



profiles



DEPARTMENT: WATER AFFAIRS AND FORESTRY





Message from Minister Ronnie Kasrils, MP

Post 1994, our Parliament has one of the highest proportions of women representatives in the world - powerful, outspoken and committed women. We have ratified the Convention to Eliminate Discrimination against Women. We have women Cabinet Ministers, women leading powerful government departments, women who are leaders in business and industry, women who lead their communities. And in the water sector we have many, many women who have made their mark.

It is in order to recognise the role that women have played and continue to play in water management in South Africa that the Department of Water Affairs and Forestry, the Water Research Commission and the Water Institute of South Africa have jointly developed the Women in Water Awards/ Amakhosikazi namanzi.

This initiative aims to honor and celebrate the hard work of women and to highlight:

- The participation of professional and community-based women; and
- The key role women play in poverty eradication, education, social cohesion and sustainable development in both the urban and rural settings.

The launch of the Women in Water Awards last year marked the beginning of an important tradition in the water sector in South Africa. Each year, we will present awards to women who have played a leading role in five categories (individual or groups):

- POLICY;
- MANAGEMENT;
- RESEARCH (OVER 35 YEARS OLD);
- RESEARCH (UNDER 35 YEARS OLD); and
- COMMUNITY.

The awards will be presented to women of stature, women who have excelled in their field, and who have made a significant contribution to the management of water in South Africa. Since 2002 was the launch of these awards, we had not been through the process of calling for nominations. As Minister of Water Affairs and Forestry, I exercised a prerogative to recognise a few women whose work exemplifies the calibre of women in water in South Africa.

I awarded 'Certificates of Recognition' to fourteen recipients. For this year, 2003, the awards have undergone an independent adjudication process. My Department undertook the following process:

- Establishment of a Co-ordination Committee consisting of departmental officials and representatives from the WRC and WISA;
- Advertisement of the awards through national print media, radio and interviews;
- Approval of esteemed members to the adjudication panel which included three recipients of the 2002 'Certificates of Recognition'; and
- Independent adjudication process by the six members of the panel which submitted recommendations to the Minister for approval.

My congratulations to the ten finalists profiled in this booklet. It will be my pleasure to announce the five winners on the 14 March 2003. They are all shining stars, and through their commitment and dedication, our water sector is stronger than before.

Ronnie Kasrils, MP
Water Affairs and Forestry

Message from the Sponsor: Umgeni Water

As women, we should be asking ourselves what kind of a world we want to create for our current and future generations. We must take responsibility for the world we have inherited and we must ask ourselves the question whether we can improve on the current state of affairs.

Globally, 1.1 billion people still do not have access to adequate water services, and 2.4 billion people do not have access to adequate sanitation services, and many more do not have access to adequate shelter and other basic services. We need to ask ourselves why this is the case.

These are major basic service challenges across the globe and especially in the developing world. As women we must take responsibility for our world. In our positions of power and influence, we must take up the challenge and use the opportunities that have been presented to us by our new-found democracy to create a better world.

Collectively as women, we must become the creators of global consciousness that it is no longer acceptable that there is increasing poverty, inequality and social injustices the world over. The time has come for us to leverage our positive energies, and to work with absolute commitment as we recreate South Africa and Africa.

It is clear to me that the ten finalists being honoured for the Women in Water Awards have all made valuable contributions to the water sector. Their work is proof that it is not acceptable that so many people remain without

basic services when many of us should roll-up our sleeves and work with our communities and our municipalities. It is clear to me that they have shown character, courage, perseverance and implemented projects that will improve the lives of others. I salute these Women. I thank them for their leadership and their fine example to all of us women in the water sector.

Umgeni Water is proud to be associated with this wonderful initiative pioneered by the Department of Water Affairs and Forestry. Let us keep the focus of ensuring that water is provided to all who need it, in the shortest possible time. Viva Women in Water!



Gugu Moloi
CEO : Umgeni Water

Members of Adjudication Panel

The Department of Water Affairs and forestry would like to thank each member of the adjudication panel for their contribution to this process.

Ms Ethne Davey	Working for Water
Dr Neil Mcleod	Ethekwini Water Services
Mr Willie Modishe	Lepelle Northern Water
Mr Neo Moikangoa	Council for Science and Industrial Research
Prof Tally Palmer	Institute of Water Research, Rhodes University
Ms Buyelwa Sonjica	Member of Parliament Chairperson - Portfolio Committee on Water Affairs and Forestry

Profiles of the ten finalists

Two finalists were recommended for each category. The winners will be announced at the WWA Ceremony on the 14 March 2003. Note that for the Category: Research 35 & Over, a special posthumous award will be given.

Research - Under 35

1. Dr H G Snyman, CSIR

Heidi Snyman is known by her peers for her enthusiasm as a scientist in her particular field and her numerous other interests.

It was an honour for her as young scientist and woman (not formally trained as an engineer) to be appointed in 1996 by the East Rand Water Care Company (ERWAT) with the responsibility of developing and maintaining a core research and development department within the company. As part of this appointment she was also seconded to the University of Pretoria, Department of Chemical Engineering, Water Utilisation Division on a part time basis. She has been responsible for the teaching of a number of post graduate courses as well as the supervision of both MSc and PhD students.


In her current research she has been able to successfully combine the fields of botany, chemistry, microbiology and engineering. Her greatest scientific contribution to date has been her research into the safe disposal and re-use of waste sewage sludge within the current South African guidelines. Application of her research could have major economic benefits to the water industry and agriculture.

Apart from being a dedicated and productive scientist, she also has the ability to communicate effectively with fellow scientists and students and this has served her well in her interactions with the national and international scientific community. As a result she has been an elected council member of the Water Institute of South Africa.

2. Dr S J Barclay, University of Natal

Changing the behaviour of society is extremely difficult even if such a change appears to be logical. Since 1995 Susan Barclay has been trying to change industry's view of water use in terms of a number of Water Research Commission projects. She started with the textile industry by compiling a Waste Minimisation Guide for the Textile Industry to assist with reduced consumption of energy and chemicals. Not only did this result in environmental benefits, but also saved the industry significant sums of money. The Managing Director of Frame Textiles and Chairman of the Textile Federation stated that the South African textile industry could make annual savings of R650 million per year by applying the techniques developed by Susan.

Susan then formed two waste minimisation clubs in the Durban area. In response to the success of these projects and the interest expressed by other organisations in South Africa, she initiated another WRC project to provide a Guide to



the Promotion and Management of Waste Minimisation Clubs. There are now over twenty-four waste minimisation clubs in South Africa with a total membership of about 200 companies. Susan and her team of research students have presented numerous training courses for industrialists, regulators and students.

Susan Barclay has been a Research Fellow with the Pollution Research Group, University of Natal, since 1993. She has been the Project leader for four Water Research Commission projects and is currently the local project co-ordinator for the Danish funded "Cleaner Textile Production Demonstration Project".

Research 35 & Over

1. Ms J S Whitmore - Posthumous

Joan Whitmore was a great initiator. Once she was convinced of the importance of a mission, nothing would deter her from fulfilling it. She has numerous innovative actions to her credit. Her life was committed to research and various projects in which she invested her talents right up to her passing away in 2002.

- In 1946 she initiated the Agrico climatological Research Unit, which she headed until 1958.
- From 1958 - 1977 she was with the Division of Hydrology Research in the Department of Irrigation/ Water Affairs. During this period she initiated the Hydrology Research Institute of South Africa, which she headed for many years. It is noteworthy that at the time it was one of the highest posts attained by a women in the Public Service (excluding the judiciary). This was in itself a major achievement in terms of discrimination against women at the time.
- In 1977 she founded Climatique, an advisory and analytical consultancy in applied climatology/ hydrology.
- In 1988, she initiated the International Convention on Women, Leadership and Development, held at University of Pretoria and attended by approximately 500 delegates from Lesotho, Zimbabwe, Zambia, USA and Austria. The focus was on the development and the advancement of women.
- In 1999 she initiated the International Conference on Drought Management, sponsored by UNESCO and held in Pretoria.

Joan Whitmore's approach was scientific and academic yet also highly practical and focused on relevant issues. Her seminal book on Drought Management on Farmlands is about the management of all aspects of drought, culminating in defining cardinal principles of it's management.

She managed many projects in the field of community development and service, not necessarily related to water affairs but also, among others, relating to the elderly who wished to be active and intellectually stimulated.

2. Dr Jackie King, Southern Waters Ecological Research

Jackie is best known for her contributions to the field of instream flow requirements (IFR). These are methods for assessing how much water must be left in rivers to ensure that their natural biophysical diversity is maintained, and that they will continue to provide the goods and services on which people depend. IFR's are one of the main bases of the ecological Reserve under the 1998 Water Act. Jackie was the main architect of the Building Block Methodology, which became an international benchmark for IFR assessment in the 1990's, and is still used and copied around the world today. She and her colleagues have since developed the DRIFT methodology, to catalogue, analyse and assess the multi-variate effects of changing flow patterns in rivers.

Apart from these high profile applications of ecological expertise, Jackie has been an international leader in fundamental research into the invertebrate communities of rivers, their habitat requirements, and how these change with changing flow patterns. In 1996 she received the recognition of her peers with the presentation of the prestigious silver medal of the Southern African Society of Aquatic Scientists.

Jackie would be the first to acknowledge that these ground-breaking developments are always a result of the ideas and co-operation of many people, but she stands as the matriarch of South African river ecology. She has trained and inspired a whole new generation of river ecologists to follow in her footsteps, and many of them are now leading scientists in South Africa and other parts of the world.

Jackie came to South Africa by way of the United Kingdom and Zimbabwe in the late 1960's. She enrolled at the University of Cape Town (UCT) in 1971, emerging with her doctorate in 1982. She then joined the UCT Freshwater Research Unit as a Senior Scientific Officer. During this time she was also parenting her daughter and son. She is still a Principal Scientific Officer with the Freshwater Research Unit, as well as her role as founder and leader of Southern Waters Ecological research and Consulting cc. As her reputation has grown, she has been invited to take leading roles in international projects and organisations: The Lesotho Highlands Water Project; the Logan River IFR assessment in Australia; and Queensland's Water Resource Planning process to name a few. In 2001 she was appointed for a three year period as Chair of the World Bank's Environmental Flows Window, with missions to the Mekong Delta, Tanzania, and Washington.

Jackie is an inspiration to women everywhere. She is an intelligent, determined, tenacious, creative leader, and at the same time a compassionate, kind, modest person. That's not a combination that you find very often, and it's probably the reason that she has made a unique contribution to water research in South Africa.



Community

1. Ms M Kgabo, Enable Community

Maria Kgabo from Limpopo has facilitated a great amount of development in her community (Enable Community), including the establishment of Water Preservation Projects.

During the dry season, most villages and communities are short of water, especially in rural areas, where they depend on water from the rivers and rainwater. Thus, Maria started a project to bring water to her community. Perhaps Maria's greatest achievement is the unique water conservation project she developed in 1993 and which has been successful in supplying water.

She also empowers others via training projects, about safe water, water purification projects, storm water drainage, gardening and building of bridges, farming and brick manufacturing. The water conservation project ensures that water is collected from the rooftops during the rainy season and stored in some five hundred tanks for the dry season. The project is now copied in other areas, which has led to further job creation.

In 1995, she initiated another project using river water for projects like brick manufacturing and thereafter, selling bricks to the community. Water is used for gardening and watering vegetables to sell to the public market and farming activities. She has overcome obstacles and has shown tenacity and creativity. She is articulate and able to convince others to join her. Above all, she realises the necessity of working in relevance to the socio-economic situation prevalent in her community and South Africa as a whole.

2. Ms T Raphela, Badimong Wetland Project

Wetlands form part of life and water systems. Realising this, Tingana Raphela initiated the Wetland Rehabilitation programme in Badimong village, Limpopo. Other communities and interested parties can learn from this initiative. For instance, the Water Conservation Directorate of the Department of Water Affairs and Forestry used the project in the making of the "eTeam" which featured on E-tv on 14 February 2002. Tingana also used the project to address other environmental issues such as water and sanitation, food security, permaculture, road safety, school curriculum, wetlands and culture.

Her interest in water projects started after she attended a workshop about Outcomes- Based Education and its role in the 20/20 Water Education Programme. She used this information to assess the village in which she works. Here, water supply is problematic and the community has to rely on water from surrounding wetlands. Poverty is also an issue since many of the parents are unemployed. Tingana realised that the wetland was a neglected treasure. Yet, it was often used for dumping purposes. According to older people in the community, this wetland was once big and used to provide water for the entire community even before 1914. It also has cultural value. As part of protecting this vital

resource, Tingana encouraged the fencing-off of the wetland to limit access. She called on the assistance of officials from the Department of Environment and Tourism, and together they turned out a successful and useful project which gave rise to the following related initiatives:


- One of her learners did a presentation about the wetlands project during a children's conference in England in May 2000;
- She initiated a water campaign to encourage the community to pay for water services and to advise them to use the wetlands water for other purposes like gardening and washing;
- The project was amongst the finalists for the Eduplant competitions for 2001;
- The gardening provides fresh vegetables to the community and the feeding scheme at the school;
- The project received a certificate of recognition from the Department of Environmental Affairs in the Limpopo Province;
- The project featured in Lepelle Northern Water's annual report as part of the organisation's Commitment to conservation and environmental awareness; and
- A presentation on the project appears in Eskom magazine of 2001.

Management

1. Ms R van Hoeve, formerly of Mogale City Local Municipality

Renée van Hoeve was responsible for the management of the Department: Scientific Services (Laboratory, Industry and Environment) at Mogale City Local Municipality for the past five years. With a remarkable blend of direct, no-nonsense, very focused attitude mixed with a collaborative, supportive, friendly approach, she has succeeded to:

- develop a highly user-friendly, efficient system for trade-effluent sampling, monitoring, tariffing and overall management. Thereby achieving a win-all situation whereby:
 - (i) MCLM collects > R600 000 per month on industrial effluent payments as part of a consistent revenue collection system
 - (ii) Plus minus 80 large industries receive personal attention and assistance from Ms van Hoeve, with amazing spin-off benefits in terms of business environmental awareness, responsibility and public relations improvement between service provider and receiver
 - (iii) The environment and surrounding communities benefit from the urgency in which effluent spills are attended and cleaned, and the improved quality of river/dam and stormwater systems in MCLM
- She added practical and monetary value to the WRC-developed program NATSURV (TT 40/89, 1989) by converting a theoretical, academic document into a practical Industrial Classification and Assessment System, comprising of a practical software usage, field implementation, lab-testing and quality/quantity/costing management.
- She continuously supports and encourages her sub-ordinates to further their personal studies and research in water and wastewater. She also evaluates numerous publications and theses on request of study leaders/promoters throughout South Africa.
- She initiated an ambitious program on training and self-development within MCLM, thereby achieving a highly trained team of experts - both professional and personally.
- Her persistence in handling spillages to the environment, and her close collaboration with SAP and DWAF and interested parties in this regard. Many spills would have remained unattended, if not for her energy and



commitment. "Going the extra mile".

- She serves on numerous Wastewater forums and committees, is a member of WISA, and a management member of the Anaerobic Process Division.
- She manages a multi-million Rand budget of tax-paying citizens with responsibility and accountability, and shows perseverance and impeccable standards in every project she takes ownership of.

Her remarkable characteristics classify her as a strong woman in a "dirty" world (sewage) with a proven record of innovative thinking, strong leadership, effective decision-making abilities, positive attitude, and an honest commitment to making things better in the human/environment/water cycle of mother nature.

2. Ms S de Villiers Leach, formerly of Rand Water

Sarah de Villiers Leach has worked extremely conscientiously to ensure the success of the various forums which Rand Water has established to communicate with its stakeholders.

This facilitation has required special skills to convene meetings, ensure high attendance levels, arrange presentations by speakers on topical issues, provide ongoing feedback on developments and stretch the imagination of the participants to create innovative solutions in the water sector. She has performed admirably and built a rapport with counsellors and water professionals including plumbers. This has enhanced the respect for and professionalism of Rand Water as an institution. As a consequence, Rand Water has experienced an improved relationship with all its customers.

The process of local government legislative changes and the implementation of the free basic water policy, presented formidable challenges which Sarah met with enthusiasm and professionalism. She also predicted a niche opportunity for Rand Water to be involved in the World Summit on Sustainable Development in enhancing a commitment to public partnerships in the water services sector. Despite language difficulties, she forged partnerships and was able to negotiate a wording of a partnership agreement between water providers in South Africa and Brazil.

Sarah has demonstrated a formidable capacity for being dedicated to her work, working long hours, being goal oriented and achieving the goals whether these were set by herself or for her by others.

Policy

1. Dr N Mjoli, Water Research Commission

Dr Nozi Mjoli has worked for years in the water sector. Her peers note her passion in finding solutions to the water supply and sanitation challenges facing the people of South Africa. Over this period Nozi has emerged as a leader and authority, with concern and passion driving her energies. She was

instrumental in incubating and catalysing research and development in the subject area of water supply and sanitation for marginalised and poor communities. This was achieved in a very difficult environment dominated by years of first world water science.

Nozi is a role model for the younger generation and especially black women, and actively demonstrates that women have a significant role to play in water management in South Africa, as well as in nourishing our country's knowledge base. She exemplifies a case of a woman who comes from a very modest and rural background, who against all the hardships and constraints posed by the lack of water and sanitation, has excelled during a hostile period in our history. She has taken this knowledge and ploughed it back to the wider society. The impact of her contribution is reflected in our country's new water vision, that encapsulates the role of women in water management.

This contribution is supported by the leadership roles she has ordained during her career. Gender issues related to water management, and Science and Technology have always been close to Nozi's heart. This was evident when she played a major role in the facilitating the first regional workshop on Gender & Water and Sanitation in South Africa. She went on to participate at an international level in drawing-up strategies for gender mainstreaming in water management, where she represented South Africa. The international recognition of her contribution to the water sector has seen her represent women and the country on a number of bodies and fora, such as the Water Supply and Sanitation Collaborative Council (WSSCC), United Nations Development Programme, and the Global Water Partnership.

2. Ms. Manda Hinsch, Department of Water Affairs and Forestry

Manda Hinsch has been involved in numerous projects dealing with the development of water quality policy and its implementation. This has included, amongst others:

- The DANCED project on water quality in dense settlements;
- The production of water quality management policy and guidelines for the above-mentioned project (1998);
- The development of policy and guidelines for nutrient management of South Africa's surface waters (1999-2002);
- Numerous conferences and workshops at which she has represented the Department by presenting papers and leading debate and discussion on how water quality should be managed; and
- Several Water Research Commission projects aimed at developing water quality policy.

Manda is an asset to South African water resource management by virtue of her enthusiasm, co-operative approach, efficiency, dedication to achieving set objectives, and for her professional ability to stimulate all parties whom she comes in contact with. There is no doubt that she has played, and will continue to play, a major leadership role in developing and influencing water quality policy within the Department of Water Affairs and Forestry. This is remarkable in that this has been accomplished within a traditionally male-dominated work environment. She commands a great deal of respect both within the Department and in the water industry at large.



DEPARTMENT: WATER AFFAIRS AND FORESTRY

