Investigating the behavioural drivers of Stakeholder Engagement and Volunteerism in the South African Water Arena

Report to the
Water Research Commission

by

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Abstract

Integrated Water Resource Management (IWRM) is an inherently complex task, especially in South Africa with its diversity of cultures and socio-economic groupings. The multitude of factors, drivers, personas, agendas and technical challenges that influence and direct the way in which IWRM is conducted leaves many communities that encounter water resource challenges in a precarious position. The reality in South Africa and elsewhere is that public-private partnerships and shifts towards adaptive management and stakeholder engagements are pivotal in ensuring effective IWRM. With governmental bodies facing resource constraints and delivery challenges, the role of engaged stakeholders and volunteerism is important in creating momentum to address water challenges. In addition to this, the level to which stakeholders are engaged with these challenges has a direct impact on the effectiveness of IWRM strategies and initiatives.

This study aimed to investigate the drivers of engagement and volunteerism in a community facing an IWRM challenge, with a view to generating an understanding of how volunteerism and engagement levels may be improved. A narrative-based qualitative methodology was utilised in gathering data and generating findings with regards to stakeholder engagement and volunteerism within communities in the Crocodile (West) Marico catchment around the Hartbeespoort dam. A foundational starting point in the methodology was that it was conducted from a pre-hypothesis perspective. This was done for two reasons: firstly, to ensure the research would be open to the possibility of unexpected insights and results, and secondly, to make strides in establishing hypotheses for future research in the field.

The findings of the study have been linked to the issues of engagement and volunteerism in general, as well as to the Hartbeespoort dam context. The study has also compiled a list of key issues for consideration should a community facing an IWRM challenge wish to increase engagement and volunteerism levels.

Key words:

Engagement, volunteerism, stakeholders, communities, narrative, water resource management, Hartbeespoort Dam, water challenges.

Executive summary

Background

Water is the lifeblood of any community. If an area is without water for an extended period of time, it becomes a desert and uninhabitable. Effective Integrated Water Resource Management (IWRM) in South Africa is a critical but complex task. The multitude of diverse stakeholders involved and the various interactions and behaviours within diverse community and stakeholder groupings add to the technical complexity of ensuring long-term sustainability of processes, structures and resources. It is with this in mind that The Narrative Lab (TNL) investigated the behavioural drivers of engagement and volunteerism with respect to agencies, organisations and individuals involved in water management.

Objectives

The research study identified three primary objectives:

1. Generate an understanding of the factors that drive community/stakeholder engagement and volunteerism, within a particular community/stakeholder grouping of water users [specifically three communities in the Crocodile (West) Marico catchment around the Hartbeespoort dam].

2. Explore how these factors can potentially be utilised to:

    a. Enhance community/ stakeholder engagement, communication and volunteerism in the focus area, and

    b. To potentially generalise these findings for broader application in catchments and communities that are in need of greater engagement and volunteerism.

3. Investigate the applicability of narrative- and complexity-based research methods within the realm of IWRM.

Research Focus

The research study investigated several possible factors that influence an individual or community's drive towards engagement and volunteerism. In particular, the notions of civic agency, stakeholder empowerment, individual resilience, salience and motivation were investigated. The prevalence, and level of influence, of these factors may differ markedly depending on the stakeholders involved in a particular context, but they are however key to effective interventions. An additional focus of

the study revolved around finding out whether there are similarities across stakeholder groupings with regards to the constructs mentioned above.

Methodology

The methodology utilised in the research study was that of a narrative-based qualitative approach. A foundational starting point in the methodology was that it was conducted from a pre-hypothesis perspective. That is, the research was not conducted to assess any framework or theory regarding volunteerism and stakeholder engagement, but to rather adopt an epistemological position of curiosity. This was done for two reasons: firstly, to ensure the research would be open to the possibility of unexpected insights and results, and secondly, to make strides in establishing hypotheses for future research in the field.

In terms of the approach, individual interviews and group sessions were conducted where respondents were prompted for narrative material relating to IWRM and volunteerism within their context. Secondly, the respondents were presented back with their own material where a form of self-analysis was conducted on the material that rendered archetypical characterisations of the perceptions of these communities on the IWRM context in general as well as the drivers of engagement and volunteerism. The outputs from these sessions were then collated and analysed for insights relating to engagement and volunteerism.

Findings

The key findings generated as a result of the study are as follows:

1. That creating awareness of the water challenge by providing appropriate information, packaged in a contextually relevant way is a necessary, but insufficient driver for engagement
2. That individual and civic agency is essential to engagement and volunteerism. If agency is lacking, engagement and volunteerism will not be possible without outside intervention
3. The salience of an issue significantly impacts the levels of engagement and the number of volunteers as well as the length of time that engagement can be sustained
4. Appropriate leadership can significantly fast track the emergence of high levels of engagement and volunteerism, however if findings 1, 2 and 3 are

present, leadership may emerge organically. Leadership can either be an individual, a project or an initiative

These constructs are necessary for the emergence or stimulation of volunteerism, although they may not in themselves be sufficient, as the context within which they occur plays a significant role

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1.   Introduction and background to the study

Introduction

Water is necessary for life and is therefore a critical resource that needs to be managed responsibly. Many industries, for example agriculture, mining and manufacturing depend on access to water, but it is the dependence of human beings on water for survival that remains the biggest driver for effective IWRM.

South Africa faces many complex IWRM related challenges. Many communities are without proper access to water, others face water pollution challenges as well as resource benefit sharing conflicts. Governmental institutions face numerous resource constraints that hamper them in effectively meeting these challenges. It is therefore imperative to find ways of enabling effective stakeholder engagement and sustained volunteerism to ensure effective public-private partnerships.

And so, the way in which diverse stakeholders engage with a water resource challenge will determine the extent to which the challenge will be addressed. The role of engagement and volunteerism is important in creating momentum to address water challenges. In addition to this, the level to which stakeholders are engaged with the challenges has a direct impact on the effectiveness of IWRM strategies and initiatives.

Focus Area

Hartbeespoort Dam, also known as "Harties", officially the Hartbeespoort Dam Reservoir is situated in the North West Province of South Africa. It lies in a valley to the south of the Magaliesberg mountain range and north of the Witwatersberg mountain range, about 35 kilometres west of Pretoria. The dam was originally designed for irrigation, which is currently its primary use. It is one of the most significant dams in the economic hub of the North West Province and the Crocodile (West) Marico Water Management Area (WMA). The Crocodile river contributes the largest volume of water to the Dam, with smaller direct inflows from the Magalies River, Leeuwspruit and the Swartspruit.

The town of Hartbeespoort is situated close to the dam wall and the villages of Kosmos, Melodie, Ifafi and Meerhof can be found alongside its banks.

Hartbeespoort Dam has been renowned for its poor water quality and has been in a hypertrophic state (which means that there are excessive nutrients like phosphate and nitrogen in the dam) since the early 1970s. According to the Department of Water Affairs (DWA), there are multiple reasons for this, including:

- Waste Water Treatment Plants discharge more than 700 million litres per day of treated effluent into the catchment, which puts a load of more than 280+ tons per annum of phosphate into the Dam.
- Storm water ingress into sewage networks that cause overflows from manholes and pump stations into watercourses.
- Storm water flows washing sewage spillages, fertilizers, litter, animal waste etc. into the Dam.
- Modified and destructed riverbanks, riverbeds and wetlands have reduced the natural purification capacity of the rivers.
- Historic and present pollution loads are trapped in the sediments, which release additional nutrient loads into the water.
- The destruction of natural habitat contributes to the distorted food web, which results in the dominance of undesired fish species (Carp, Babel and Canary Kurper) and the depletion of the desired fish species (Mozambique Tilapia) and zooplankton. (Source: http://196.3.165.92/hartiesdev/)

The extreme level of eutrophication is evident in the excessive growth of microscopic algae and cyanobacteria, and macrophytes such as water hyacinth (Van Ginkel and Silberbauer, 2007). The South African Department of Water Affairs and Forestry (DWA) launched a remediation programme, Harties Metsi-a-Me (Harties, My Water) which aims to address unhealthy biological conditions and imbalances within the Dam. According to DWA "The guiding principle of the Harties, Metsi a me programme is waste minimisation and recycling, which give effect to the implementation of the National Water Resource Strategy which provides the framework for the protection, use, development, conservation, and control of the country's water resources in an Integrated Water Resource Management (IWRM)."

(Source: http://196.3.165.92/hartiesdev/)

The communities that surround the dam represent a diversity of socio-economic stratification. As a popular weekend holiday destination for people from Johannesburg and Pretoria, the residential suburbs surrounding the dam have flourished in recent years, resulting in a fairly transient and fluid population. Water sports, boating and golf are favourite recreational activities for affluent residents and visitors alike. There are also several low economic status townships situated alongside the dam, which are dependent on the water from the dam as their primary water source.

Hartbeespoort Dam was chosen as the focus area for this study because of the lengthy history of IWRM challenges and the notable issues regarding a lack of stakeholder engagement and volunteerism regarding the water quality at the dam. The sample of narrative fragments listed below highlights the diversity of perspectives and the complexity of context within which the IWRM challenges need to be addressed.

> ***Always a selfish motive (contributed by a volunteer in a leadership role)***
> *"But I think unless you achieve something out of the situation, you will not be motivated, and you won't even start it for that matter. So there's always something, whether it's just the personal ego, to show where I am and I know, or, like in my case I keep telling myself that a big part of my earthly sort of wealth sits in my house which sits on this water. As that water is, gets worse, the value of my house and everything that goes with it will go down. So it's a very good motivation to get involved somewhere, if I can improve the water or stop it getting worse, I will improve my own situation. So, it sounds like a selfish thing, but I would think most people are driven by that you know, whether it's just, you want to gain knowledge, you want to gain money, you want to gain prestige, goes all the way up the ladder to political power and wanting to run countries and whatever. So that's what I think has driven us, and we were not as aware as people around the dam."*

> ***Rich Sandton golfers (contributed by a volunteer in a leadership role)***
> *"So we tried to motivate people, we got a group together, we got Water Affairs people, we even got the Minister of Water Affairs at the time, to come out here physically, take him on a boat, take him on the water, show him all this green, smelly stuff everywhere. And, I do quote him at time from that particular meeting because, he was very impressed, he said, 'You guys*

really have got a dirty dam and it's terrible'. He says but, and that was typical what maybe, maybe he's correct. He said do you want me to go back to Parliament tomorrow and ask for, in those days, R200 million, to fix your dam for you bunch of rich Sandton golfers who want clean water. He says I've got 20 million people who don't have any water. You know, how do I motivate government to apply that money to the problem? It was a short-sighted reaction really, because, although we maybe even felt ourselves it's recreation and therefore we are worried you know, we'd like it clean. But, the more you get involved over the years, the more you realise it's far deeper than that, it's not just we want it clean because you'd like to go and swim in it. It's health-related and there are many issues."

People just need information (contributed by a volunteer working with DWA)

If I can use Pecanwood as an example, because I've moved there six months ago, and what, there were so many red flags that came up in my head, with what I could see they were implementing that are terrible for me, in terms of, things like organic material. Their garden service, which a homeowner would be paying for, for the service in your levy. Their garden service is removing all the leaves. They're cutting everything, and they go on their hands and knees and they go under bushes, and then remove all of the leaves. I'm thinking how the hell can this be, how can people be doing this? And I then developed a concept document, which is an operational best practice guideline, will be, when it's gone through all the formalisation and whatever. But, I've taken the document to them, to say this will be part of the Integrated Water Use Licensing, part of the RMP that will be rolled out, and they've been told that in meetings, in the RMP. I'm now saying to you Mr Pecanwood, here is the basic document, and when you read that, you will see that there are simple things that you can implement today. So, it's not been easy. There are people that have their own agendas in these estates, and they are on power-trips and ego-trips and whatever. I try and bypass all of that, and I go up until somebody actually listens to me. This is what I've done at Pecanwood. For the last five years, with the developer, I had a very good working relationship on a personal basis, me as a resident, and luckily he was on the same page and whatever I asked him and explained to him, he agreed to, because in his words it's the right thing to do, once you explain this to him. So, I've developed several guidelines.

2. Literature Review

2.1 Overview

This literature review focuses on existing research associated with the core constructs that form the focus of the study: stakeholder engagement, volunteerism and narrative research.

2.1.1 Stakeholder engagement and social learning.

According to Pahl-Wostl (2006) natural resources management in general, and water resources management in particular, are currently undergoing a major paradigm shift. Primarily this paradigm shift is the acknowledgement of the complexity of social-ecological systems and that stakeholder engagement and collaborative governance could be considered more appropriate for integrated and adaptive management processes than linear management practices that have largely been developed and implemented by experts using technical means based on designing linear systems. This collaborative governance paradigm creates the need for greater levels of engagement and social learning, leading to sustained behaviour change.

In defining what stakeholder engagement is, there exists a veritable buffet of definitions. As such, the concept can be viewed from a strategic management perspective aimed at capturing knowledge, increasing ownership of a project by all impacted by the project, reducing conflict between concerned parties, encouraging innovation and facilitating spin-off partnerships. From an ethical perspective, meaningful stakeholder engagement can be seen to enhance inclusive decision-making, promote equity, enhance local decision-making and build social capital by training the communities involved. (Reed et al., 2010) defines stakeholder engagement as "a process whereby individuals, groups, and/or organizations choose to take an active role in decision making processes that affect them".

There seems to be many different definitions and interpretations of the concept of social learning, as well as the links between social learning and engagement. Pahl-Wostl et al. (2008) refer to social learning and "sustainable learning" that consists of

developing "new identities, as well as institutions and individual capacities, that are more ecologically robust with the common goal of sustainability".

Reed et al. (2010) summarises social learning as a process that:

1. Demonstrate that individuals involved in the process have experienced a change in understanding as demonstrated on the surface level by the simple recall of new information, or on deeper levels by a change in world view.

2. Goes beyond the individual to become "situated within wider social units or communities of practice within society"; and occurs through "social interactions and processes between actors within a social network, either through direct interaction e.g. conversation, or through other media, e.g. mass media"

Evidence seems to suggest a link between engagement and social learning, specifically that participatory processes could stimulate the emergence of social learning (Cundill, 2010), however that does not imply that participation or engagement inevitably leads to social learning. What seems to be commonly understood is that stakeholder engagement is a pre-condition for social learning to occur.

The concept of social learning has also been used outside of the social-ecological arena. For example there has been increasing use of social learning in adult learning processes to teach citizenship. This is based on a belief that learning about good citizenship (which encompasses the responsible stewardship of natural resources) is better facilitated through positive experiences, reflection and experimentation than through a structured curriculum. (Wildemeersch et al., 1998; Benn, 2000).

Lotz-Sisitka and Burt (2006), in their critical review on participatory processes recommend that social learning be adopted as a means to improve the interplay between structure and agency in participatory processes.

2.1.2 Participation

Stakeholder participation is becoming increasingly important. There seems to be a global trend in policy making towards decentralisation. This is evidenced in South Africa by the establishment of Catchment Management Agencies (CMA's) as vehicles to implement IWRM. Effective decentralisation largely depends on achieving increased stakeholder participation throughout the decentralisation

process (Lotz-Sisitka and Burt, 2006). To this end, participation has been included in government legislation relating to IWRM.

In addition, the second principle that was presented at the Dublin Statement and Conference Report on water development and management, states that water development and management should be based on a participatory approach involving users, planners and policy makers (Poolman and Van de Giesen, 2006).

Apart from legislative requirements there are various motivations for increasing stakeholder participation (Pahl-Wostl et al., 2007). These include arguments based on democratic legitimacy, asserting "that all those who are influenced by management decisions should be given the opportunity to actively participate in the decision-making process. Principles of equity and social fairness demand that the voices of the less powerful should also be heard" (e.g. REC, 1998, 1999; Renn et al., 1995; C. Pahl-Wostl and D. Ridder, unpublished manuscript). From a complexity thinking perspective, insights into complex issues and integrated management approaches cannot be addressed or implemented effectively without taking into account the contextual knowledge and perspectives that are held by local stakeholders. Decreasing governmental budgets reduces the efficacy of traditional top-down command-and-control management styles, which leads to increasing interdependence between government bodies and other stakeholders. "Collective decisions are needed to implement effective management strategies, and the combination of top-down and bottom-up formation of institutional arrangements may lead to a greater acceptance by all the stakeholders involved." (Pahl-Wostl et al., 2007).

Rosenzweig (2009) also makes the assumption that due to overwhelming population growth and associated urbanisation trends, some local government structures are struggling to cope with the demand for service. This struggle with demand is made worse with the additional pressure of a skills shortage and lack of capacity to deliver due to the political views in regards to employment. Earles in Rosenzweig 2009, also holds the view that "there is an enormous need for partnerships which build understanding and communication and which help close the gaps between people and government, within government, between local government and national government, within civil society, and so on. Often the most valuable are non-formal and unstructured, built around recognition of common interests despite profound differences."

Rosenzweig (2009) expands on this definition by stating that each of these above-mentioned stakeholders will enter a partnership with different incentives and objectives. The interests of each stakeholder must be clearly expressed and considered. Engagement stems from stakeholders first participating to some degree within a project or area. Poolman and Van de Giesen (2006) indicate that the role of participation is to be concerned with the structural relationships and the importance of developing people's capacities and skills. Secondly it is also the method through which all the stakeholders can be made aware of the impact they can have on the project and empower them to develop a stake in development projects and programmes. Rosenzweig (2009) indicates that projects working with the business, government and civil society sectors are able to deliver more cost-effective financially sustainable and environmentally friendly water systems. She emphasises that the success of this approach requires an understanding that each sector has different goals, but by utilising each other's resources and competencies a sustainable solution is possible.

Emmet (2000) states that since the release of the Reconstruction and Development Plan in 1994, concepts such as citizen participation and public-private partnerships can be found in most policy documents. This gave rise to the idea of popular participation and a call for involvement from the communities and stakeholders in every sector. Herein lies the problem as many communities don't want to or do not know how to engage with the various organisations. Midgley in (Emmet, 2000) gives us another perspective by stating that conceptual clarity and rigour in research is often sacrificed for an infusion of notions about community engagement and moral sentiment.

2.1.3 Community voice

Hemson et al. (2007) state that engagement is made more complex by the way in which stakeholders participate in research. This means that the research or project team is seen as external to the stakeholders or can be seen as another sub-stakeholder grouping. To engage the community in an effective way Hemson provides a tool to engage the community and help the process of participation stimulation. They term it the "community voice", which is described in the following points:

- Brings together many diverse voices
- Expresses the accumulated needs and priorities of all the voices (stakeholders)

- Creates a vision that is shared and talked about
- Communication to higher level stakeholders
- Documented by reports, photographs and video
- The way interaction between stakeholders and government departments take place

According to Hemson, community voice empowers the community to take its rightful place in society and provides the breeding ground for community engagement and volunteerism. This begins to occur as the community starts to see that they have the means, power and responsibility to make the necessary changes to become more healthy, especially in the water arena.

2.1.4 Communicating the need for interaction & participation

Participation is a complex phenomenon in itself, but in the South African context it is further complicated by a historic reality of a majority of the population being marginalised with regards to water management among other things such as education. This limited education and access has led to a profound lack of understanding of the system, by a large percentage of the population. Participation is largely seen as a way to redress this reality, but people aren't able to participate in processes and systems that they don't understand. (Lotz-Sisitka and Burt, 2006). New methods of participation are therefore required in order to engage these stakeholders in ways that value the knowledge they do have and facilitate social learning.

Although not a water focused project, the research conducted by (Meintjies, 2010) provides another view on how to actively engage the community. In the bid to engage children in the Child Advocacy Project, Meintjies utilised home visits, community theatre, posters and workshops to communicate the need for interaction and participation. Meintjies conducted a theatre on domestic violence in communities where this problem was rife. Using volunteers from Rivlife, they acted out scenes of domestic violence and then initiated a dialogue or conversation around these scenes. By using cases that were known in the community it gave the theatre more meaning, and as people could resonate with the process, it opened other areas of concern that needed to be addressed.

2.1.5 Shared dissatisfaction as a driver for participation

A project that chronicles a case study of community engagement was done in the Pelhindaba informal settlement near Sannieshof (Gouws et al., 2009). The Sannieshof community declared a dispute with the Tswaing Local Municipality with regards to the service delivery of the local municipality. The community was proactive in their approach to this problem by coming together to lodge grievances with the local authority. What is interesting about this case is that a sense of local patriotism took over and bridged the racial divide within the community. What seemed to mobilise this high level of engagement was the shared dissatisfaction with the lack of consultation by local government.

2.1.6 Sense of ownership as a benefit of participation

The desire to engage with stakeholders in decision-making processes is also linked to enhancing the sense of ownership that the community has toward the process. Shepherd and Bowler (1997) in Mathur et al. (2008) claim that when citizens' values are incorporated in project decision-making and design, they develop a sense of ownership of the project. Similarly, (Shindler and Cheek, 1999) in (Mathur et al., 2008) suggest that one of the benefits of effective participation and engagement is the public ownership of a project. Stakeholder ownership is important for the long-term success and upkeep of the project and must be seen as one of the criteria for its success. This is especially important in a context of water research and intervention projects, where the building of sustainable environments lead to the highest gains, creating environments to facilitate social learning and leading to long-term sustainability as the participants take responsibility for the upkeep of the process.

2.2 Volunteerism

2.2.1 What is volunteerism?

Volunteerism is a complex term, as it means different things to different people and it is not always immediately apparent what the link is to the water arena. For many, volunteering behaviour in the environmental arena is more closely related to the concept of activism than volunteerism (this is definitly the case in countries like Australia), although activism could seem a more extreme term to many.

One of the views within existing research is that volunteerism seems to be a phenomenon on the decline. This seems to be due to an over reliance on governmental organisations in the hope that government will "fix" the problems, as was the case in Botswana. (Rankopo et al., 2006).

In the past, and in some cases even now, aspects of volunteering behaviour are woven into the fabric of African social life when the concept of Ubuntu is considered. To ensure the survival of individuals and communities, the individuals as well as the community contribute material and non-material goods to the collective. This spirit of cooperation and reciprocity ensured that everyone was healthy and looked after.

Marta and Pozzi (2008) define volunteerism as a specific type of sustained, planned, pro-social behaviour that benefits strangers and occurs within an organisational setting. The view of the researchers is that this can be expanded to a communal level if not also a national level. Within the water arena all water-users could be potential volunteers to further the cause of sustainable water usage.

Dovidio et al. (2006) refer to "planned and long-term helping behaviour", and makes a distinction between community activism and volunteering. Community activism is defined as a pro-social behaviour of which the goal is to benefit others through one's own actions. "It involves recognising a need that exceeds a single person's resources and then taking action to mobilise others to address the problem. Often community activism means challenging conventional beliefs and traditional ways of doing things. Community activists often 'rock the boat'". Volunteering is defined as giving an unpaid service freely to a nonprofit organisation that directly or indirectly delivers goods and services to individuals, groups, or a cause (Wilson, 2000). Dovidio describes several motivating influences that answer the question of why people become community activists or volunteers. For the purposes of this document, the focus will be on the motivations for community activism, as it more closely aligns to the concept of "volunteerism" in the water arena discussed in this study.

2.2.2 The next generation of volunteers

Children, or the next generation of water users are one of the stakeholder groupings that the researchers identified as a key community. It is the next generation that will take forward and drive the initiatives that are put in place now to conserve and

manage water. It is therefore critical to gain insight into their beliefs and perceptions around water and volunteerism. Marta and Pozzi (2008) provides us with some insight into what the effect will be of encouraging children to volunteer from a young age, and if this spirit of volunteerism survives through the transition into adulthood.

Young adults are seen within the research community as the group that has increased their engagement in volunteering activities the most in the past few years. They state that this growth in pro-social behaviour can be attributed to emerging interpersonal relationships, cognitive and emotional development and the change within the social context. Carlo et al. (1992, 1999); Marta and Scabini (2003); Kirkpatrick-Johnson et al. (1998) in Marta and Pozzi (2008:35-36) have identified personality and motivation characteristics of young adults that volunteer. They are more extroverted, need less autonomy, have greater self-worth, higher internalised moral standards, and have a more positive stance towards other people and themselves. They also exhibit a greater degree of self-efficacy and optimism, less narcissistic investment on themselves and have greater empathy for others.

Studies on the effects of volunteerism in young people have highlighted how voluntary service is useful for socialisation, becoming more involved in the social context of belonging, gaining political participation as a promoter of civic engagement and support of pro-social norms. (Marta and Pozzi, 2008) It therefore seems that if young people can be effectively engaged and made aware of the contribution they can make by engaging with problems facing the community such as water conservation and management, the results can be astounding.

2.2.3 The cyclical nature of volunteerism

Empirical evidence seems to suggest that volunteerism and engagement are cyclical phenomena within communities. There are periods of high engagement followed by periods where community engagement and volunteering virtually disappear. High levels of engagement are typically manifested in the face of a crisis or when specific projects are creating high levels of awareness in a certain community. An example of this would be the high levels of engagement experienced in the Inkomati catchment while the Catchment Management Strategy was being developed (Luton and Rogers, 2009:30-31). However, it seems that as soon as the project is over, or the crisis is resolved, engagement levels drop and eventually virtually disappear.

It seems that this cyclical nature of volunteerism is linked to the concept of salience and availability.

2.2.4 Core influences on volunteerism

2.2.4.1 What motivates people to volunteerism or become social activists?

William Berkowitz (1987) coined the term "local heroes" after writing a collection of biographies of normal people who became pro-social activists in their communities. He investigated what motivated individuals to become "local heroes" and found that there were more differences than similarities between the various individuals he studied. Some of them seemed to be driven by altruistic concerns, others by self-interest. There were however shared characteristics such as few familial obligations, strong parental influence, a spiritual background and the political ethic of the 1960s. There were also similarities in personality, which included "naïveté (not realising what they were getting themselves into), high energy coupled with the ability to pace themselves, and a boundless capacity for humour. In addition, he found two other similarities in which they shared a capacity for strong emotions. "They had experienced excitement about the issue that made them want to "jump out of their seats" and anger that made them want to really "kick butt". The second pattern he observed was that these "local heroes" shared "a strong belief in and reliance on traditional virtue, that is, commitment, tolerance for criticism, hard work, optimism, persistence and the willingness to take a risk for a good cause" (Berkowitz, 1987).

According to Dovidio et al. (2006), a combination of affective and cognitive factors is required to stimulate social activism. Initially, emotional elements such as excitement or anger lead an individual to initiate the behaviour. The second phase involves problem solving abilities, willingness to take risks and perseverance in order to perform the long-term and complex actions that are often required to sustain the behaviour.

Community activists often start their prosocial work in isolation, often outside of the conventional boundaries of the community in order to find solutions for problems that few others want to engage with. Usually the results of their sustained efforts will result in the formation of organisations that will take over from them. These organisations, often established due to the efforts of community activists, usually need volunteers (as per Wilson's (2000) definition) to give of their time and resources in order to function effectively.

2.2.4.2 Issue Salience

Availability, salience and vividness are three terms that refer to very similar things in social psychology but have slightly different meanings. They may actually all refer to the same underlying concept, and they positively influence one another, but they are each used consistently in different theoretical contexts (Tversky and Khaneman, 1974).

> **Availability** refers to how likely or probable something appears, in probability estimation.
>
> **Salience** refers to the state or quality of an item that makes it stand out relative to neighbouring items. It also refers to the likelihood that something will appear causal, in attribution theory.
>
> **Vividness** refers to how easily something is recalled and how convincing it is, in persuasion.

The salience of an issue can therefore be defined as the state or quality that stands out relative to neighbouring issues. The relative salience (or perceived importance) of an issue largely determines the level of attention that the public would pay to it. A crisis or project seems to significantly increase the salience of the relevant issue in the minds of stakeholders. Another key influencer on the salience of an issue is personal experience.

2.2.4.3 The role of the media

The media play an important role in communicating the current salient issues in a community or country. A recent example is the increased media coverage of the threats posed by acid mine drainage in Gauteng and how it has significantly increased the salience of the problem in the wider population.

Much research has been done into the role of issue salience on voter behaviour, and specifically the role the media plays in influencing issue salience in the mind of voters.   A theory called Agenda Setting Theory (Roger Wimmer and Joseph Dominick, 2006) proposes that "the public agenda – or what kinds of things people discuss, think, and worry about (and sometimes ultimately press for legislation about) – is powerfully shaped and directed by what the news media choose to publicize" (Larson, 1994). According to Zyglidopoulos and Georgiadis (2006) the main tenet of agenda setting theory is that the media set the agenda for public opinion by

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highlighting certain issues more than others. In other words, while mass media do not tell people what to think, they determine what people think about (Shaw and McCombs, 1972)."

This implies that whatever the news media determines to give the most attention to, will become the most important item on the audience's agenda.

2.2.4.4 Identity

Gee (2000) describes identity as "Being recognized as a certain "kind of person", in a given context". People have multiple identities that are dynamically managed; these identities are more strongly linked to their societal context than to their internal state. Gee distinguishes between four ways to view identity, these are not discrete from each other, but are inter-related and used as lenses to observe this phenomenon from various perspectives:

- Nature identity – we are what we are because of our nature
- Institution identity – we are what we are because of the positions we occupy in society
- Discourse identity – we are what we are primarily because of our individual accomplishments as they are interactionally recognized by others
- Affinity identity – (we are what we are because of the experiences we have had within certain sorts of "affinity groups"

For this study, Affinity identities (or A-identities) will be the focus. A-identities are formed and sustained by affinity groups. These are groups made up of individuals who share a common interest, but may be geographically dispersed and share or have very little in common, except this interest. Members of the group share an allegiance to, access to and participation in specific practices that lead to a shared experience. It is therefore participating and sharing that leads to the formation of an A-identity. A-identities are not bestowed or sustained by outside forces as with the other identities, they are "opted into", in other words, people choose to be affiliated to the affinity group. They therefore offer potential in the volunteering space to serve as "identity attractors" for the formation of volunteering affinity groups.

2.2.4.5 Role Identity Salience

Another key concept is that of role-identity salience (Schuurman, 2010). In short, role-identity salience refers to the degree to which others identify a person or actor

with a certain role identity as well as the amount of social support the person receives in the role identity. Another key factor is the size of the social network that is linked to the role identity. An important implication of role-identity salience for volunteerism is its strong association with behaviour – it is seen as an important predictor of behaviour (Schuurman, 2010). If volunteering role-identities can be therefore strengthened, volunteering behaviour could become more sustained and less cyclical.

2.2.4.6 Civic agency

A concept that seems to be linked to both community engagement and volunteerism (or activism) is that of civic agency. According to Boyte (2009) resilient democratic societies are characterized by a shift from a top down to a bottom up paradigm of action. In such a paradigm, people are agents of their own development and problem solving. A key difference is in the approach of larger support structures: in a bottom-up paradigm these structures have a deep-seated respect for people's capacities for self-directed action – they therefore seek to empower them. Top-down approaches are characterized by an enabling mindset where people need to be "helped" or rescued by others. Agency can therefore be defined as "our own navigational capacities to negotiate and transform the world around us, which is understood to be fluid and open" (Boyte, 2009)

Civic agency is strongly linked to resilience, which, according to Boyte (2009) is characterised by:

- The adoption of an identity of a resourceful survivor rather than a passive victim, not only on an individual level but also as the collective, is the heart of civic agency:
- A sense of collective or civic agency – people's confidence in their capacities to direct their lives, individually and collectively, to solve public problems together, and to shape their environment
- Cultural norms that reinforce community, mutual aid, the value of each person, and appreciation for the assets of individuals and communities
- Capacities to find positive meanings in trauma and to learn from difficulties
- Opportunities to contribute to the wellbeing of others and the society

Fourie (2009) provides a few handles to understand what empowers stakeholders to be self-motivated agents who engage or go further and volunteer. These include concepts or dimensions that impact psychological empowerment.

By empowering the stakeholders psychologically they may become more responsive and may even reach a state of reflexive agency. Fourie (2009) gives 12 concepts that can impact the sense of empowerment that participants/volunteers/ stakeholders cognitively perceive.   This study will only focus on the impact of: *powerlessness vs. power*, *learned helplessness vs. control*, and *meaning*.

Powerlessness vs. power:
On the one side of the power coin a stakeholder may have a sense of powerlessness that can stem from continuous interaction between the person and his or her environment. It combines a sense of generalized distrust, a feeling of lack of resources for social influence, an experience of economic vulnerability and a sense of hopelessness in socio-political struggle and surviving in the socio-economic arena. The problem with people who feel powerless is that they are likely to become over controlling (Fourie, 2009). On the other side of the coin is one of the root constructs to empowerment. Power can be seen as the way participants manage relationships and political alliances due to a realisation of a responsibility and a sense of accountability (Kanter, 1981; 1993 in Fourie, 2009). Most people need a sense of power to feel that they are in control of their own lives and that they can make an impact in the lives of others and themselves.

Learned helplessness vs. Control
Power and control are learned from experiences and if failures happen often enough a person may generalise the perception of lack of control to all situations, even when the situation may actually allow control. Repeated experiences with failure leads to erroneous beliefs of incompetence, which may lead to an individual giving up, becoming passive and to not pursuing opportunities. To counteract the sense of helplessness, another root construct to empowerment is control. Control is the way that stakeholders will be able to affect a volunteer's need for independence. Whether a person sees their control as internal or external is important. If a person sees their locus of control as internal then they may be more able to feel a sense of empowerment. (Fourie, 2009)

Meaning

When a person is concerned with the value of the tasks, goals or purpose and they have a feeling that what they are doing is important there will be genuine concern about the tasks to be done. (Fourie, 2009)

Positive empowerment means that a participant/ volunteer/ stakeholder will be able to have agency. By creating a positive space where people are heard, participants have the chance to develop and have the freedom to take ownership in all aspects of the project; agency will become a reflex. This will add value to the project and give an extra boost to the sustainability of the project.

An aspect that can also contribute to the stakeholder's empowerment is the way that they are educated, or the knowledge they are provided with. This education may give them power and control to make a difference and want to make a difference (Lotz-Sisitka and Burt, 2006). The stimulation of reflexive agency may provide stakeholders with the ability to really understand the impact they may have within an area and that their contribution can be the difference that is needed to uplift their area. This emancipation of stakeholders may therefore contribute to increased volunteerism.

2.2.4.7 Reflexive Agency

In a study done by Kerfoot (2008), in which she investigated the ways in which adult education can contribute to increased agency in the development of adults within the Northern Cape Province, she indicated that there is a set of five factors (listed below) that seems to enhance or constrain reflexive agency. Bourdieu (1977) in (Kerfoot, 2008) stated that reflexivity is the awakening of the consciousness that enables the ability to reflect on previously unthought-of habits and may guide social inquiry and action. The first of these factors was the acquisition of the discourses of participatory development by participants on a Certificate programme. This Certificate programme was a tertiary level Certificate for adult educators. This Certificate programme was developed by the University of the Western Cape, to build capacity for sustainable, high quality Adult Basic Education systems and to stimulate development processes. The case study indicated that the education of adults can lead to a community that engages and volunteers, which seems to support the general hypothesis that people often don't take action because of a lack of knowledge i.e. if you tell people what they can do (empower them with knowledge)

they will be more likely to act. We believe that as a driver for volunteering behaviour, knowledge or education is a necessary but not sufficient pre-condition. Our study will focus on finding the other pre-conditions or drivers that stimulate action within communities.

Bourdieu (1977) further states that the traditional class, race and gender boundaries break down over time, and as the control over resources shift, many of the participants could enter into or create new spaces of agency. Before the macro-social and political changes that accompanied the end of apartheid; many participants had been taking on the powers that be in various ways in a struggle for legitimacy. However, not all had acquired the discursive, conceptual and procedural knowledge necessary to engage in participatory development and governance (Kerfoot, 2008). In this study (Kerfoot, 2008) discovers that agency is socio-culturally mediated and emergences out of the dynamics between specific social, political and cultural factors within a given context at a point in time. Kerfoot (2008) discovered these dynamics by using interviews to obtain the ideological practices and the narratives that emerged as the constructions of reality. The examination of these "accounts" of participant's perceptions on their ability to become agents of change was centred on five framing factors:

- The enabling effect of discourses of participatory development acquired on the project. (Learning)
- Their view that they are seen as "insiders" in the community of study. (Cohesion)
- The strengthening of emotional and moral resources. (Empowerment)
- The integrated nature of the most successful approaches to development. (Integration)
- The dynamic relationship between macro- and micro-contexts. (Being relevant)

By engaging and educating adults in this reflexive way they could be made aware of their impact and contribution within the water arena and be motivated to become Change Agents for clean water and the conservation of water on all levels.

2.2.4.8 Sense of responsibility

One problem is that not all stakeholders are aware of, or concerned about the role they play in the water arena. This gives rise to a mentality of "this is the

government's problem, not mine" or "someone else will do it". This extends into the scientific and management communities, evidenced by this statement by the Water Supply and Sanitation Collaborative Council (WSSCC) of the UN: "The main barrier to 'water, sanitation and hygiene for all' is not the lack of resources; it is a lack of willingness to learn from past failures and to listen to those who have pioneered the new approaches". This implies that the mindset with which people engage each other is negatively loaded with a self-concerned view rather than a view that prioritises the survival of the community.

2.2.5 Volunteerism in other countries

According to The Review of General Management, Volume 11, Issue 1 (Andronic, 2010) Romania is experiencing an increase in the number of registered volunteers in public non-profit organisations. This increase seems to be driven in part by a set of laws on the use of volunteers in areas such as child protection, emergency services voluntary, civil protection, home care services for elderly, environmental protection etc. There is also a significant number of projects and employee volunteer programmes of domestic companies (supported by them), and this way of action (known as 'corporate volunteering') seems to be "the middle way" (Andronic, 2008, p. 143) between social responsibility at a company's level and the one assumed at an individual level (through volunteering).

Andronic (2010) goes on to discuss nine (9) key steps in Volunteer Management implemented in organisations to encourage volunteerism, namely: preparing the organisation for volunteer involvement, recruiting volunteers (e.g. students and pensioners), volunteer selection, orientation and training of volunteers, supervision of volunteers (which is ongoing), motivating volunteers, recognition of merit volunteers, ensuring good relations between volunteers and staff, and evaluation of programs/ projects and volunteers (National Volunteer Center Pro-Vobis, at: http://www.voluntariat.ro/manageri_de_voluntari.htm # 2).

In Pakistan, the International Irrigation Management Institute (IMMI) initiated a project to research establishing effective Water Users Organizations (Hassan et al., 1996). To assist with the project's fieldwork, the IMMI approached the general community to volunteer as Social Organization Volunteers (SOVs). This was done by identifying a number of community members who satisfied predetermined criteria, and then approaching these identified community members to request their assistance in the project, whilst completing a checklist for suitability.

In the United States, there are many volunteer initiatives focused on dams, rivers or natural lakes (for example http://www.pca.state.mn.us/index.php/water/water-monitoring-and-reporting/volunteer-water-monitoring/volunteer-surface-water-monitoring.html?menuid=&redirect=1). Most of these initiatives are structured and well-managed uniforms and signage for volunteers, as well as training and equipment to perform certain tasks such as taking measurements. These initiatives seem to establish clear volunteering identities.

2.2.6 Volunteerism in Africa

Growing independence in African countries, along with the rapid increase in nationalist governments gave rise to a search for new development ideologies. There was an increase in governmental revenues to invest in social development. However, a large portion of this revenue was generated by the nationalisation of foreign-dominated private sectors. With revenue in hand, the governments sought to go it alone, and not enlist communities to engage and participate as stated by (Rankopo et al., 2006). This gave rise to a crisis in the 1970s which was characterised by lack of growth, high rates of inflation, rising debt, high unemployement, shortages in basic goods and the most important one: crumbling infrastructure (Osei-Hwedie and Bar-On, 1999 in Rankopo et al., 2006). All these problems gave rise to a renewed focus on volunteerism and non-governmental organisations (NGO) that became entrenched in the social development process.

This case study gives us the understanding that, when people don't realise what their responsibilities are and that their inputs are needed to ensure good service delivery, volunteerism will decrease and the strain on NGO's will keep increasing. It is because of this mindset that it is crucial that people be made aware of their responsibility to contribute to sustainable practices. It would seem from the Botswana example that the need for service and the fact that the government could not provide this effectively enough gave rise to a new generation of volunteers that was concerned about the survival of the community. It was also stimulated by NGO's and other groups making communities aware that they cannot do it alone. Awareness and knowledge, although necessary is not sufficient to stimulate volunteering behaviour within communities.

2.2.7 Volunteerism in South Africa

In South Africa there are many NGO's and funds attempting to assist with community development. Volunteerism as community initiatives seems to not be catching on as rapidly. It is as if the "someone will provide, someone else will do it" mentality of the apartheid era is so deeply entrenched, that the idea of volunteerism is almost foreign to most South Africans. It is therefore imperative to find the keys that would unlock the behaviour that once came naturally to people and communities.

There are sectors that seem to have had some success in mobilising volunteers. Mathambo and Richter (2007) provide an example: in Kwazulu Natal they did research into the endogenous community-based responses to the needs of children affected by HIV and AIDS and how these responses might be supported. They identified three Children in Distress (CINDI) sites to do their research. Their research was primarily concerned with the needs of children afflicted or impacted by HIV and AIDS and how these needs could be met. With the number of children being impacted by AIDS and HIV, they identified that communities and families coped through a variety of mechanisms to mitigate the impact on the children. With the high level of concern within the community about the well being of the children, community initiatives emerged spontaneously in two of the communities/ sites that Mathambo and Richter (2007) investigated. This study emphasises the effect that community based responses can have within an area.

Another interesting finding of this research is that the community with the lowest level of volunteerism (of the 3 communities they investigated) was characterised by low levels of togetherness, trust and reciprocity. Mathambo and Richter (2007) continue to state that both social and individual factors should be considered when looking at individual volunteers. Some of the volunteers continue to help despite having to face problems such as poverty and unemployment. A giving of self, support and understanding in non-material terms seem to be just as needed in these circumstances as material responses. It would seem that volunteerism also has a down side: if the volunteers move away or die, the community and the spirit of volunteerism may destabilise. This means that volunteerism should be managed and developed to exist in the larger community, and not within a few key individuals.

There is also a high degree of volunteerism in religious and educational sectors, as well as in areas such as crime prevention and HIV prevention and treatment. It seems that people and communities are more likely to volunteer in areas that directly impact them, or where the benefits of their involvement or negative consequences of their non-involvement is clear. It seems that there are few documented instances of wide-spread volunteerism within the water arena, which leads us to consider the possibility that the benefits and consequences of volunteering or non-volunteering has not been communicated to water stakeholders in impactful ways. There are however stories of individuals who have done extraordinary things within their communities. An example of this is a study that was done with people in the Free State and Eastern Cape (Baiphethi et al., 2008) (Mathambo and Richter, 2007) which identified that the majority of people in the identified communities were women. This implies that women are important decision makers in the running of the community and households. These women were harvesting rooftop rainwater to be used in the households. They had no formal training, yet they identified a need for extra water and found it in rain water.

2.3 Narrative- and complexity-based research methods

This literature review includes an investigation into the use of similar research techniques as proposed in this study. Several qualitative studies were found, such as those done by the Research Niche Area for the Cultural Dynamics of Water of the University of North West (CuDyWat). (Gouws et al., 2009). An example is the project they conducted using a transdisciplinary research methodology. The research was done at the Pelhindaba informal settlement near Sannieshof in the North West Province and was based on the principle of intellectual empowerment, which links directly to volunteerism and stakeholder engagement as indicated in the sections above. Their objective was to identify potential sources of knowledge outside academia by interviewing people at grassroot level to find their opinions on various issues. The narrative approach applied in this study differs from this approach, as we are not interested in the opinions alone, but also in the experiences that inform these opinions as well as the perceptions and metaphoric constructs that people use to make sense of any given situation.

In addition, techniques based on conversation or dialogue also seem to be successful in stimulating engagement (Hemson et al., 2007). Specifically the

adaptive planning approach employed in the Inkomati Catchment Management Agency and within SANParks (South African National Parks, 2008) (Witkowski, 2004) (Roux et al., 2009) has proven very succesful in fostering community engagement. Luton and Rogers (2009:30-31) employ three simple rules (Covey, in their workshops, which ensure and leverage diversity and foster dialogue. These are:

1. Everyone will be able to, and needs to, give their perspective. We accept it as their perspective but can ask questions for clarification.
2. The best way to achieve what you need is to help others get what they need.
3. Seek first to understand then to be understood

This process also focuses on the creation of "shared rationality" between stakeholders and co-learning through civic engagement. Figure 1 illustrates their model for co-management.
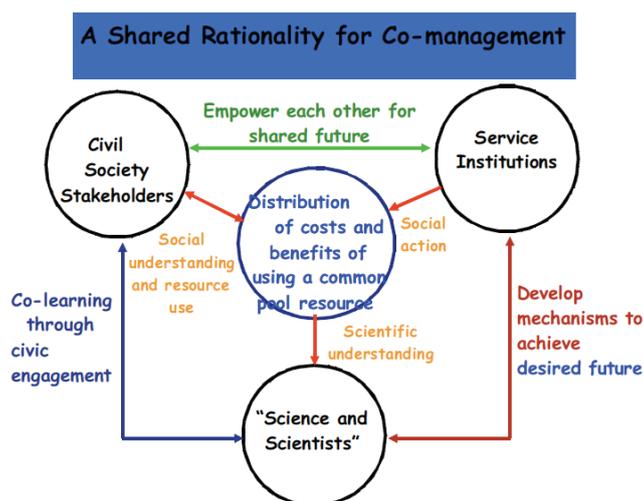
Figure 1: Shared rationality for co-management (Luton & Rogers, 2009:30-31)

Roux et al. (2009 in Luton and Rogers, 2009:30-31) establishes three ideals that acknowledge complexity and underpins adaptive management. These are:

- Sensitive Persuasion – an acknowledgement that self-organising systems cannot function optimally within formal "control" management approaches.
- Up close and personal – an acknowledgement that the nature and extent of interpersonal relationships are core drivers to social behaviours.
- Expecting the unexpected – an acknowledgement that an ever-present mindset of expecting to be surprised is needed.

Dialogue and narratives are useful in increasing awareness, changing attitudes and affecting behaviours, the first by letting people give their perspectives on a subject and the second by allowing them to share stories about experiences that shaped these perspectives. There is a need for an approach that combines the strategic, ethical and narrative/dialogue perspectives if sustainability is to be pursued. This multi-faceted approach facilitated through the sharing of stories and discussing them, can not only lead to crucial information needed to understand the key drivers for stakeholder engagement but also to provide an ideal means to an integrated sustainability assessment of other projects in the area.

The researchers were not able to find many references to specific narrative-based research projects investigating aspects such as root metaphors and perceptions evident in the narrative similar to the research that we will be conducting. Research that is related is study done by exploring environmental perceptions, behaviours and awareness: water and water pollution in South Africa (Anderson et al., 2007).

2.4 Implications for this study

The literature shows that volunteering is a complex phenomenon that is highly contextual and difficult to "design". The research focus will therefore be on finding naturally occurring patterns of behaviour in the various stakeholder groupings that we will engage with, in order to find novel ways of stimulating volunteering behaviour with more organic approaches.

The necessity of engaging with stakeholders seems clear from the existing research. What is key is that the perspectives, goals and understanding of each of the stakeholders should be kept in mind when encouraging them to engage. These different perspectives and goals need to be managed to include all the stakeholders and the resources that they can contribute/ volunteer to a project. It is also necessary to engage the different stakeholders in such a way that they will take ownership of the project to ensure sustainability even after the research/ intervention team has left. To this end the stakeholders need to be empowered to make their unique contribution. Increased engagement will hopefully lead to increased volunteerism.

To counteract the fact that many communities don't want to or do not know how to engage with various stakeholders, as stated by (Emmet, 2000), it would seem that a dialogue or pre-hypotheses narrative extrapolation will give us the required information about how to stimulate stakeholder engagement by identifying the key factors that will encourage engagement within each.

For the purpose of this study we will define stakeholders as all persons, organisations or agencies that are impacted by or impact on a specific area, community and/or project. A project will be defined as a process of research or practical implementation that describes, explains or changes the environment of the stakeholders, be it physical or behavioural. (Mathur et al., 2008)

Hemson et al. (2007) brings a few key considerations to our attention. The first is that participation does not necessarily lead to empowerment/ engagement if all "voices" are not heard and seen as equal. The second is that a participation-based project must aim to guide the stakeholders to take ownership and create a sustained community initiative that makes any need for volunteers explicit. Furthermore, according to Hemson et al. (2007) the training and development (empowerment) of women and youth are crucial. All three of these considerations indicate that ownership and giving all stakeholders a voice and empowering them is crucial for the development of something that is more than just community participation but extends and grows, and develops into sustainable community engagement.

The community theatre process employed by Meintjies (2010) is an idea that could be explored in the water space to engage and mobilise the next generation of water users. The applicability of this idea can be explored by engaging with the children visiting the Metsi-A-Me communication centre at the Hartbeespoort Dam, the focus site of this study.

The lessons learned from studies on volunteerism in Africa illustrate the fact that awareness and knowledge, although necessary is not sufficient to stimulate volunteering behaviour within communities.
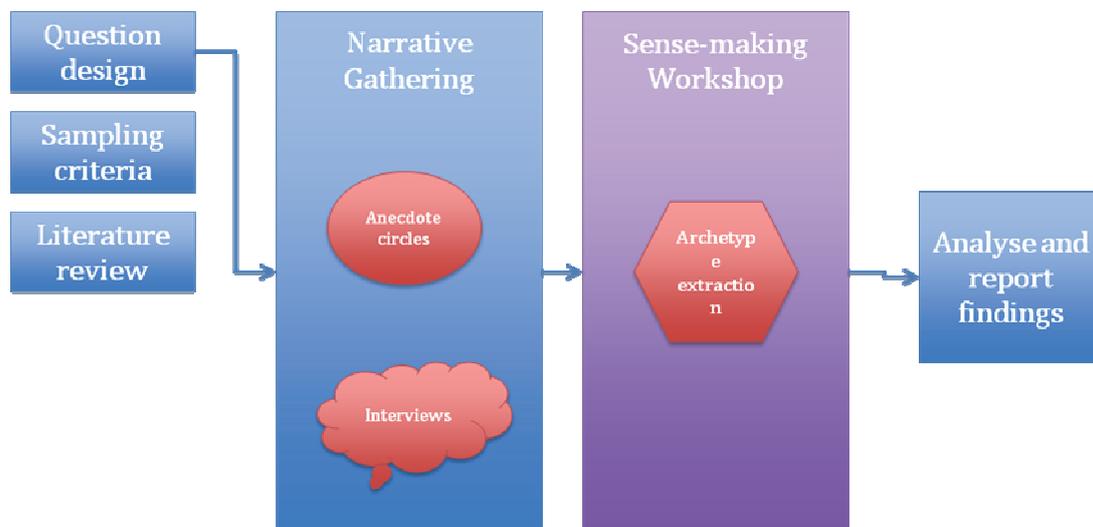
3. Methodology

Figure 2: Methodology used for this study

3.1 Pre-hypothesis approach to research

In this Study Pre-Hypothesis Research (PHR) was utilised as an alternative to other data collection approaches (such as structured questionnaires) that are employed in Hypothesis Led research. This approach draws on research in the fields of Cognitive Sciences and Knowledge Management (Kurtz and Snowden, 2003). According to Ward and Wright, PHR broadly comprises the following aspects:

- Open discovery using narrative extracted from a variety of stakeholders (in the form of anecdotes and experiences) and other secondary sources;
- Consulting a diverse range of stakeholders in order to view the research topic from multiple perspectives. This is important to the process so as to mitigate against the biases introduced by stratified stakeholder samples; and
- The focus of the data collection is on the retelling of experiences rather than statements or opinions.

Hypotheses are therefore formed utilising patterns found by analysing the narrative obtained from participating stakeholders, not up-front as with Hypothesis Led research techniques.

3.2 Narrative data gathering techniques

3.2.1 Interviews

The research team conducted 17 one-on-one interviews with key stakeholders who are either actively involved in volunteerism and community service specifically around water-related issues, or who play another key role. 11 of these interviews involved stakeholders from Hartbeespoort Dam, the rest involved experts and stakeholders involved in other catchments or water-related agencies.

In order to allow the participants freedom to share their experiences, stories and personal views, TNL made use of unstructured narrative-based interviews, with participants retelling actual experiences and not simply voicing opinions. This entailed posing open-ended pre-hypothesis questions about volunteerism to avoid leading the interview as far as possible.

3.2.2 Anecdote Circles

An anecdote circle is a facilitated group activity, where a trained facilitator poses open-ended questions with the intent of eliciting stories of actual experiences from the participants. One of the objectives of an Anecdote Circle is to stimulate the emergence of "ditting" or competitive storytelling – a conversation process where individuals respond to stories they hear spontaneously and willingly. The storytelling then becomes facilitator independent as participants volunteer their stories in a quasi-competitive manner.

A series of anecdote circles were conducted with a diverse group of Hartbeespoort residents who are not involved in any water-related activities. The segmentation of the groups was as follows:
1. A group of seniors (or retired residents)
2. A group of women belonging to a church women's ministry
3. A group of men who reside in Hartbeespoort, and attend a Men's Group at a local church
4. A group of under-privileged children who are students at Ennis Thabong school and are very environmentally aware
5. A group of female volunteers who are residents of an informal settlement (Orange Farm), situated on the edge of the dam (a translator was used to assist with this session)

All the circles and interviews were recorded by means of digital recorders with the permission of participants

3.3 Archetype extraction workshops

Once the narrative collection was complete, workshops were scheduled with a sample of the total number of participants who contributed narrative during the interviews and anecdote circles. On the 26th of May 2010, three (3) workshops were conducted at the Oewerklub in Hartbeespoort. The three (3) groups who participated were:

1. A subset of the volunteers or involved stakeholders that were interviewed, with representation from Metsi-a-me, Hartbeespoort Water Action Group (HWAG) and the estates surrounding Hartbeespoort
2. A group of environmentally-aware school children from the Ennis Thabong school
3. A subset of the senior, women and men's groups that participated in the anecdote circles. These groups represent Hartbeespoort residents who are not actively involved in volunteerism in the water arena (the turn-out in this group was very disappointing, which puts the validity of the outcome in question).

The participants of the workshops were facilitated through an emergent process where various clustering techniques were utilised to extract emergent sense-making constructs called archetypes from the narrative. Archetypes are personas, or metaphors, which represent the dominant perceptions or culture of a specific community. They are derived from narrative material that is gathered around a certain topic within the community. Archetypes are emergent properties of discourse and provide a powerful lens through which to make sense of the behaviours and beliefs within a community, and at their simplest levels, archetypes assist a group or community to articulate understanding that previously remained sub-conscious (Snowden, 2001).

Because of the emergent nature of the methods used, it is very difficult for participants to influence the outcome to any pre-contrived benefit. Complex facilitation and disruption techniques reduce the opportunities for any dominant personalities to influence the results. The social construction aspect of the process

makes it difficult for those engaged to deny the results and at the same time, difficult for executives to challenge, as they emerged from the environment itself, not from an external consultant or expert.

3.4 Narrative Analysis

In addition to the self-analysis focus of the Archetype extraction workshops, the approach adopted by this study in analysing the narrative material gathered from the interviews and anecdote circles was that of analysis of narrative. Polkinghorne (1995) outlines two modes in which narratives can be analysed: 'analysis of narrative' which proceeds in the scientific mode and attempts to identify common themes across a series of narratives, and 'narrative analysis' which analyses the narrative on its own terms. In this project, research analysts utilised the first mode of finding common themes across a series of narratives.

4. Findings

This section outlines the findings generated by the research study regarding the behavioural drivers and inhibitors of volunteerism and stakeholder engagement.

In general, the findings of this research project suggest that there are very few common behavioural drivers between each of the involved stakeholders interviewed. Volunteerism seems to be driven by highly context-specific and personal drivers, which differ from one individual to the next. There are however common enablers and barriers for effective engagement, of which volunteerism is a specific occurrence.

4.1 Key patterns

The key findings generated as a result of the study are as follows:

1. That creating awareness by providing appropriate information, packaged in a contextually relevant way is a necessary, but insufficient driver for engagement
2. That individual and civic agency is essential to engagement and volunteerism. If agency is lacking, engagement and volunteerism will not be possible without outside intervention
3. The salience of an issue significantly impacts the levels of engagement and the number of volunteers as well as the length of time that it can be sustained
4. Appropriate leadership can significantly fast track the emergence of high levels of engagement and volunteerism, however if findings 1, 2 and 3 are present, leadership may emerge organically. Leadership can either be an individual, a project or an initiative

Each of these findings will be discussed in greater detail in the following section.

4.1.1 Appropriate knowledge and enablement

There seems to be a common belief that simply creating awareness about a problem or issue will lead to appropriate action. A key finding from this research project is that awareness is a necessary pre-condition for action, but that in itself it is not sufficient to stimulate engagement or action. Communication campaigns that aren't

simply focused on creating awareness, but that focus on disseminating appropriate knowledge or information to the target audience, seem to have a much higher success rate at stimulating engagement.

> "*You know, the Olifants project is a very sensitive project to work on. Emotions run high about bad water quality, the involvement of the mines, water purification plants not working etc. There's a very good and active Olifants-forum that's been going since the late 80s or early 90s. They have annual meetings that are very well attended by various stakeholders and the public. The media also faithfully attends. From a research perspective, people are very hesitant of the media and are usually scared to say things to them. But this liaison officer handles it very well. She actually helps us a lot. The reports that she put out contained several "good news stories" and she caused all the small local papers and journalists to come to know about the project. From the start we were clear about what the project was about, the goals of the project etc and then we put out a notice to say that we need volunteers to take rainfall samples. We were overwhelmed by the response. People phoned in their hundreds, all of them just wanting to take samples. We had a tremendously good response and in return we kept people up to date with what's going on through media releases about the project progress, the current situation etc. I can't say that there was great community involvement, but there were many people who volunteered to help with things that before then we've seen them do before. I was surprised by how willing the people were. They could've said "but it's the mines that are polluting our water", but they could see that there was something being done about the situation. If people can see that there is a goal and a plan to do something about a situation, there is a willingness to get involved. If there is no strong leadership or no clear goal that make them feel that something's being addressed, people lose momentum completely.*"

Another pitfall many people and projects fall into is to communicate at a level that is too technical for the community to understand. Technical jargon is often not the best vehicle to obtain buy-in from the community and move people to action.

"You have to have a very very clear perspective of where you want to go, what you want to do. And you have to go and explain that to people in terms that they can actually buy into it. Because when you start talking about 0.1-milligram phosphate per litre, and things like that you know. It's cool to say there is a toxin in this water that can actually take your liver out and give you cancer hey. Everybody gets very scared"

Social learning methodologies and processes could be employed to ensure that knowledge sharing and co-learning is facilitated between the various stakeholder groupings.

Most of the volunteers spoke of a need for a "platform" or channel through which to work to enable meaningful change, as illustrated by the quote below:

"I'm a prime example of what I'm talking about. I have a lot of passion, I'm passionate about the environment, and that includes everything in the environment. And it kills me when I see people chop down trees and deforestation and all of that. For me it was finding something, and Metsi-a-me is that something, where I can actually make a difference, and I can see the results of that. Metsi-a-me for me is the channel to do that. …. for me, the Metsi-a-me is the channel for me to realise "Me" making a difference. A lot of people go through life totally frustrated where they do not find that channel.

This need of a platform is especially true of the school children that formed part of the study. Although they are extremely passionate, they lack a platform from which to effect change. Most adults are unwilling to listen to them because they are viewed as being too young to have a valid opinion. This is expressed in the "Mrs Waster" archetype (Figure 3) that emerged from the learner group.

Figure 3: Mrs Waster archetype

4.1.2 Agency

In general volunteers exhibit drive, persistence and determination. They also have the tenacity to overcome challenges and obstacles and seem to be compelled to act on a problem once they become aware of it. Volunteers do not seem to share the belief, common amongst uninvolved parties, that the problem needs to be solved by someone else. Rather, they pro-actively pursue solutions themselves. The "Respected Activist" archetype (Figure 4) is a representation of such personas in communities with high agency levels.
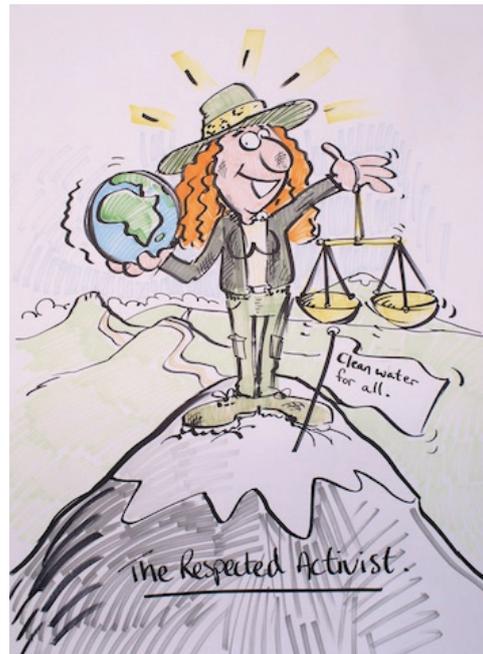

Figure 4: Respected Activist archetype

Figure 5: The Narrow-minded Moaner archetype

There are two archetypes that seem to be indicative of this behaviour; the "Narrow-minded Moaner" (Figure 5) as well as the "Backseat Driver" (Figure 9 below) indicates a prevalent behaviour of talking and expressing opinions about certain problems, but expecting others to act.

4.1.3 Issue salience and the cyclical nature of volunteerism

The cyclical nature of volunteerism is perfectly illustrated by the following narrative:

> ***There has to be a direct impact (translated from Afrikaans) – contributed by a water activist***
> *The Star once quoted Dr Mike Whittal where he said: people only act when they become immediately affected. This is not affecting them yet, but it's coming. This … and there are already boreholes with the same chemical composition as acid mine water, and then those people all come to me, then they're mobilised. The Hartbeespoort dam people, I've given talks there as well, and they now realise the heavy metals coming in their directions. Then they also mobilise. There always has to be a personal impact ... people are inherently selfish you know. They do very little for altruistic motives; it's a bit like with missionaries.*

Our research suggests that history has an important part to play in stakeholder engagement levels in a region. The reality is that water-related actions and problems have a history in each context. In some areas these span over decades, while in others merely a few years. There is evidence to suggest that engagement levels vary greatly over these life spans. In particular, volunteerism (as a stakeholder identity) is highly volatile and influenced heavily by interactions between stakeholders, communication, understanding of the problem, expectations and the prevalence of other types of problems within a community that require attention and how these are perceived in terms of vividness and a sense of immediacy.

The confluence of high levels of engagement amongst stakeholders influenced by a water resource challenge will no doubt lead to greater efficacy in addressing the challenges faced by the community. Communities, individuals and organisations will thus be more effective. That being said, creating high levels of engagement is only half of the battle won. The deeper challenge is sustaining these levels of engagement over time, especially once the initial challenge has become less immediate.

The cyclical nature of stakeholder engagement creates a reality in which different levels of progress will be achieved at different points in the history of a water resource action or challenge. If one considers engagement cycles as a graph over

time, the ability to spot and discern a change in the cycle from a trough to a peak, or vice versa, should translate into an ability to respond pro-actively in stimulating higher levels of engagement from the associated stakeholders. It is at these points in time that disengaged stakeholders could be conscripted thus increasing a community's ability to add value to IWRM processes through activities like financial support, alleviating resource and time constraints, resolving conflicts etc.

An understanding of what motivates a particular stakeholder (be it an individual, group or organisation) to engage with other stakeholders despite physical or social differences and to actively engage with water-related issues are vital. The role that each stakeholder believes they fulfil is dependent on the identity they adopt. Motivations and factors that influence these identity roles are deep and complex in their make-up, but they could hold the key to creating sustainable engagement identities. This understanding is especially important within the context of mandated participation of multiple stakeholders that is required in many IWRM projects.

The history of the Hartbeespoort Water Action Group (HWAG) is a very good example of an engagement cycle. When the group started in the 1990s in response to growing concern about water quality in the dam, there were very high levels of engagement from the community. Over time, and due to many different reasons, this engagement has virtually disappeared, and today HWAG has less than ten members.

An event such as a crisis or project raises the saliency of water issues within the community. Volunteerism emerges, and community engagement peaks. However, as soon as the crisis or project is over, an "out of sight, out of mind" mentality seems to creep in. The community starts focusing on other concerns that are important to them, or that are simply more salient (or obvious). In Hartbeespoort Dam, this is evidenced by high levels of engagement with relation to crime prevention and addressing potholes in the
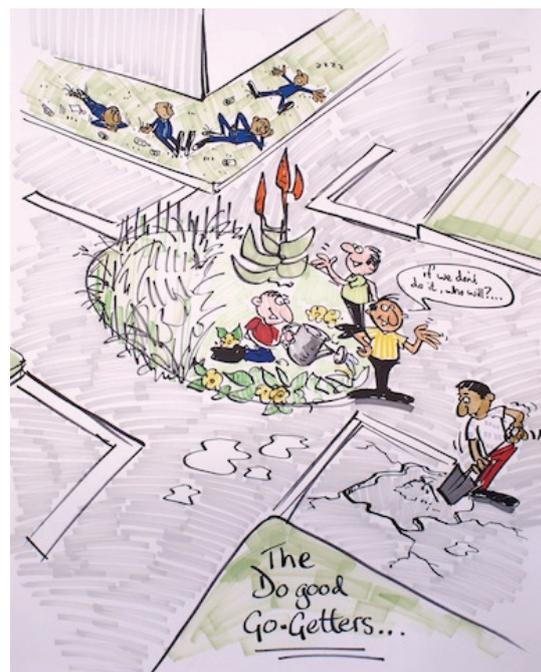

Figure 6: Do-good Go-getters archetype

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roads versus the low engagement levels with relation to water challenges. The "Do-good Go-getters" archetype (Figure 6), which emerged from the session with uninvolved stakeholders, is indicative of this pattern. The do-good go-getters are highly engaged in filling potholes and landscaping traffic circles, but they are completely uninvolved in water action, which could potentially have a much bigger negative impact on them in the long term. This archetype highlights the need for increasing the feeling of immediacy and awareness of the impact of water issues as opposed to those that the community is currently focusing on. Volunteers seem to recognise the importance of water issues (i.e. it has more salience, vividness and availability to them) as opposed to or in comparison to other issues facing communities such as crime prevention or road quality. In contrast, other community members tend to focus on the issues that are more vivid or more obvious at that given moment.

4.1.4 Leadership

Figure 7: The Leader of the Pack archetype

The role of and need for leadership was emphasised by all the interviewed volunteers as well as the uninvolved community members.

"It needs a champion, that's the first thing. It needs a champion to drive it, a champion with credibility. The champion has to have the time and resources to stay alive while you're doing it because you don't earn any money doing it. It's not something that you can ever make any money out of, but I wouldn't want to anyway. You have to have a very very clear perspective of where you want to go, what you want to do. And you have to go and explain that to people in terms that they can actually buy into it."

There seems to be two main styles of leadership that is acceptable to the community and would lead to increased levels of engagement and volunteerism. The first is illustrated by the "Leader of the Pack" archetype (Figure 7); the second by the "Respected Activist" archetype (Figure 4), both of which emerged from the volunteer

group. The "Leader of the Pack" archetype speaks of a charismatic and autocratic leadership style. In the Hartbeespoort dam area, research suggests that this is an aspirational archetype, i.e. this is a persona and behaviour that doesn't exist at the moment, but that all the role players feel is necessary. Ideally, this is the role that DWA should be playing in the area through the Metsi-a-me project, but currently the community does not accept them in this role. This is not an altruistic leader, but someone who plays the role of a leader driven by his/ her own ambitions.

In contrast, the "Respected Activist" archetype speaks of leadership based on vision and a passion to make a difference. There is a strong association between this archetype and advisory bodies, which seems to suggest that this is how the "experts", such as academics, are perceived. It also suggests that if a real difference is to be made, and if the support of the wider community is to be conscripted, real and tangible commitment would need to be shown, and clear communication with relevant information must form a key part of the effort.

4.2 Hartbeespoort Dam specific findings

The research study had as its main focus the dynamics, drivers and inhibitors of engagement and volunteerism within the Hartbeespoort Dam community. This section outlines the findings that are specific to the Hartbeespoort context and discusses how these issues may be addressed in creating greater levels of engagement amongst the stakeholders.

4.2.1 Meeting fatigue

Currently, it seems that engagement levels around the Hartbeespoort dam are low. Community meetings are attended but with a high turnover and very little continuity. A sense of meeting-fatigue has also set in after too many meetings being convened with no tangible outcome resulting from them.

4.2.2 Salience of water-related issues

The lack of salience of water issues as opposed to those of crime and road quality in the community is of concern as it is pronounced, which is surprising if one considers the context of the Dam. An illustration of the imbalance in salience is shown in how there are very active community policing forums operating in the area, and many

church volunteer groups who get involved in repairing potholes in the roads and landscaping pavements and traffic circles. Within this same community, there are virtually no water-related volunteer initiatives.

One of the reasons for this lack of salience may be the limited access to the waterfront of the dam. Although many residents choose to live in this area to be close to the water and to engage in recreational activities such as fishing and water sport, gaining access to the dam front is expensive and difficult for most residents; even volunteers find it difficult to get close to the water. For example, there are no boardwalks that people can use to walk or cycle around the dam. This lack of accessibility results in the dam remaining abstract to the community, with a general lack of awareness about the real extent of the water quality problem in the dam, and leaves people feeling "disconnected" from the problem. In cases where people have had first hand exposure to the problems, a greater willingness to engage seems evident. Walkways or bicycle tracks around the dam could be an effective solution to this problem.

Attempts have been made to raise awareness in the media. Many of the volunteers spoke of contacting local and national newspapers to create awareness of the problems they face. This seems to have had a short-term impact, but hasn't increased salience levels markedly. A key question therefore becomes, how can the salience, vividness and availability of water-related problems be increased?

4.2.3 Property ownership

Another key limitation to effective engagement in this area is the fact that a large percentage of the property owners are not permanent residents (many of the homes are weekend or holiday homes for people residing in the city). Many of those that do stay in the area commute to Johannesburg or Pretoria and therefore effectively only sleep in Hartbeespoort during the week or sporadically during the year.

4.2.4 Agency & the "higher power"

The research findings suggest that an extremely fatalistic view and a lack of agency with regards to water-related action is prevalent amongst uninvolved communities. Many of them believe that only a higher power or government can solve the problems, so there is nothing they can do. There also seems to be a complete lack of understanding and naiveté regarding the real problems in the dam, and how they

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are linked to the catchment and upstream issues. Many of the participants seemed unaware of projects such as Metsi-a-me and described the DWA as a "ghost". This suggests that current communication strategies may not be effective in reaching the wider community.

4.2.5 Myths

Among residents in the informal settlements around the dam, myths play an interesting role in their engagement. For example, there is a strong belief within the informal settlement (and even amongst people from which these beliefs are traditionally not expected, e.g. higher income westernised households) that there is a "monster in the water". This leads to many people being too afraid to volunteer for clean-up efforts. This belief is widespread and may be the result of earlier generations creating a story of a monster to keep children away from the water, which poses a legitimate threat to them. However, the generation who created the story has long since passed away, yet the myth persists.

4.2.6 Leadership

It is evident within the Hartbeespoort community that there isn't a single, respected leader who engages effectively with all the stakeholders. While there exists a governmental structure in the community who acts in this role, namely DWA and Metsi-a-Me, due to various reasons such as personality conflicts, power dynamics and lack of context-relevant stakeholder engagement, the community does not recognise them as the leader required to shift the situation at Hartbeespoort. The community forums that adopted this role in the past have largely ceased to function, or have lost the relationship capital they once had within the community. With the existing fragmentation, it will probably serve this community best if an external entity or person with bona-fide credentials is introduced to take up this leadership role.

4.2.7 Follow-through

Related to the lack of leadership, another common factor mentioned in the research conducted is that Hartbeespoort is not short of initiatives to address the water challenge. However, while many initiatives are started, very few seem to follow-through to completion, ensuring that there is follow-through and momentum for water initiatives. Many initiatives are begun, but eventually lose focus and stakeholders

become despondent, frustrated and unwilling to participate further. There is also presently a lack of continuity in terms of community members who attend meetings, which results in the same issues being discussed at each meeting but with no progress.

4.2.8 Communication

Determining a single compelling message or cause with clear objectives and action plans is critical to any initiative that aims to address a resource problem. Currently, even though the commitment is clear, the focus of each of the key stakeholders who volunteer or play a leadership role in the area is fragmented and does not complement the others. As a result, the message as a whole is ineffective, and the problem seems so overwhelming that it erodes a sense of civic agency (specifically the community's belief in their own power and control) and eventually leads to inaction

Tailoring communication to the community so as to ensure that the message is clearly understood is an area in which the Hartbeespoort stakeholders should pay particular attention. Using academic or scientific terms when engaging with the community leads to confusion and a lack of understanding of the personal impact of the issue. Engagement levels are significantly higher in areas such as crime prevention, as the immediate impact of the problem is compelling enough to lead people to act.

4.2.9 Volunteering identities

The diversity of the community in and around the Hartbeespoort area manifests in different stakeholders with different beliefs about the dam, and who it "belongs" to. For example, a very strong perception exists that the dam is an "Apartheid monument that is a playground for the rich". As stated in the initial desktop study, engagement and volunteering seems to increase in areas where there is cohesion within the community. In this area, the community seems fragmented and highly politicised. Communicating to all stakeholders (despite circumstances and income levels) the commonality of the challenge faced by community members, could serve as a compelling identity attractor to supersede the existing fragmentation

4.2.10 Passion

Volunteers seem to share a passion for water and the environment. This is an important individual driver for volunteerism that causes individuals to make significant personal sacrifices for the sake of "the cause". Unfortunately, this passion is often misdirected and leads well-meaning individuals to focus their energy on activities that will have minimal impact.

This passion can also contribute to existing fragmentation within the community, as each individual is passionately pursuing their own agenda with disregard for those of other stakeholders, as displayed in the "Committed Volunteer" archetype (Figure 8).

Figure 8: The Committed Volunteer archetype

4.2.11 Spirituality

Many of the interviewed volunteers indicated that their faith or spiritual beliefs compelled them to get involved in volunteering efforts. There is however a downside to this aspect as well, as it is also used as an excuse for not exhibiting agency. Many people expressed the opinion that the problem that faced the Hartbeespoort Dam community was "so big, only God can fix it. So all we can do is pray". This attitude is evident in the "Backseat Driver" archetype (Figure 9)

Figure 9: The Backseat Driver archetype

that emerged from the uninvolved stakeholder grouping.   As can be seen in the picture, every person on the wagon has an opinion but they are all just "along for the ride" and no one is actively engaged.   The praying man on the right side of the wagon represents the view that any action outside of prayer to a higher power is futile.

4.2.12 Networking

The volunteers that were interviewed as part of this project were all effective networkers and were very well connected within their context. This could be seen as a positive pattern, as social learning is facilitated through social networks. (Reed et al., 2010).

4.2.13 Positive Realism

If no visible results are attained, and no feedback is provided, volunteer groups seem to run out of steam.   Often unrealistic expectations are to blame for the disillusionment, as many of the participants had a very naïve view of the timeframe and amount of effort that would be involved in impacting the system.   Would-be volunteers are often de-motivated by the negativity of others, as can be seen in the "De-motivated Motivator" archetype (Figure 10) that emerged from the uninvolved stakeholder group.

Figure 10: The De-motivated Motivator archetype

4.2.14 Motivation

As stated by Dovidio (2006), a combination of altruistic and self-serving motivations seems to drive prosocial behaviour. The majority of the people interviewed exhibited high levels of personal agency and commitment, but seemed unable to articulate exactly what motivates or drives them to volunteer. It would seem from the narrative gathered, that there is a perception that there is always some level of self-interest

involved. Several of the interviewees, directly and indirectly, highlighted what they as individuals gain from volunteering.

Some of the benefits participants highlighted were:

- **Materialistic gain** – e.g. a property owner whose life savings is invested in property on the dam, and cannot afford for it to lose value
- **Power** – some volunteers do so to gain power in a community, political or otherwise
- **Recognition** – even though some interviewees mentioned the need to make a difference, it was clear that recognition for these efforts was important
- **Security** – knowing that they need to secure access to clean drinking water for themselves and their families
- **Spiritual contentment/ fulfilment** – knowing that they have satisfied what they believe their faith requires

This list by no means constitutes a complete list of motivations for volunteering behaviour, however it provides insight into the perspectives of the communities around the Hartbeespoort Dam.

5. Necessary factors for the emergence of volunteerism

Based on the discussions from the interviews conducted as part of this research project and TNL's observations, a number of factors that are necessary, but in themselves not sufficient to enable effective engagement, have been identified and these are:

- An awareness of the problem linked to a compelling cause and single compelling message
- Access to relevant and appropriate information about the problem, how it directly affects the individual and what they can do about it practically
- A realistic expectation among volunteers as to the outcome of their efforts and how long it might take to see results
- An understanding of the bigger picture and how things are connected
- A leader or an enabling platform

5.1 Recommendations for communities wanting to stimulate volunteerism and engagement.

This section outlines recommendations and suggestions that were surfaced through the research study that could prove beneficial for communities wishing to increase the levels of stakeholder engagement and volunteerism within their context. The points that follow can be viewed as potential signposts in the journey a community would embark on to engender higher levels of engagement.

The researchers do not claim that this list of recommendations is exhaustive, nor applicable in all water resource management contexts. Rather, community members who engage with these 'signposts' should assess the validity and viability of the same with particular regard to the unique factors, drivers and inhibitors of engagement and volunteerism within their context.

Signpost 1: Leadership

One of the most important factors in establishing successful levels of engagement and volunteerism is that of leadership. While the Hartbeespoort example exhibits a lack of a credible leader, and how volunteerism may emerge amidst the presence of other factors, leadership is still a key factor in general. A leader (either a person or entity) who will be able to engage effectively with all stakeholders, and drive the

process of community involvement is required in the face of water-related challenges. This person/ organisation would need to be able to identify with the community and communicate in laymen's terms with stakeholders, as well as display a genuine and felt understanding of the needs and concerns of the various stakeholder groupings in the community.

Cognisance of the historical nature of leadership should also be a key consideration. As communities evolve and shift, various leaders emerge over time with varying degrees of success. The credibility of such leaders is often variable over time, and one needs to bear this in mind when establishing a new movement towards addressing the water challenge. In some cases, the personal history of some individuals will be an insurmountable issue in the minds of the community, while at other times personal history of leaders may be of help to the cause.

What is certain is that the most passionate of community members regarding the water challenge may not be the best individual to lead the initiative. While their energy, commitment and passion for addressing the challenge is vital in jump-starting the drive, the strength of their presence may inhibit volunteerism from other individuals or groups, thus stifling the good intent.

Rather, one of the key criteria for a credible leader is that of integrative capacity. While connecting and engaging with the diverse stakeholders in the problem, such a leader should be able to balance the various demands, concerns, suggestions, ideas and resources while managing to move the community initiative forward.

A case study by Hahn et al. (2006) investigates the role of bridging organisations to create arenas for trust building, knowledge generation, co-operative learning and conflict solving among actors in relation to specific environmental issues. Bridging organisations or agents mobilise resources, utilise social incentives for ecosystem management and provide inter-organisational arenas for building trust, vertical and horizontal cooperation, learning, sense-making, identification of common interests and conflict resolution. Introducing a bridging agent or organisation could potentially be a valuable intervention in this area. In the absence of leadership, a potential solution would be to find a person or institution that could play this bridging role.

Signpost 2: Communicate appropriately

As previously noted, determining a single compelling message or cause with clear objectives and action plans is critical to any initiative that aims to address a resource problem. Too often a fragmentation of ideas, expectations, dreams and roles occurs in the face of a challenge. The need to create, or leverage, a single, coherent message or identity of the problem that the community can buy into will go a long way in creating effective volunteerism.

Tailoring communication to the community so as to ensure that the message is clearly understood is a critical factor for anyone aiming to generate commitment. Using academic or scientific terms when engaging with the community has lead to confusion and a lack of understanding of the personal impact of the issue.

Communication efforts need to speak to the community where they're at, so to speak. This is a challenge for engagement and volunteerism as the likely mixture of stakeholder will be disparate, resulting in highly variable literacy and language proficiency. The perceived benefit of addressing a water-related challenge may also vary highly amongst community stakeholders. Creating the conditions for social learning to take place within the stakeholder networks would go a long way to enhancing communication from the bottom up.

Another important aspect to communication is that it needs to clearly communicate how the challenges will impact the stakeholders personally in order to appeal to the hearts and minds of individuals. Narrative, specifically story, may be a very powerful vehicle in this regard. Communication strategies should also aim to increase the salience of the challenge being addressed. This could be achieved through the responsible use of the media and other vehicles, to make sure it's top-of-mind of individuals within the community. Salwen (1988), in Wimmer and Dominick (2006), found that it took from 5 to 7 weeks of news media coverage of environmental issues before they became salient on the public's agenda. This would imply that continuous extensive media coverage is crucial in sustaining messages that need to be communicated to the public.

Signpost 3: Focus – influence the influencers

Focusing on key individuals and entities that are potential influencers in the community and not targeting the community as a whole. Influencing the influencers, or the connectors in the social networks seems to be a more effective strategy than attempting to influence the broader community.

As discussed by (Alvina Schuurman, 2010), people with diverse cultural backgrounds are likely to volunteer in organisations, which is supported by their behaviour and social network. Gender and cultural identity influences beliefs and thus peoples' involvement in specific organisations (Dolnicar and Randle, 2005; Berger, 2006). (Berger, 2006) also found that religious groups, especially evangelical Christian churches make up the majority of committed volunteers. This literature is important as a large number of South African students belong to evangelical churches. It would thus be wise to recruit from these groups, as it will ensure a good number of dedicated volunteers.

Signpost 4: Create volunteer identity attractors

One of the misconceptions that exist regarding the stimulation of volunteerism is that the prevalence of volunteerism is a naturally occurring phenomenon, one that is not influenced by intentional actions. Relying on individuals to naturally volunteer in the face of a water resource challenge will render even the best-intentioned initiative sterile.

Rather, one of the key leadership considerations should be the intentional establishment of volunteerism identities. Creating a formal volunteer programme where individual are enlisted, trained and equipped in certain roles is one such step towards stimulating volunteerism. For example, such volunteers could be used to take temperature or pH readings etc at various locations around the dam, thereby reducing the load on the authorities and increasing their own engagement levels at the same time.

Volunteerism identities will be unique to particular contexts. In addition, the most effective identities will most likely be emergent. This means that work will need to be done by leadership to ascertain what the best identities would be that can be used to stimulate volunteerism and engagement.

Signpost 5: Keeping momentum

Ensuring that there is follow-through and momentum for water initiatives is another critical factor in engendering sustainable levels of engagement and volunteerism. Leaders in communities need to be aware that there is the risk of initiatives losing focus, for various reasons. If this were to occur, stakeholders are likely to become despondent, frustrated and unwilling to participate further.

A second aspect of momentum is the role of continuity. Communities are adaptive and evolve over time, resulting in a continued fluidity with regards to leaders and volunteers. Sustaining a level continuity in terms of community members, who for example attend meetings, will combat the inertia that sets in as a result of continuous flux. Perhaps a website can be created for the formal volunteer programme, whereby agendas, minutes of meetings, and other additional information is regularly updated. New joiners (or erratic attendees) to the programme, are invited to refer to the website for information, instead of covering the same issues/ topics in meetings

6. Conclusion

This research study set out to understand the drivers behind volunteerism and stakeholder engagement, with particular reference to the communities situated around the Hartbeespoort Dam. The methodology used was that of a pre-hypotheses narrative-based qualitative approach.

In general, the study has helped understand the reasons behind low levels of stakeholder engagement and volunteerism, despite the best of intentions on behalf of committed stakeholders. It seems that areas and communities plagued by water resource challenges need to be cognisant of the cyclical nature of engagement and volunteerism, and know how to capitalise on the "windows of opportunity" when they present themselves.

The study has shown that traditional conceptions of leadership and communication do not necessarily lead to increased engagement and volunteerism. Rather, there is a unique blend of emotional, psychological and societal factors that create sustainable levels of engagement. One needs to somehow make the water challenge an immensely personal issue and engage community members on multiple levels in order to generate a volunteering culture.

In addition to this, the study has surfaced some hypotheses around the stimulation of volunteerism and increased engagement that warrant further research. These include the impact of identity on the stimulation and sustainability of volunteering; the role of salience in stimulating and sustaining engagement and volunteering and others. The pre-hypothesis narrative research approach has proven to be effective in surfacing new insights. We believe this method could be used to enhance existing hypothesis-led research techniques.

7. Acknowledgements

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Addendum A – Full List of Archetypes

Group 1: volunteers or people actively involved in water-related activities

The following archetypes were extracted from the Hartbeespoort volunteering community and represent their view of volunteering in the water space. Archetypes are listed in order of prevalence i.e. how strongly present they are in the gathered narrative.

1. The misguided egotist

The misguided egotist.
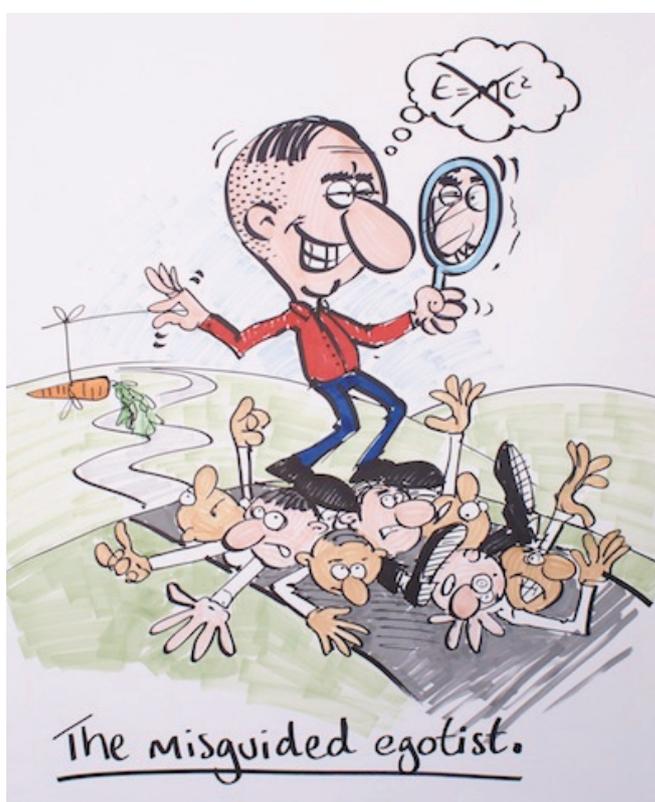
The essence of this archetype is: Uncooperative, misguided, self-serving, self-interested, unfocused and ineffective

This is the most pervasive archetype within the volunteer group. What is interesting about the archetype is that it seems to be a reflection of how the volunteer community sees each other. It is associated most strongly with Government & Big Business (11%), the Metsi-a-me project (9%) and Pressure groups (9%) and Uncaring people (9%). At first glance it would seem to be a reflection on Government and their initiatives such as Metsi-a-Me, but it may in fact represent a picture of how the volunteer groups around the dam perceive each other and how fragmented this community actually is. The effect of this archetype is extremely negative and destructive. It causes a lot of wasted time and effort, and erodes the formation of critical relationships.

2. The leader of the pack

The essence of this archetype is: Leadership, passion, focus, effectiveness, persistence, forcefulness and self-focused ambition

This archetype is also very pervasive, and it emphasises the crucial role that leadership plays. The type of leadership portrayed by this archetype is autocratic, yet charismatic. In the Hartbeespoort dam area, research suggests that this is an aspirational archetype, i.e. this is a persona and behaviour that doesn't exist at the moment, but that all the role players feel is necessary. Ideally, this is the role that DWA should be playing in the area through the Metsi-a-me project, but currently the community does not accept them in this role. This is not an altruistic leader, but someone who plays the role of a leader driven by his own ambitions. What is of interest is that this archetype has a high correlation to volunteers as well as to educators. This archetype represents a potentially positive influence in the water domain in Hartbeespoort, however, it would take a person with exceptionally high credibility to take up this role in this fragmented community.

3. The committed volunteer
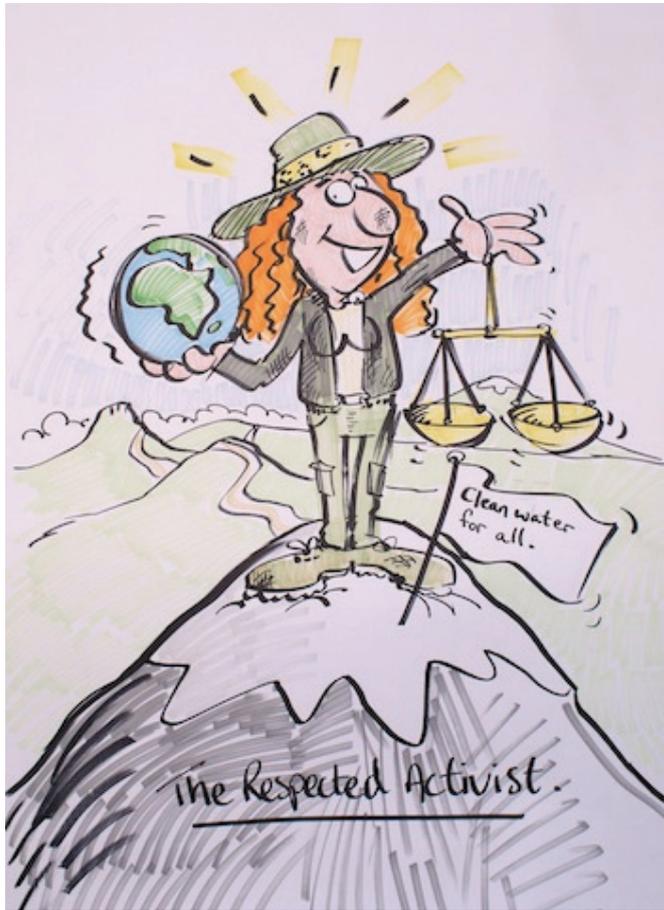

The committed volunteer.

The essence of this archetype is: Martyr, passion, intelligent and educated yet naïve, persistent, vocal, relentless, deep sense of community, pedantic

This archetype seems to reflect the current state of volunteerism at the dam. Individuals, who are unable to unite behind a single cause, or process, see themselves as martyrs due to the lack of support from the rest of the community. This archetype seem to be in direct contrast to the Misguided Egotist archetype, and it may represent how each of the volunteers (including groups such as Metsi-a-me) see themselves in the face of opposition or apathy from the wider community as opposed to how they see each other (misguided egotists). This archetype doesn't have a very positive impact on volunteerism around the dam, although it seems positive at first glance. This behaviour contributes to the fragmentation of the volunteer community, and although they spend a great amount of effort, their efforts don't have an impact on the actual problem.

4. The respected activist

The essence of this archetype is: Informative, selfless, overcomes adversity, accuracy, resourcefulness and future vision

This archetype presents another side to volunteerism compared to the previous persona of the committed volunteer. This persona is informed and committed to making a real difference. They have a big-picture view and a future vision. They are selfless and resourceful and their contributions make a real difference. The strong association with education (17%), info centre (12%) and advisory bodies (8%) seems to suggest that this is how the "experts", such as academics, are perceived. It also suggests that if a real difference is to be made, and if the support of the wider community is to be conscripted, real and tangible commitment would need to be shown, and clear communication with relevant information must form a key part of the effort. This is a very positive archetype that represents (along with the "leader of the pack" archetype) a real opportunity to effect change in this community.

5. The narrow-minded moaner

The essence of this archetype is: Self-interest, uncaring, disruptive, unproductive, narrow-minded and misguided

Although this archetype currently has a negative impact on the state of water volunteerism around the dam, it presents an opportunity. It represents the disengaged and uninvolved members of the community, who love to complain, but refuse to get involved and become part of the solution. Addressing this archetype should be the key focus for the Leader of the Pack archetype. Specific communities that need to be mobilised are the "people of faith" and the "informal communities". This archetype represents untapped potential and resources that can be utilised to make a difference around the dam.

Currently the impact of this archetype is very negative as it serves to de-motivate the people who are spending a lot of their own time and effort on volunteering activities.

6. The victim of the system


The victim of the system.

The essence of this archetype is: Vulnerable, exploited, low self-esteem, lack of knowledge, education and untapped potential

This is a sympathetic archetype with a very prominent correlation to rural communities. It represents the people who are victims of the water problems around the dam. These people have no choice but to use the contaminated water, and are seen as extremely vulnerable and disempowered. This archetype is linked to the previous archetype in that it represents untapped potential. This community is directly impacted by water issues, and therefore should be one of the strongest voices in the call for intervention. This community lacks knowledge, a platform and a leader to organise and mobilise them.

7. The ambitious politician

The Ambitious Politician.
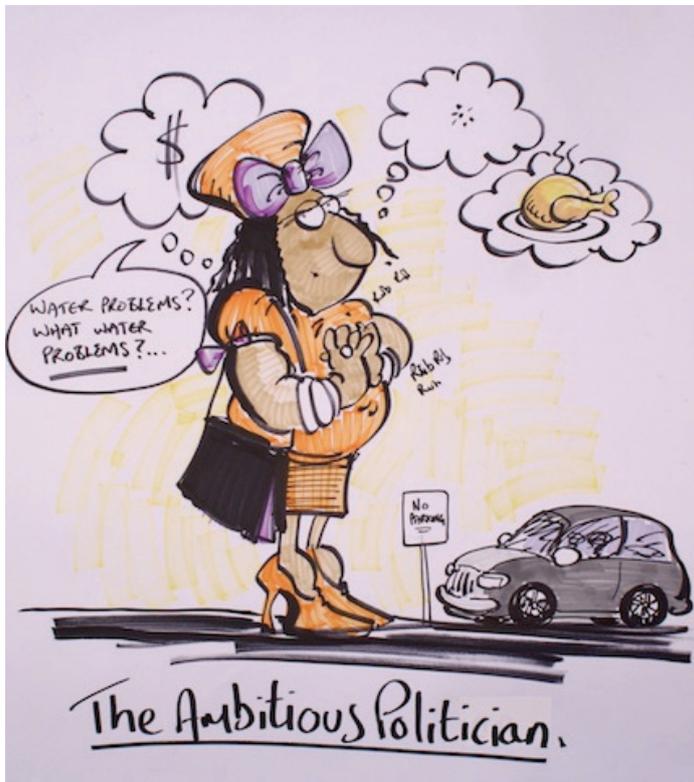
The essence of this archetype is: Profit driven, realist, selfish, greedy, opportunist, pessimist and powerful

This archetype is interesting as one would expect the main association to be towards government and big business, but in fact it is most strongly related to local business. There were many stories about how the volunteer group could not understand the lack of interest from the business community. From this archetype it seems that the perception that this group holds of the local business community is that they are profiting from the water problems and therefore are not motivated to become part of the solution. This archetype has a negative impact in this community, and should be a focus for intervention.

8. The king of bling

The king of Bling.

The essence of this archetype is:
Politically motivated, greedy, arrogant, self-serving and deceitful

This archetype is related to the ambitious politician (as can be seen in the graphic representation). It is very strongly correlated to government and big business (60%) but correlations to forums and advisory bodies suggest a general distrust in the motives of these bodies.

This is a very negative archetype. It requires a change in behaviour by government, big business and other organised entities (e.g. the WRC and Universities as well as Forums) so as to make their motives clear.

Group 2: Uninvolved community

The following archetypes were extracted from members of the Hartbeespoort community who are not involved in any water-related activities. Archetypes are listed in order of prevalence, i.e. how strongly present they are in the gathered narrative.

9. The de-motivated motivator

The demotivated Motivator.

The essence of this archetype is: Disenchanted, hopeless, despondent, ineffective, overwhelmed, creative, well intentioned

There seems to be a correlation between this archetype and the Narrow-minded Moaner" archetype that emerged from the volunteer group. The de-motivated motivator represents the perception of the uninvolved community members who feel that they start off being motivated to get involved, but ultimately become disenchanted by the negativity of the "moaners" and other personas who shoot down ideas, without creating solutions themselves. This archetype lacks the drive and willpower to fight the system and overcome obstacles (like the "respected activist" archetype) and represents untapped potential and resources that can be utilised to make a difference around the dam, as their motives are pure but they lack leadership and a platform to harness their energies.

10. The backseat driver

The essence of this archetype is: Pessimistic, destructive, disengaged, disruptive, uncommitted, shifting responsibility

This archetype represents uninvolved community members who appear to be content to have their say, but don't get actively involved. Another perception of this archetype, based on stories gathered from "people of faith", is that the problem is too big for people to fix, and only a higher power can make a difference. There is a clear sense of misdirection and fragmentation in this archetype, with everybody believing that they know best, but unwilling to take the initiative and be actively involved.

11. The do-good go-getters

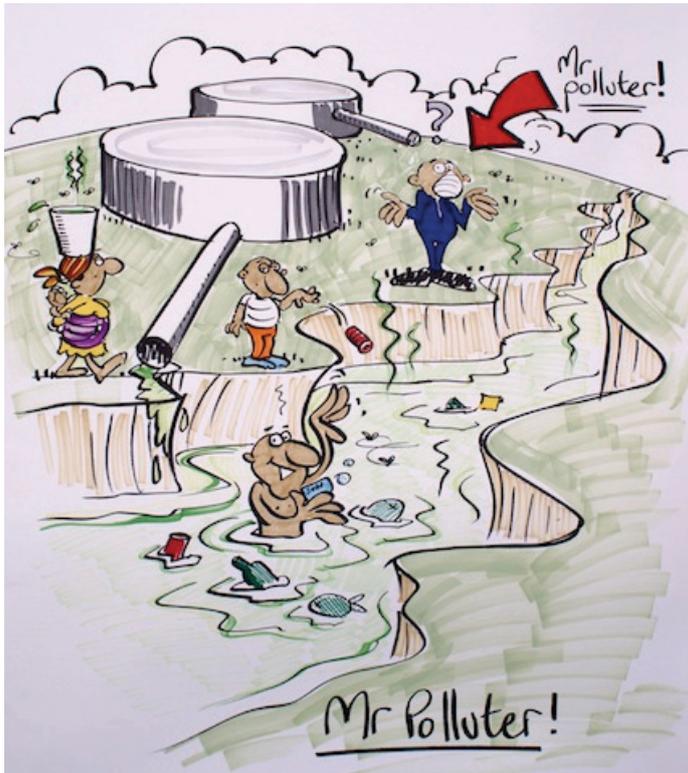The essence of this archetype is: Enthusiasm, misguided, eager, self sacrificing and community-orientated

This archetype shows the perception that people who are not involved in water-related action holds of volunteering. It seems to highlight the importance that salience plays in decision-making processes of communities. The do-good go-getters are highly engaged in filling potholes and landscaping traffic circles, but they are completely uninvolved in water action, which could potentially have a much bigger negative impact on them in the long term. This archetype highlights the need for increasing the feeling of immediacy and awareness of the impact of water issues as opposed to those that the community is currently focusing on.

Group 3: Learners from the Ennis Thabong school

The following archetypes were extracted from a sample of learners from the Ennis Thabong School. Archetypes are listed in order of prevalence, i.e. how strongly present they are in the gathered narrative.

12. Mr Polluter

The essence of this archetype is: Destructive, self-serving, environmentally unaware, profit-driven, proclaim innocence/ ignorance

This archetype represents the children's perception of the entities that are polluting their water. In general these are local government, sewage workers and uncaring individuals. Overall, the archetypes created by the children were simpler, yet equally as profound as those that emerged from adult sessions. Children are not influenced by politics; they see things as they are. This image also shows how the people are directly impacted by the dirty water, as can be seen by the character fetching water from the contaminated source.

13. The good guys

The essence of this archetype is: Positive, make a difference, involved, environmentally educated youth, education

This positive image stands in opposition to the negative images that emerged from this group. These characters are seen as the "good guys" who actively engage and make a difference practically by doing simple things. A teacher can be seen teaching learners how to recycle and care for a vegetable garden. People can be seen cleaning the river and fixing leaking faucets. This is highlighted in the graphic by green, dirty water becoming blue and clean once it's cleaned. It's interesting how practical the children's ideas of interventions are, as opposed to the abstract views of the adults.

14. Mrs Waster

The essence of this archetype is: Arrogant, ignorant, selfish, proud, misconception of superiority, narrow-minded

This archetype represents actual behaviour and personas encountered by children in the townships. A common obstacle that the children need to overcome is the perception that they are too young to tell adults how to behave differently. TNL believes that providing a platform for environmentally aware and passionate children to educate their parents and other adults in informal settlements about water and its value, is a key intervention that could have a big impact.

15. Destroyer

The essence of this archetype is: Profit-driven, destructive, fatal, don't-care attitude

The destroyer represents the perception that the children have about mining activities in the area. They seem to have a generally negative perception of mines and mine workers and see them as people who knowingly pollute the water and don't care about the environment at all.

16. The brat

The essence of this archetype is: Ignorance, lack of knowledge and education, misguided, carefree, undisciplined

Many of the stories the children told was about other young children playing with water and not recognising its value. At the same time, the parents who are supposed to enforce discipline and communicate the value of water are condoning the behaviour and even encouraging it. This archetype along with the "Mrs Waster" archetype highlights the need for environmental education within informal settlements. Although this archetype is very context-specific, it probably applies to other communities as well.