Introducing the uMhlathuze Water Stewardship Partnership

March 2020
The uMhlathuze catchment area
The partnership was catalysed by a major drought in 2016, and the need for a collective response.

The major dam serving the uMhlathuze region at 18% capacity in 2016:

Photo Credit: Alex McNamara, NBI
Goudertrouw Dam, August 2016
The partnership aims to:

1. Serve as a **coordination** hub for collective action on **water security** across the uMhlathuze region
2. **Collaborate** with all key stakeholders and water users in the region
3. Implement **short and medium-term measures** to improve water security for industry, agriculture and communities
4. Use water as a focal point for **transformation and economic development** to strengthen resilience and adaptive capacity
5. Work with public sector institutions to support improved **service delivery** and **natural resource management**
UWASP has five work areas, as agreed by the partners:

1. Enhanced coastal lakes management & dam mentorship programme
   - Lead: NBI
   - Support: GIZ-NatuRes

2. Downstream water-use efficiency & water losses
   - Lead: GIZ-NatuRes
   - Support: NBI

3. Agricultural water stewardship & efficiency
   - Lead: WWF-Mondi
   - Support: Tongaat Hulett

4. Ecological infrastructure: invasive clearing and wetlands
   - Lead: WWF-Mondi
   - Support: uMhlathuze Irrigators Forum

5. Cross-cutting: develop local community environmental champions
UWASP has an established governance structure that supports your participation.

UWASP Partners Platform

Open, consultative advisory platform
Biannual meetings

Management Committee

Implementation of identified activities;
Partnership coordination & management
Bimonthly meetings

Mutual information exchange

NBI Project Manager
GIZ Technical Advisor
WWF Project Manager
Examples of our recent work in the catchment
Tackling water leakage and non-revenue water with the City of uMhlathuze

1. Gap analysis and identification of key challenges
2. Pressure analysis
3. First population count in Gobandluvo
4. Second population count in Vulindlela area - Zenzele, Ongoye, Kwashodisa, Nkojane and Mangeze
5. Presentation on smart meter potential

| Projected figures | ZONAL AREA |   |   |   |   |   |   |   |   |   |
|------------------|------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-----------------|
|                  |            | Legend          | Legend          | Legend          | Legend          | Legend          | Legend          | Legend            | Legend          | Legend          |
|                  |            | Inessedilla     | Mengeza         | Ongoye          | Nkojane         | Mangeze         | Nkojane         | Mangeze          | Nkojane         | Mangeze         |
| People 2019      |            | 4015            | 7709            | 2055            | 4940            | 4487            | 1193            | 1193              | 6114            | 31 706          |
| Water required l/capita/day |            | 130             | 130             | 130             | 130             | 130             | 130             | 130               | 130             | 130             |
| Total Monthly Water demand (KL) |            | 15659           | 30066           | 8014            | 17501           | 4651            | 23845           | 123 653           | 123 653         | 123 653         |
| Water demand KL/household/month |            | 15              | 16              | 23              | 19              | 9               | 20              | 22                | 22              | 22              |

Current figures:

- Census 2011: 1587, 4260, 790, 1659, 1162, 6114, 15 572
- Population increase: 153%, 81%, 160%, 170%, 3%

Dec 17 to Dec 18 water supply KL/month: 183 712
- Current Water consumption l/capita/day: 193
- Monthly bulk supply deficit (KL) = inefficiencies and/or losses: 33% 60 059
- Current over consumption (l/c/d) = inefficiencies and/or losses: 33% 63
Collaborative monitoring and management of dam water releases

- Harness knowledge and expertise of experienced dam manager (Norman Ward): embed within catchment

- Simplify the dam release tool to encourage more widespread use amongst stakeholders and improve collective decision making support

- Digitise the tool to enable more effective collaboration and use

- Present the tool to DWS national dam operators

www.uwasp.pisilabs.com
Citizen and youth-based water and waste management

- An integrated schools programme that builds on and connects the best of existing schools’ initiatives in South Africa

- A water efficiency programme within partners’ properties (e.g. water audits and responsive actions within schools, universities, government buildings and companies)

- A socio-technical water/ catchment management programme beyond partners’ properties (e.g. using innovations such as communities and youth support by cell phone applications to report on and address water/ catchment issues)
Business and natural resource management training for small-scale farmers

- **Business development** to equip farmers with optimal production parameters
- **Natural resources management** and approaches to more efficient farming
- **Water re-use and management** in the agricultural sector
- **Gender:** women in farming

![Image](image.png)
Convening, learning and coordination

**Aim:** Informed decision making by authorities through partnership, mentoring, planning, research & monitoring

- Catchment Management Forum
- Non revenue water reduction support
- Climate change strategies & action plans
- Multi-stakeholder Alien Invasive Plant (AIP) Strategy
- Catchment monitoring & dam releases support
- DWS Learning Academy Graduate Mentoring Support
Industry water stewardship

Mondi

Aim: Introducing and guiding Richards Bay industry on their water stewardship journey

• Industry water stewardship training, August 2018
• Industry water stewardship training, October 2019

Tongaat Hulett Sugar

Eg. Mulching of citrus and nut trees using waste fibre.
Some of our priority initiatives for the year ahead:
Strategic Water Governance: No. 1 - Development of Single Water Users Association

**Aim:** Strengthen irrigation governance through an improved management structure

**Objective:** Merge five existing irrigation systems into one Water Users Association
Strategic Water Governance: No. 2 - Metering

**Aim:** Understand daily and seasonal water use by irrigators in the catchment

**Objective:** Install reliable, accurate meters and telemetry at all necessary abstraction points. To be managed by the WUA

Strategic Water Governance: No. 3 - Catchment Water Balance

**Aim:** Develop an online water balance tool/dashboard with data from resources and users, to assist authorities in making informed strategic decisions on water management

**Objective:** Convene and motivate key role players to contribute to the online balance
Thank you!

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