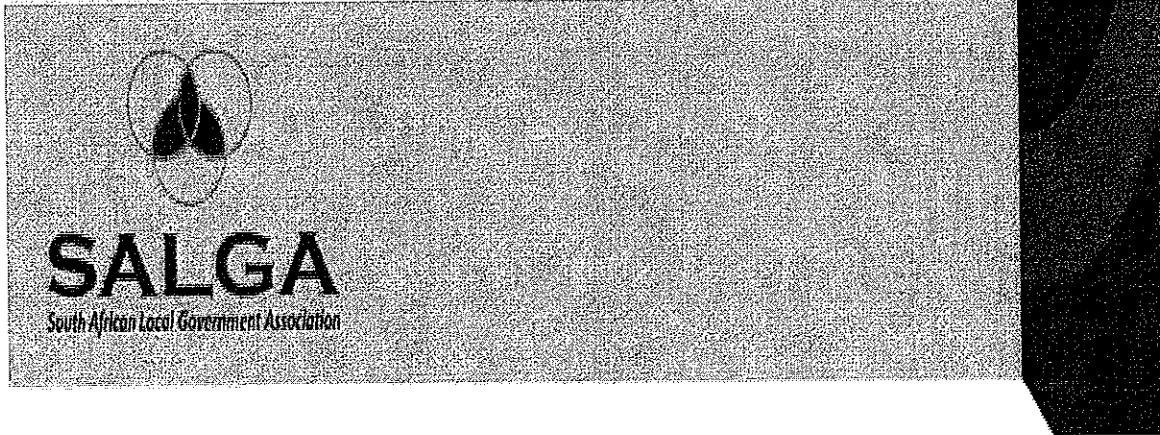


30.10.2012
PC WATER

2012. DWA.NWRS [2]. 14



High level Comments on the National Water
Resource Strategy 2012 (NWRS2)

Some Local Government Perspectives

OCTOBER 2012

1. Approach

This review considers the complete NWRS2 draft, provided for consultation by the DWA on its website. Also on the website is a summary as well as certain chapters which have been elaborated in more detail on the DWA website although some separate chapters are actually summaries of the main report, which can cause confusion where there is an apparent difference in approach between different versions. The structure of the NWRS2 is completely different to that of the NWRS (2004) which makes it difficult to identify and assess changes in approach.

The review identifies issues of particular interest to the local government sphere, highlights areas in which SALGA may wish to engage and addresses some broader issues that may also be of relevance.

2. Introduction

The National Water Act 1998 (NWA) outlines the purpose of the NWRS. It:-

“... requires the progressive development, by the Minister, after consultation with society at large, of a national water resource strategy. The national water resource strategy provides the framework for the protection, use, development, conservation, management and control of water resources for the country as a whole. It also provides the framework within which water will be managed at regional or catchment level, in defined water management areas. The national water resource strategy, which must be formally reviewed from time to time, is binding on all authorities and institutions exercising powers or performing duties under this Act.”

The NWA also outlines what the NWRS should contain and how often it should be produced. The Preface to the NWRS2 confirms this framework and states that

“The NWRS is the legal instrument for implementing or operationalizing the National Water Act. It is crucial that the NWRS is recognized as the primary mechanism to manage water across all sectors towards achieving national government’s development objectives.”

However, the NWRS2 has generally not followed the NWA guidelines. There is very little concrete information about the current state of water resources and their use although there are many unrelated snippets of data. In many areas it appears that no new information has become available since the NWRS (2004) which in turn used data from 2000. There is also little structured effort to review and analyse progress on the implementation of the NWRS (2004) to guide the next period of work beyond a short table of key issues.

Table 2: Progress with the implementation of the NWRS 1

Successes in implementation	Weaknesses in implementation
<ul style="list-style-type: none"> • Sustaining reliable supplies • Development of water resources infrastructure • Improved insights in future water demands and supplies • Increases in environmental flows 	<ul style="list-style-type: none"> • Limited implementation of Water Conservation and Demand Management • Limited implementation of Water Allocation Reform to redress past racial and gender imbalances in access to water for productive uses • Inadequate establishment of water management institutions and decentralisation of water management • Inadequate regulation of Water Resources and compliance monitoring enforcement • Shortage of technical and management skills to implement the National Water Act • Poor integration of monitoring and information management

The contents pages of the NWRS2 are appended. As can be seen, the document addresses 11 core strategies, 7 technical strategies, 4 enabling strategies and 4 governance strategies. In addition, it contains an extensive, sometimes duplicated, list of 79 key strategic activities that are to be undertaken in the next five years. With a focus on 26 separate strategies and 79 activities, the NWRS2 could be described as a “strategy to develop strategies”.

Two key themes are to mobilise water and its management as an instrument to promote equitable social and economic growth and development and to promote SMART water management approaches. However, NWRS2 lacks details in particular on the institutional and financial approaches that will be taken to achieve its rather poorly defined objectives. This is particularly the case in areas of interest to local government.

3. Local government issues

Local government’s interest in water resource management is primarily related to their interaction with water services provision. Properly managed water resources provide a source for local government water supply services; water resources such as rivers are widely used to dispose of the waste from local government sanitation services. And local government must be concerned about environmental protection as well as about the importance of water resources and their management to support local economic and social development.

From this local government perspective, key issues in the NWRS2 include:

1. The lack of information about water resource availability (which will have changed since 2004 due to the construction of new infrastructure) or about the potential to increase it and any investment plans to do so. This will impact on municipalities which need information for their water services and development planning.

2. The absence of information on water use trends, which makes it difficult to determine whether a “water crisis” may be emerging where water demands exceeds supplies.
3. A similar lack of information on water quality trends makes it impossible to assess whether poorly managed municipal wastewater works are “A key contributor to the deterioration of water quality” as the NWRS claims.
4. It is stated that the number of CMAs (the bodies through which local government would be able to participate in water resource management) will be reduced from 19 to 9. Although this issue is officially still open for consultation, information in the NWRS2 is based on the assumption that there will only be 9 CMAs each covering a much larger Water Management Area (WMA) and larger population than previously. This will mean that individual municipalities will have a weaker voice in local water resource management.
5. In the absence of an overall plan built up from WMA perspectives, the NWRS2 reports that to plan actions to maintain a balance between demand and supply, “water reconciliation” studies have been undertaken, overseen by steering committees representing water users, interest groups and decision makers. These representatives also had the responsibility to validate relevant sector information”. It is not clear to what extent local government was involved in these processes.
6. It is proposed to reduce the reliability of water supplies in order to achieve “equity” in access to water resources – defined as water for irrigating crops or water for a business or an industry. This could create major problems for local government at all levels.
7. It is proposed to promote “multiple-use systems” to supply both domestic and “productive” water. This could require local government to substantially increase the volume of water supplied through distribution networks without clarity about where the raw water will come from nor how the expanded services will be paid for.
8. There is considerable emphasis on water conservation and demand management (WCDM) and it is indicated that in many areas there will be “no new water”. However, no detail is provided on the proposed programme to promote WCDM in municipal services.
9. The NWRS2 generally does not distinguish between physical water losses (leaks) and non-revenue water (which includes water that is used but not paid for). These are significantly different problems that require different approaches and have different impact on water availability.
10. It is suggested that water licences will be curtailed for users that do not achieve their WCDM targets. This could have serious impacts on weaker municipalities.
11. Wastewater reuse is emphasised as an increasingly important source of water in the future as is groundwater for smaller settlements.
12. It is stated that the existing 12 water boards will be consolidated into 8 by 2016. Although water boards are not strictly a matter for the NWRS (they are established under the Water Services Act) they are important institutions. It is stated that “The water boards will also play

a strong role in supporting municipalities through their secondary activities by providing services on their behalf and/or providing services to municipalities in terms of contracts.

13. While the NWRS2 emphasises that water must be central to development planning, it gives little attention to Local Government's Water Services Development Plans (WSDPs) and IDPs which will be the key interface between the management of water resources and the provision of water services. It states that "at local government level, failure to plan effectively to determine water resource requirements as well as to provide for effective wastewater treatment has serious implications for water management" but makes no concrete suggestions on addressing this challenge.
14. Although institutional and financial issues are raised as key concerns, there is little discussion about options and approaches to be taken except to review current approaches. The financial implications for local government of the large proposed investment plan thus remain unclear. So too are implications of proposals to retain existing divisions between the Departmental Infrastructure Management Unit and the TCTA which promotes large projects that are funded "off-budget.
15. One example of absence of strategy is in relation to wastewater treatment. The draft strategy (Technical Strategy 1: Infrastructure Development and Management) simply says that a strategic action is to "improve maintenance of municipal wastewater treatment infrastructure and groundwater supply systems" with no indication of how this is to be done.

4. Implications of the draft NWRS2 for local government and recommendations for response.

The current draft of the NWRS2 contains a very large set of proposals. Some of these are contradictory and many are likely to be beyond the capacity of DWA specifically and the water sector (including local government) generally to implement in the next five years.

Without further clarification, simplification, prioritisation and sequencing, it is difficult to determine in which direction NWRS2 will take DWA and the country. Indeed, given the many different initiatives and focus areas proposed and the acknowledged capacity limitation, if approved in its present form it would most likely lead to paralysis or at the least to a lack of direction. The focus of SALGA's comments should therefore be to insist on the need for greater focus, prioritisation and clarity.

5. Other related issues

Some additional issues have been identified of particular current interest to SALGA.

5.1 Climate change

Climate change was not viewed as a particularly high priority in the NWRS1 which simply committed the DWA to maintain a "watching brief". In NWRS2, a commitment is made to finalise the Water Sector Climate Change Response strategy.

However, it is still pointed out that “as hydrological uncertainty is already part of the normal water business, the core of the responses to climate change will be addressed via existing programmes. These activities such as water planning, infrastructure investment, risk and disaster management as well as outcomes based development must be more robust and focussed.” Climate change issues will be addressed in catchment strategies, reconciliation strategies and investment planning.

The Berg and Olifants-Doring WMA in the Western Cape is identified as the most likely of all South African Water Management Areas to experience declining rainfall through climate change which could affect the available yield of water in Western Cape dams and rivers, in addition to increasing water requirements. “This uncertainty adds urgency to the need for diversification in water resource solutions including the implementation of WC/WDM, the re-use of water, and to complete the studies into the feasibility of desalination as an augmentation option for the City of Cape Town.”

Even in this area though, it is emphasised that, while “plans must be prepared for the situation where Climate Change starts to impact on the availability of water, the size of this impact and the timing are very uncertain. Appropriate monitoring, especially of rainfall, and rigorous analysis of this data, is required before very expensive infrastructure is built for mitigation.”

5.2 Conventional versus Ecological infrastructure

With the exception of the impact of alien vegetation on water resources, limited attention is given to ecological infrastructure as an alternative to conventional infrastructure. The “core strategy” dealing with the protection of water resources mentions the “ecosystem services” provided by a protected resource but provides few concrete examples. Most of the strategy is focused on protection activities and “Freshwater Ecosystem Priority Areas” where resource development will be limited to maintain freshwater ecosystems, rather than to provide any specific ecosystem service.

The lack of attention for formal ecological infrastructure roles reflects, perhaps, the situation of water stress faced by most of South Africa, where the challenge is to leave enough water for ecological functioning rather than to use “natural infrastructure” to support water supply.

This is because “hard” conventional infrastructure may be more effective. Thus wetlands, while they do help in reducing floods, actually reduce the total amount of water available to flow into existing dams and then to be made available to water users. Correctly designed, dams can also be used to reduce flood impacts while losing less water than wetlands for the same purpose. The one area in which environmental infrastructure is addressed is in the control of activities such as plantation forestry which uses more water than the natural grasslands.

5.3 Greater attention to the details of WCDM and WSDPs

In the area of water conservation and demand management as well as in the area of water resource planning, the NWRS2 does not reflect on the approach taken in NWRS1 nor the progress made since 2004. The major change is that DWA will set the targets for WCDM loss reduction whereas, in NWRS1, this was to be done by municipalities and only reviewed when they applied for water abstraction licences.

Thus the “strategic actions” proposed in NWRS2 for WCDM duplicate in many respects those of NWRS1 8 years previously. There is no indication of what has happened in the interim, what

successes were achieved or difficulties encountered. As a result it is not clear whether the target established for 2014 can be achieved or what will be required to achieve it.

37. DWA will intensify the existing WCWDM programme across all sectors, and will identify targets for critical water use sectors in stressed areas where targets have not already been set;

38. Water Services Authorities will drive intensive WCWDM programmes in order to achieve the Outcome 10 target for the reduction of water losses in municipal distribution systems from the current average of 30% to 15% in 2014;

39. Where targets have been set, DWA will monitor progress against targets, will support WC/WDM interventions, and will ensure that a review of relevant water use licences is done to reflect the required impact of the WC/WDM interventions;

Similarly, in relation to water resource planning, a key provision of the NWRS1 related to the coordination between water services provision and water resource management. The Water Services Development Plans were intended to structure this coordination:

A water services development plan will be a responsible water authority's principal source of information for determining water allocations to a municipality and issuing a licence (see Part 2 of Chapter 3). The plan's requirements must be accounted for in the responsible authority's catchment management strategy. Some of the data in water services development plans will be incorporated into the national water resources information system (see Part 6 of Chapter 3) and will therefore contribute to national water resources planning. The plans should also contain details of water demand management and conservation measures (see Part 4 of Chapter 3) and contingency plans for water-related disasters (see Part 7 of Chapter 3).

For its part, when preparing its water services development plan a water services authority must refer to the relevant catchment management strategy for information about the availability of water to support proposed water services targets, the source of the water, and the requirements for the quality of waste water that is to be returned to the water resource after use. (NWRS1 Chapter 5)

There is no reference in the NWRS2 to the performance of this arrangement and whether any changes are considered to be necessary.

6. Recommendations for SALGA's focus

In this context, areas in which SALGA could usefully focus would be on:

- The need for adequate information about trends, in particular of water availability to and use by water services providers. Information is also needed about water quality trends to enable local government to evaluate the impact of poor wastewater treatment management and inform its response strategies.
- The need to recognise and use the process of preparing the WSDPs as the opportunity for municipalities to engage with water resource issues.

- Proposals to reduce the reliability of water supplied, in order to make more water available for allocation to historically disadvantaged groups should be challenged by SALGA, which should propose that the focus should rather be on compulsory licensing to reallocate water in an organised way while maintaining reliability of supplies.
- The importance of WCDM is acknowledged by SALGA. However it would be appropriate to ask what measures are proposed to support local government in its efforts to achieve loss reduction and how licence restrictions on water abstraction will be applied in the absence of such support.
- Proposals for multiple use will have major implications for SALGA members since they are likely to encourage the use of potable water for purposes such as home garden irrigation before additional capacity is available. This will cause shortages elsewhere in the systems. SALGA should ask for urgent clarification of these proposals, specifically , how much additional capacity will be required, how it is to be funded and how areas to benefit from such initiatives will be identified.
- The absence of clarity on financing issues must be a matter of concern for SALGA members. At present, operation and maintenance costs for water resource schemes are supposed to be covered by water use charges. If these are inadequate and are to be increased, will SALGA members be assisted to meet the increases? And how can they be assured that the funds from tariffs are properly used for maintenance? Would there be benefit to users from combining the activities and strengths of the TCTA with that of the Department's infrastructure unit into a single agency, as proposed by the National Planning Commission?
- Related to the above, a number of institutional opportunities for greater involvement in water resource planning and management are outlined in the NWRS2. It is important to determine whether municipalities are already participating in such arrangements (reconciliation project committees, informal forums and CMAs) and, if not, what support is available to help them to participate more effectively?

7. Conclusion

These issues should be taken forward bilaterally with DWA but also through the Parliamentary comment process and through the submission of formal comments. It might be useful for SALGA to propose an open meeting with DWA at which water resource issues of particular relevance to local government could be discussed, in order to inform the broader local government community.

NATIONAL WATER ACT (1998) : MANDATE FOR NATIONAL WATER RESOURCE STRATEGY

National Water Act: Chapter 2 - Water Management Strategies; Part 1 - National Water Resource Strategy

Establishment of national water resource strategy

5. (1) Subject to subsection (4), the Minister must, as soon as reasonably practicable, by notice in the *Gazette*, establish a national water resource strategy.

(2) The notice must state the address where the strategy may be inspected.

(3) The water resources of the Republic must be protected, used, developed, conserved, managed and controlled in accordance with the national water resource strategy.

(4) A national water resource strategy -

(a) may be established in a phased and progressive manner and in separate components overtime; and

(b) must be reviewed at intervals of not more than five years.

(5) Before establishing a national water resource strategy or any component of that strategy in terms of subsection (1), the Minister must -

(a) publish a notice in the *Gazette* -

(i) setting out a summary of the proposed strategy or the component in question;

(ii) stating the address where the proposed strategy or the component in question is available for inspection; and

(iii) inviting written comments to be submitted on the proposed strategy or the component in question, specifying an address to which and a date before which comments must be submitted, which date may not be earlier than 90 days after publication of the notice;

(b) consider what further steps, if any, are appropriate to bring the contents of the notice to the attention of interested persons, and take those steps which the Minister considers to be appropriate; and

(c) consider all comments received on or before the date specified in paragraph (a)(iii).

Contents of national water resource strategy

6. (1) The national water resource strategy must, subject to section 5(4)(a) -

(a) set out the strategies, objectives, plans, guidelines and procedures of the Minister and institutional arrangements relating to the protection, use, development, conservation, management and control of water resources within the framework of existing relevant government policy in order to achieve -

(i) the purpose of this Act; and

(ii) any compulsory national standards prescribed under section 9(1) of the Water Services Act, 1997 (Act No. 108 of 1997);

(b) provide for at least -

- (i) the requirements of the Reserve and identify, where appropriate, water resources from which particular requirements must be met;
 - (ii) international rights and obligations;
 - (iii) actions to be taken to meet projected future water needs; and
 - (iv) water use of strategic importance;
- (c) establish water management areas and determine their boundaries;
 - (d) contain estimates of present and future water requirements;
 - (e) state the total quantity of water available within each water management area;
 - (f) state water management area surpluses or deficits;
 - (g) provide for inter-catchment water transfers between surplus water management areas and deficit water management areas;
 - (h) set out principles relating to water conservation and water demand management;
 - (i) state the objectives in respect of water quality to be achieved through the classification system for water resources provided for in this Act;
 - (j) contain objectives for the establishment of institutions to undertake water resource management;
 - (k) determine the inter-relationship between institutions involved in water resource management; and
 - (l) promote the management of catchments within a water management area in a holistic and integrated manner.
- (2) In determining a water management area in terms of subsection (1)(c), the Minister must take into account -
- (a) watercourse catchment boundaries;
 - (b) social and economic development patterns;
 - (c) efficiency considerations; and
 - (d) communal interests within the area in question.

Giving effect to national water resource strategy

7. The Minister, the Director-General, an organ of state and a water management institution must give effect to the national water resource strategy when exercising any power or performing any duty in terms of this Act.