# 1.1 uMkhomazi Water Project (uMWP-1)

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| **Project Description** | |  | **Project Phase** | | | | **Project Preparation** | | | |
| Water requirement projection indicates that the Mgeni System is experiencing a deficit since 2016 and therefore there is a need for new water resources, hence uMWP-1. uMWP-1 consists of Bulk raw water implementation by TCTA and Bulk Potable Water Implementation by Umgeni Water.  The Bulk Raw Water portion consists of:   * 81m high dam and appurtenant works at Smithfield on the uMkhomazi River near Bulwer. * Conveyance infrastructure (32km 3.5m diameter tunnel and 5km 2.6m diameter raw water pipeline) to the proposed Umgeni Water’s Water Treatment Works (WTW) in the uMlaza River valley.   The project is implemented by TCTA and was to be fully funded from loan funding. A fiscal subsidy of 50% is being sought from Treasury through a submission due to affordability concerns from users) | | **Project Start** | | Feb 2019 | | **Project Completion** | | | 2028 |
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| **Project Schedule** | | | | | | | |
| **Key Milestones\*** | | | **Planned** | | | **Actual/ Revised** | |
| Funding - Borrowing Limit, Agreements | | | March 2022 | | | \*tbc | |
| Long-term Funding | | | April 2022 | | | \*tbc | |
| Appoint PSP | | | July 2022 | | | \*tbc | |
| Start Construction | | | 2024 | | | \*tbc | |
|  | |
| **Percentage Progress** | NA | Complete Construction | | | 2028 | | | \*tbc | |
| **Summary Progress** | | Project Close-out | | | 2029 | | | \*tbc | |
| A political steering committee has been established, including the Minister of W&S, the Premier, and the Mayors of the affected municipalities.  There is agreement at political level for the water use (off-take agreements) to be signed by the municipalities pending finalisation of the fiscal subsidy application to National Treasury.  The application to National Treasury is being prepared by TCTA (with inputs from the municipalities) for submission to NT by end February 2022. | |  | | | | | | | |
| **Project Expenditure** | | | | | | | |
| **Estimated Total Cost at Completion** | | | | | R 23 243 000 000 | | |
| **Total Expenditure to Date** | | | | | R25 910 530 (Actual)  R60 000 000 (Advance)(Project Preparation) | | |
| **% Expenditure to Date** | | | | | *0,1%* | | |
| **Approved Budget** | NA | | | | **Revised Budget** | | NA |
| **Month Projected** | NA | | | | **Month Actual** | | NA |
| **Cum Projected** | NA | | | | **Cum Actual** | | NA |
| **% of Variation to baseline projection** | | | | | NA | | |

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| **Variance Reason** | **Recovery Plan** |
| NA | NA |

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| **Key Risks / Issues** | | |
| **No.** | **Risk Description** | |
| Inability to raise long-term funding for the project | | |
| **Root Causes of the Risk** | | **Mitigation Strategy or Management Actions for Resolution** |
| 1. | Reluctance by municipal water users to conclude Water Supply Agreements | On-going negotiations with water users on Water Supply Agreements and draft financial model |
| 2. | Non- approval of a 50% fiscal subsidy by National Treasury | Reducing the losses on the Ethekwini system to delay the need for capital works |
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| **Concluding Remarks** | |
| If National Treasury does not accede to the fiscal subsidy request and WSAs refuse to sign the off-take agreements in the current form, the project cannot proceed. In that case, there would need to be a re-engagement at a political level to encourage WSAs to sign the off-take agreements without fiscal subsidy. | |
| **Responsible DDG: Motebele Moshodi** | |

**1.2 Possible dams for upper and lower Tugela for local communities: Msinga, Nkandla and Mandini Dam**

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| **Project Description** | | |  | **Project Phase** | | | | | **Reconnaissance** | | | |
| Possible Scope of works  Possible dams for upper and lower Tugela for local communities: Msinga, Nkandla and Mandini Dam   * Reconnaissance level of detail assessment is being undertaken to screen various dam sites in the upper Tugela catchment for water for downstream areas in KZN comprising Msinga (right bank of Tugela river), Nkandla (left bank of Tugela river) and Mandini (mouth of Tugela River), dam on Nsuze river, upgrading Mandini Weir in the lower Tugela, etc. * Two Large Dams namely Jana and Millietuin Dams have been investigated at a feasibility level of detail and forms part of the Thukela Water Project which is aimed at stabilizing water availability within the basin and for water transfer to augment the Vaal System once the yield of Phase 2 of Lesotho Highlands Water Project is fully utilized by about 2045. An appraisal will be made to ascertain whether one of these two large dams can be developed even before the projected transfer date so that demands in KZN areas that require this resource development can be met. | | | **Project Implementation Start** | | | 2027 | | **Project Implementation Completion** | | | 2032 |
|  | | | | | | | | |
| **Project Schedule** | | | | | | | | |
| **Key Milestones\*** | | | | **Planned** | | | **Actual/ Revised** | |
| Inception Phase for the Reconciliation Strategy for the area completed | | | | October 2022 | | | N/A | |
| Reconnaissance level Assessment of the various dam options completed | | | | June 2023 | | | N/A | |
| Draft Reconciliation Strategy for the area developed | | | | December 2023 | | | N/A | |
| Inception Phase of a Prefeasibility Study of the recommended water resource development option from the draft Reconciliation Strategy completed | | | | March 2024 | | | N/A | |
| Prefeasibility Study of the recommended water resource development option completed | | | | December 2024 | | | N/A | |
|  | | |
| **Percentage Progress** | | 1 % | Inception Phase of the Feasibility Study of the recommended Dam Development option from the Pre-feasibility Study Completed | | | | April 2025 | | | N/A | |
| **Summary Progress** | | | Feasibility Study of the recommended dam development project completed | | | | December 2026 | | | N/A | |
| Record of Implementation Decisions (RID) Issued | | | | March 2027 | | | N/A | |
| Sourcing of funding & hand over for Implementation | | | | April 2027 | | | N/A | |
| Implementation of the project (Funding Agreement, Detail design & Construction) started | | | | April 2027 | | | N/A | |
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| * The work is at a reconnaissance level of detail as part of the reconciliation strategy development study. It will screen any possible dam sites for prioritization for further studies at a higher level of detail in future * Once the reconnaissance level assessment is completed, a draft Reconciliation Strategy for the area will be developed. The next stages of the planning process will be guided by the Reconciliation Strategy and will entail a prefeasibility study which will recommend the preferred dam development option. The recommended Dam (Water Resource Development) Option will then be investigated at a detailed Feasibility Study level culminating in a Record of Implementation Decisions (RID) document describing the Water Resource Development Project to be handed over for Implementation. | | |
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| **Project Expenditure** | | | | | | | | |
| **Estimated Total Cost at Completion** | | | | | | To be determined because the work is at reconnaissance level of detail | | |
| **Total Expenditure to Date** | | | | | |  | | |
| **% Expenditure to Date** | | | | | |  | | |
| **Approved Budget** | |  | | | | **Revised Budget** | |  |
| **Month Projected** | |  | | | | **Month Actual** | |  |
| **Cum Projected** | |  | | | | **Cum Actual** | |  |
| **% of Variation to baseline projection** | | | | | |  | | |
| **Key Risks / Issues** | | | | | | | | | | | | | | |
| **No.** | | **Risk Description** | | | | | | | | | | | | |
| Budget shortfall and lack of adequate data | | | | | | | | | | | | | | |
| **Root Causes of the Risk** | | | | | | **Mitigation Strategy or Management Actions for Resolution** | | | | | | | | |
| 1. | | Availability of Hydrological Data | | | | Ensure that River Flow Gauging Weirs are maintained and that records are up to date. | | | | | | | | |
| 2. | | Shortage of funding for DWS | | | | Budget to complete the feasibility for this project will be made available through reprioritization of funds | | | | | | | | |

**Responsible DDG: Deborah Mochotli**

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| **1.3 Possible Dams on Umfolozi system to supply Ulundi and Nongoma**   |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | **Project Description** | |  | **Project Phase** | | | | **Reconnaissance** | | | | | Reconnaissance level of detail assessment that will screen dam sites:   * including an off-channel storage dam from the Black Mfolozi River, dams on Maphophoma river, dams on Nhlekiswa river to supply Nongoma, * small dams in the upper catchments of the White Mfolozi River for domestic water supply to Ulundi | | **Project Construction Start** | | 2026 | | **Project Completion** | | | 2030 | |  | | | | | | | | | **Project Schedule** | | | | | | | | | **Key Milestones\*** | | | **Planned** | | | **Actual/ Revised** | | | Inception Phase for the Reconciliation Strategy for the area completed | | | October 2022 | | | N/A | | | Reconnaissance level Assessment of the various dam options completed | | | May 2023 | | | N/A | | | Draft Reconciliation Strategy for the area developed | | | December 2023 | | | N/A | | | Inception Phase of a Prefeasibility Study of the recommended water resource development option from the draft Reconciliation Strategy completed | | | April 2024 | | | N/A | | |  | | | **Percentage Progress** | 5 % | Prefeasibility Study of the recommended water resource development option completed | | | November 2024 | | | N/A | | | **Summary Progress** | | Inception Phase of the Feasibility Study of the recommended Dam Development option from the Pre-feasibility Study Completed | | | March 2025 | | | N/A | | | Feasibility Study of the recommended dam development project completed | | | April 2026 | | | N/A | | | Record of Implementation Decisions (RID) issued | | | July 2026 | | | N/A | | | Sourcing of funding & hand over for Implementation | | | October 2026 | | | N/A | | | Implementation of the project (Funding Agreement, Detail design & Construction) started | | | October 2026 | | | N/A | | | * The work is at a reconnaissance level of detail as part of the reconciliation strategy study. It will screen any possible dam sites for prioritization for further studies at a higher level of detail in future * Once the reconnaissance level assessment is completed, a draft Reconciliation Strategy for the area will be developed. The next stages of the planning process will be guided by the Reconciliation Strategy and will entail a prefeasibility study which will recommend the preferred dam development option. The recommended Dam (Water Resource Development) Option will then be investigated at a detailed Feasibility Study level culminating in a Record of Implementation Decisions (RID) document describing the Water Resource Development Project to be handed over for Implementation. | | |  | | | | | | | | | **Project Expenditure** | | | | | | | | | **Estimated Total Cost at Completion** | | | | | To be determined because the work is at reconnaissance level of detail | | | | **Total Expenditure to Date** | | | | |  | | | | **% Expenditure to Date** | | | | |  | | | | **Approved Budget** |  | | | | **Revised Budget** | |  | | **Month Projected** | R | | | | **Month Actual** | |  | | **Cum Projected** |  | | | | **Cum Actual** | |  | | **% of Variation to baseline projection** | | | | |  | | |  |  |  | | --- | --- | | **Variance Reason** | **Recovery Plan** | | None | . |  |  |  |  | | --- | --- | --- | | **Key Risks / Issues** | | | | **No.** | **Risk Description** | | | Budget shortfall and lack of adequate data | | | | **Root Causes of the Risk** | | **Mitigation Strategy or Management Actions for Resolution** | | 1. | Shortage of funding for DWS | Budget to complete the feasibility for this project will be made available through reprioritization of funds | | 2. | Availability of Hydrological Data. | Ensure that River Flow Gauging Weirs are maintained and that records are up to date. | |  | | | | **Responsible Deputy Director General: Deborah Mochotlhi** | | |

**1.4 Mfolozi River Regional Water Supply Scheme (incl. Ulundi, Nongoma, Richards Bay, Empangeni and Mthubathuba Areas)**

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| **Project Description** | |  | **Project Phase** | | | | **Reconnaissance** | | | |
| Possible Scope of works   * Reconnaissance level of detail assessment is being undertaken to screen a number of possible dam sites including;   + raising Lake Ntweni,   + Investigate and evaluate two water transfer options to the Mhlathuze River Catchment from the Mfolozi and Tugela Rivers   + Raising of Klipfontein Dam, water supply scheme for Ulundi, Water Supply scheme for Mtubathuba   + Mfolozi Off-channel Storage Dam for Richards Bay, Empangeni and surrounding areas | | **Project Start** | | 2027 | | **Project Completion** | | | 2032 |
|  | | | | | | | |
| **Project Schedule** | | | | | | | |
| **Key Milestones\*** | | | **Planned** | | | **Actual/ Revised** | |
| Inception Phase for the Reconciliation Strategy for the area completed | | | October 2022 | | | N/A | |
| Reconnaissance level Assessment of the various dam options completed | | | June 2023 | | | N/A | |
| Draft Reconciliation Strategy for the area developed | | | December 2023 | | | N/A | |
| Inception Phase of a Prefeasibility Study of the recommended water resource development option from the draft Reconciliation Strategy completed | | | April 2024 | | | N/A | |
| Prefeasibility Study of the recommended water resource development option completed | | | March 2025 | | | N/A | |
| Inception Phase of the Feasibility Study of the recommended Dam Development option from the Pre-feasibility Study Completed | | | July 2025 | | | N/A | |
| Feasibility Study of the recommended dam development project completed | | | February 2027 | | | N/A | |
|  | |
| **Percentage Progress** | 1 % | Record of Implementation Decisions (RID) issued | | | April 2027 | | | N/A | |
| **Summary Progress** | | Sourcing of funding & hand over for Implementation | | | June 2027 | | | N/A | |
| Implementation of the project (Funding agreement, detail design & Construction) started | | | June 2027 | | | N/A | |
| * The work is at a reconnaissance level of detail as part of the reconciliation strategy development study. It will screen any possible dam sites for prioritization for further studies at a higher level of detail in future * Once the reconnaissance level assessment is completed, a draft Reconciliation Strategy for the area will be developed. The next stages of the planning process will be guided by the Reconciliation Strategy and will entail a prefeasibility study which will recommend the preferred dam development option. The recommended Dam (Water Resource Development) Option will then be investigated at a detailed Feasibility Study level culminating in a Record of Implementation Decisions (RID) document describing the Water Resource Development Project to be handed over for Implementation. | |
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| **Project Expenditure** | | | | | | | |
| **Estimated Total Cost at Completion** | | | | | To be determined because the work is at reconnaissance level of detail | | |
| **Total Expenditure to Date** | | | | |  | | |
| **% Expenditure to Date** | | | | |  | | |
| **Approved Budget** |  | | | | **Revised Budget** | |  |
| **Month Projected** | R | | | | **Month Actual** | |  |
| **Cum Projected** |  | | | | **Cum Actual** | |  |
| **% of Variation to baseline projection** | | | | |  | | |

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| **Key Risks / Issues** | | |
| **No.** | **Risk Description** | |
| Budget Shortfall and Lack of adequate data likely to result in delays in the execution of the project | | |
| **Root Causes of the Risk** | | **Mitigation Strategy or Management Actions for Resolution** |
| 1. | Shortage of funding for DWS | Budget to complete the feasibility for this project will be made available through reprioritization of funds |
| 2. | Availability of Hydrological Data. | Ensure that River Flow Gauging Weirs are maintained and that records are up to date. |
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**Responsible Deputy Director General: Deborah Mochotlhi**