial assessment of strengthened capacity. This PDO could have benefitted from the inclusion of other capacity related indicators. Finally, indicator 6 was linked to PDO#4: to strengthen regulation capacity for the WSS sector. Indicators 5 and 6 had a simple yes or no answer.

The RF included six intermediate outcome indicators all of which were quantitative and tracked the different activities supported by the project. These intermediate indicators were relevant, measurable and included clear targets. However, the RF did not capture important outputs that contributed to PDO#2 (to improve efficiency in water services in selected growth centers), for example the number of micro and macro water meters installed, and the number of leak detection equipment installed. Also, the rehabilitation of water pipes was not tracked. The lack of information on these outputs questions the impact of the project on NRW reduction.

The ICR (paragraph 62) reported that "the project encountered several difficulties setting the baseline for the indicators." The baseline was completed in July 2017, but had issues with PDO indicators 5 and 6. The ICR revealed that the baseline information for NRW reduction was only available for four growth centers and was "deemed highly unreliable (ICR, paragraph 62)."

M&E design suffered from weaknesses. Most notable were the lack of outputs related to NRW and the poor quality of baseline data.

b. M&E Implementation

The Project Implementation Unit (PIU) was responsible for M&E activities. ZINWA was responsible for submitting semiannual reports to provide an overview of progress made and highlight issues that required attention as well as setting up an M&E system to report to the Project Steering Committee (PSC) and the Bank.

During the first years of implementation, M&E activities suffered from the absence of the Project Implementation Teams (PITs) in project sites, and "reports were oftentimes submitted late and lacked clear information on progress, implementation bottlenecks, and environmental and social aspects (ICR, paragraph 64)." After the 2018 restructuring, M&E activities improved with the presence of PITs on the ground. The PIU consistently monitored project indicators, and the PITs ensured the quality of the



contractor's work, and the Technical Advisory Committee (TAC) monitored the quality of the NWRMP. Also, social and environmental safeguards reporting improved. The ICR (paragraph 64) reported that "the PIU's safeguard team was monitoring water quality at the Eureka Gold Mine to ensure that the water did not contaminate Guruve's supply."

Restructuring and revision of the RF in May 2020. This was a necessary step-given the evident financing gap and failure to secure alternative sources of financing, but it was delayed for years. The downward revision of the PDO indicator targets was relevant. However, doing this just one month before project completion did not help the outcome of the project.

c. M&E Utilization

According to the ICR (paragraph 65) "the team utilized monitoring data to inform decision making during the life of the project." The project data on household connections was used to focus on measures to increase household connections. Also, the PIU used data on water quality from the Eureka Gold Mine's open pit to halt and eventually redirect the pumped water away from Guruve's water supply (ICR, paragraph 65).

Overall, M&E Quality is rated Modest. This rating reflects moderate design shortcomings, significant shortcomings during implementation--particularly the late restructuring of the RF and delays in "providing progress reports and in collecting baseline data (ICR, paragraph 67)."

M&E Quality Rating

Modest

10. Other Issues

a. Safeguards

The project was screened and classified Category B because the potential negative environmental impacts of the sub-projects were site-specific. The project triggered the following four safeguard policies: OP 4.01 Environmental Assessment, OP 4.04 Natural Habitat, OP 4.37 Dam Safety Policies, and OP 7.50 Projects on International Waterways. Involuntary Resettlement (OP/BP 4.12) was triggered and added as part of the June 2018 restructuring (see below for details). Environmental and Social Management Plans (ESMPs) were formulated for each of the seven sub-projects. The ESMPs were cleared by the Environmental Management Agency (EMA) and the Bank's regional safeguards advisor. While OP 7.50 is triggered, the project falls under the exception to the riparian notification set out in paragraph 7(a) of the policy; the exception was approved by the regional vice president on October 13, 2015. OP 4.04 Natural Habitat was triggered for precautionary purposes considering that some of the raw water supply is from dams that may have some fish or other aquatic species. The potential negative environmental impacts of the project were limited and included small-scale erosion from the excavated soils, competition on raw water abstraction, and occupational safety arising from open trenches.



According to the ICR (paragraph 68) "the project finished in compliance and with an overall Moderately Satisfactory rating for environmental safeguards although there were concerns that reporting was not carried out regularly as was agreed during project implementation."

Compliance with Environmental safeguards. In 2018, the reopening of the privately-owned Eureka Gold Mine required dewatering the mine's open pit. This posed risks to the water quality and hydrological flows at the abstraction point for the water works in Guruve, located downstream from the mine. With Bank support, a Water Quality Monitoring Plan and an Emergency Preparedness Plan was prepared by ZINWA to ensure adequate monitoring and prevent the pumping of potentially contaminated water directly into the water source that supplies Guruve. Testing showed that the mine's pumped water had quality issues, which could impact the river. The mining company "agreed to redirect the pumped water to an area where there was less risk of the mine water entering the drinking water supply (ICR, paragraph 69)."

Compliance with Social safeguards. According to the ICR (paragraph 72) "the project fully complied with OP 4.12." The ICR (paragraph 71) reported that a non-compliance issue was discovered by a Bank mission in 2017. This related to the destruction of private sanitation facilities (19 in total: pit latrines, soakaways, and septic tanks), which stood in the right of way of project works, without compensation. This situation was addressed through remedial actions and the Bank also provided additional training on social safeguards to PIU staff.

b. Fiduciary Compliance

Financial Management (FM). According to the ICR (paragraph 73) the project's (FM) arrangements were adequate and "complied with Bank requirements and national regulations." All unqualified audit reports were submitted.

Procurement. According to the ICR (paragraph 74) "the project complied with the Bank's procurement requirements, successfully completing and carrying out all bidding processes in accordance with Bank guidelines." Procurement activities benefited from the presence of a procurement consultant among the PIU staff who facilitated procurement processes. When the consultant left the PIU after all bids were completed, a gap appeared in several minor reporting issues, since ZINWA had limited in-house knowledge on Bank procurement (ICR, paragraph 74).

c. Unintended impacts (Positive or Negative)

d. Other

According to the ICR (paragraph 50) "the successful implementation of component 1 leveraged supplementary resources. MOFED released \$18 million in September 2018 to rehabilitate 18 water supply stations. Renewed currency instability in Zimbabwe, however, limited the extent to which this ambitious initiative could be carried out. Based on the positive assessment of the project, ZINWA used internal



resources to complete a number of these rehabilitation works. For the 2021 budget, the GoZ has allocated resources for rehabilitating 17 water supply stations in line with examples demonstrated under the project, extending the approach to Gutu, Nembudziya, Mataga and Madziwa (the four remaining growth centers from the original project design). ZINWA created a Project Management Unit (PMU) based on the project's PIU to oversee these projects' implementation.

The Bank team helped identify resources for analytical and TA work in response to the 2018 cholera and typhoid outbreak in Zimbabwe, and in collaboration with the CMU, also supported the scoping for potential COVID-19 support from the World Bank and other donors (ICR, paragraphs 48 and 49).

11. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Moderately Unsatisfactory	Moderately Unsatisfactory	
Bank Performance	Moderately Unsatisfactory	Moderately Unsatisfactory	
Quality of M&E	Modest	Modest	
Quality of ICR	---	Substantial	

12. Lessons

The ICR included five lessons. The following three are emphasized with some adaptation of language:

1. Securing adequate project financing is a key factor to enable implementing the project activities according to the appraised design. Designing a project that requires financing beyond the amount approved in the project's grant or legal document presents considerable reputational and outcome risks. The project experience showed that phasing the project to allow two distinct phases would have been a better option to achieve the project's outcomes. Also, an earlier, proactive restructuring to align the work program with the actual financing would have allowed the team to realign the project objectives and results at an earlier stage.

2. In fragile countries, engaging directly with government institutions may ensure building local capacity. Under this project, the benefits for the Zimbabwe National Water Authority (ZINWA) went far beyond the physical investments in the growth centers. Substantial capacity was gained on procurement, connections and payment systems, social safeguards, M&E, and general project management. Moreover, contrary to the perception of weak performance on projects that utilize country systems, the overall performance of the ZINWA staff assigned to the PIU was notable.

3. Training the local team on the Bank's operational policies is critical to identify and avoid any violations to the these policies. It is important that the PIU has adequate awareness of the Bank's operational policies to identify and/or avoid any policy violation. Training on Bank Safeguards



should be held at the outset of projects. Under this project, a social safeguards specialist should have been hired, even on a part-time basis, to support the PIU in the identification of potential issues.

13. Assessment Recommended?

No

14. Comments on Quality of ICR

Quality of Evidence. The ICR acknowledged that M&E design and implementation had shortcomings. The ICR used the project data to the extent possible to assess the project outcomes. However, the lack of reporting on some outputs undermined assessment of the impact of the project on some activities, for example the Non-Revenue Water (NRW).

Quality of Analysis. The ICR provided clear linking between evidence and findings and used the evidence base to serve the arguments under the different sections, in particular the discussion on outcomes.

Lessons. Lessons reflected the project experience and were based on evidence and analysis.

Results Orientation. The ICR included a comprehensive discussion in particular on PDO1 and PDO2. The ICR also provided a well balanced discussion between reporting on the achievement of outcomes in relation to the indicators and what the project actually achieved on the ground.

Internal Consistency. Various parts of the ICR were internally consistent and logically linked and integrated.

Consistency with guidelines. The ICR successfully used the available data to justify the assigned ratings. Discussion of outcomes was adequate. However, the efficiency analysis could have benefited from further evidence to justify the assigned rating.

Conciseness. The ICR provided comprehensive coverage of the implementation experience and candidly reported on shortcomings. The reporting on safeguards was detailed and included an explicit statement on compliance with the Bank's safeguard policies. There was enough clarity in the report's messaging. However, the outputs in Annex 1 lacked targets. The ICR also could have provided more details on financial management, and could have commented on the risks that materialized during implementation and the appropriateness of the risk mitigation measures.

Overall, the Quality of the ICR is rated Substantial despite some minor shortcomings.

a. Quality of ICR Rating Substantial

