



CITIZEN SCIENCE FOR PARLIAMENT- ARIANS

AMANDA LOEFFEN, SEP' 2023
IPU WORKSHOP, QUY NHON

WHAT IS CITIZEN SCIENCE?

- Inclusion of non-professional scientists in scientific work
- Community based
- A mechanism to support SDG's
- The collection and analysis of data relating to the natural world by members of the general public

WATER QUALITY AND HUMAN RIGHTS

- Water quality is quickly becoming the biggest problem in access to drinking water
- Lack of understanding and awareness by general public
- It is a government responsibility (under human rights law) to protect, respect and fulfil this human right
- The first step is to make people 'aware' of their rights
- **No.1 RECOMMENDATION: Educate**

WATER QUALITY DATA

- Monitoring water quality data is not well covered globally (SDG 6.3)
- Citizen Science collects data in hard-to-reach areas
- Frequent data collection over time
- Wide range of social impacts, including:
 - Decision-making
 - Data sharing
 - High spatial recognition
 - Relevance for people
- **No.2 RECOMMENDATION : Set up Monitoring**

SOCIAL ENGAGEMENT

- More than just a means to collect data
- People feel involved in the protection of the environment
- Results are immediate
- Ability to influence local policy
- Immediate feedback on contamination incidents
- **No. 3 RECOMMENDATION : Build into Policy**



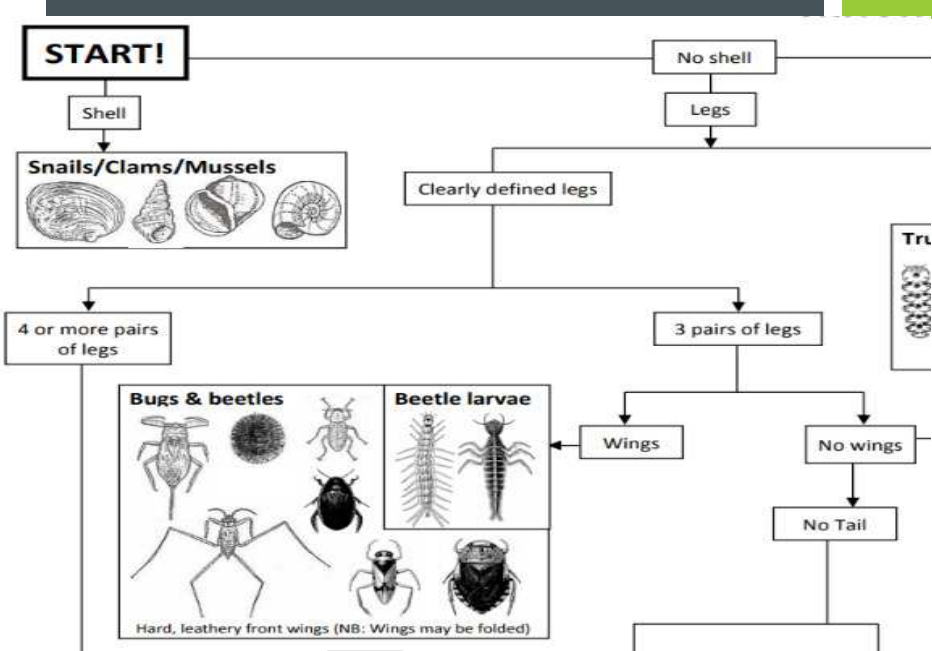
WWQA – WORLD WATER QUALITY ALLIANCE



- A UN Environment initiative
- Local Water Forums – easy to set up
- Support from the community of practice
- Support and capacity building

TECHNIQUES AVAILABLE

- Free to use
 - Ecological – based on identifying ‘bugs’ in the water and classifying, linked to google maps
- Sponsored
 - GEMs (Global environment monitoring) – provides testing equipment and labs with free training
- Funded
 - Requires water quality labs, and testing equipment

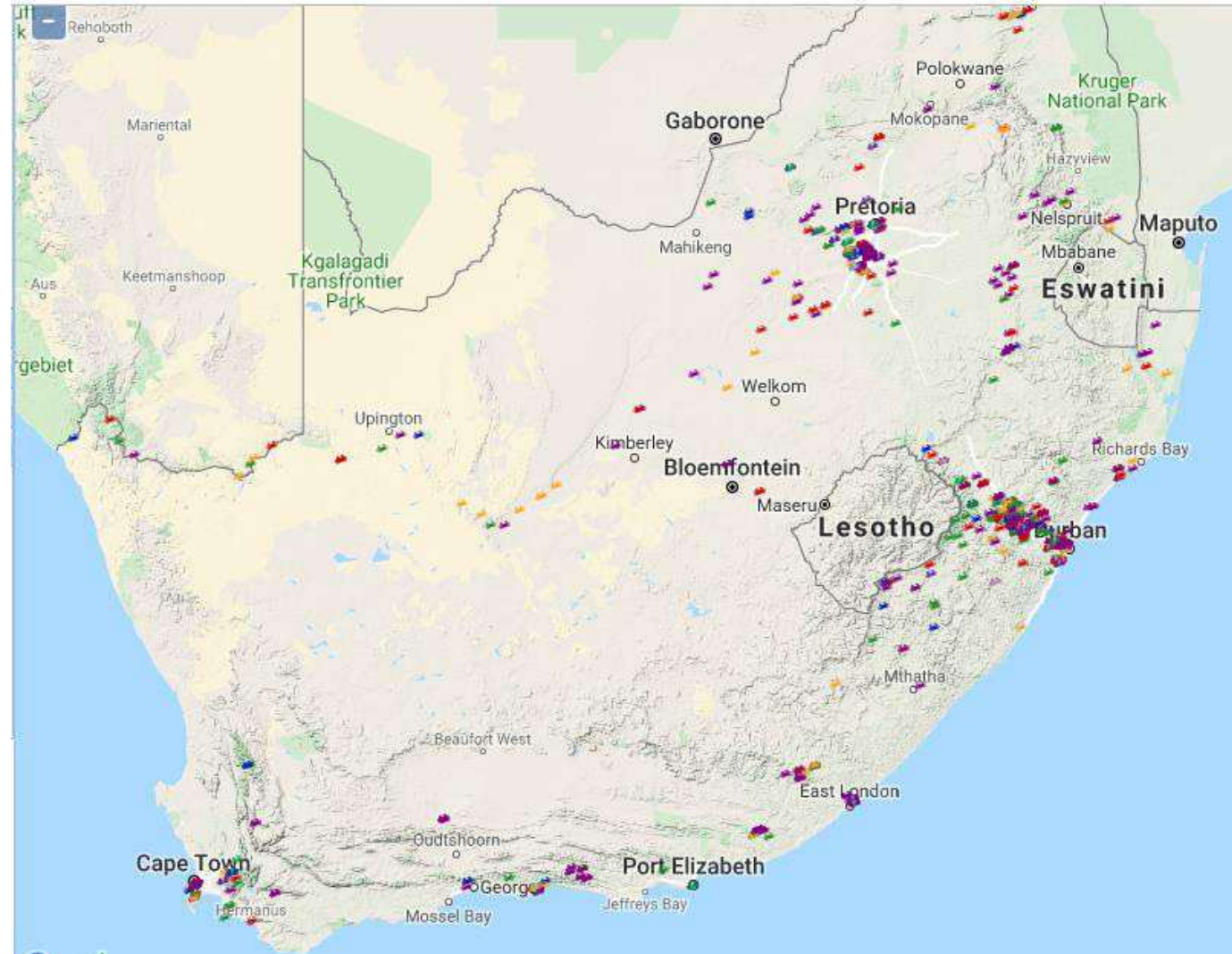


GROUPS	SENSITIVITY SCORE
Flat worms	3
Worms	2
Leeches	2
Crabs or shrimps	6
Stoneflies	17
Minnow mayflies	5
Other mayflies	11
Damselflies	4
Dragonflies	6
Bugs or beetles	5
Caddisflies (cased & uncased)	9
True flies	2
Snails	4

	Ecological category (Condition)	River category	
		Sandy Type	Rocky Type
	Unmodified (NATURAL condition)	> 6.9	> 7.9
	Largely natural/few modifications (GOOD condition)	5.8 to 6.9	6.8 to 7.9
	Moderately modified (FAIR condition)	4.9 to 5.8	6.1 to 6.8
	Largely modified (POOR condition)	4.3 to 4.9	5.1 to 6.1
	Seriously/critically modified (VERY POOR condition)	< 4.3	< 5.1

GOOGLE MAPS

- Colour crab classification
- GIS mapping
- Link to SDG 6.3



GEMS - GLOBAL ENVIRONMENT MONITORING

- Test kit for N, P, turbidity, bacteria
- Sponsored by UN Environment
- Kits available



CASE STUDY - LIMPOPO

- Freshwater water quality monitoring kit (N, P, turbidity, miniSASS, bacteria – e.coli, coliform)
- South African Association Youth Club
- 7 schools with 30 learners each
- Engaging with young learners
- Future ambassadors



SUPPORTING LOCAL WATER FORUMS

- Capacity building for how to fund locally.
 - Engagement plan
 - Stakeholder mapping
 - Choosing the technology
 - Funding options

WWQA SOCIAL ENGAGEMENT WORKSHOP TO SUPPORT THE ESTABLISHMENT OF LOCAL WATER FORUMS

When: 21st September, 2023

Where: Following the WWQA Conference, Nairobi, Kenya

A one-day workshop to train the trainers for local water groups to make them less dependent on external funding sources and create longer-term financial support and expand their reach.



[RSVP HERE](#)

4 MODULE WORKSHOP

1. **Engagement:** Develop a communication plan to encourage local businesses and authorities to support LWFs with awareness campaigns, funding and technical training.
2. **Stakeholder Mapping:** Understand how to identify and involve the optimal partner stakeholders (people and organisations), to support expending and fund-raising of the LWF.
3. **Monitoring and Data Collection Expertise:** Explain the most suitable water quality data collection techniques and the people required to make this work from a citizens science perspective.
4. **Funding Strategy:** Design a local funding strategy to encourage local authorities, businesses, charities, and people in the local community to contribute financially or otherwise support.

PARLIAMENTARIAN ROLES

1. Make (young) people aware of their rights
 - Education, communication, citizen science
2. Monitor water quality as a way to track areas for investment and improvements over time
3. Integrate Policy to support citizen science programmes – with budget



THANK YOU FOR LISTENING

A.LOEFFEN@HUMANRIGHT2WATER.ORG

