

May 2025

The WRC operates in terms of the Water Research Act (Act 34 of 1971) and its mandate is to support water research and development as well as the building of a sustainable water research capacity in South Africa.



Standardised tools to support assessment of the socio-economic impact of water reallocation through compulsory licensing

A study co-funded by the Inkomati-Usuthu Catchment Management Agency and the Water Research Commission developed a set of standardised approaches that can be used to support assessment of the socio-economic impact of water re-allocation plans. These approaches were tested and refined through application in selected catchments in the Inkomati-Usuthu Water Management Area.

Background

As one of its primary objectives, the 1998 National Water Act (NWA) sets out to ensure equitable access to water resources, including rectifying the effects of past racial and gender discrimination. The NWA further enables the efficient, sustainable and beneficial use of water in the public interest, including the facilitation of social and economic development. In pursuit of these objectives, principles and mechanisms are set down in the NWA for the allocation and re-allocation of water resources.

One of the impediments to achieving more equitable sharing of water is the persistence of Existing Lawful Uses (ELU) as defined in section 32 of the NWA. These are water uses that were authorised under any law in force immediately before the NWA came into effect. Their retention under the new dispensation was intended to be a temporary measure to smooth the transition and avoid disrupting economic activities reliant on large volumes of water, without immediately requiring users to apply for water use licences under the NWA. Ultimately the NWA envisaged extinguishing these old-order water rights through their conversion to temporary, conditional entitlements to use water in the form of water use licences under the jurisdiction of the NWA.

Compulsory licensing was introduced by sections 43-48 of the NWA to enable water to be re-allocated in areas where it is necessary to bring about more equitable sharing of water among existing and new users, or where demand exceeds available supply. It is one of the most important legal mechanisms for phasing out ELU in a systematic way at catchment scale. However, it has proven to be time-consuming and complex to implement and has only been undertaken in three catchments to date.

As a result of this experience with implementation of compulsory licensing, the need was identified to draw on lessons learned and identify how compulsory licensing can better be done in the future. Further, there is a need for standardised tools to guide and expedite aspects of compulsory licensing, including assessment of the socio-economic impacts of authorising a particular proposed allocation schedule. The re-allocation of water will have positive and negative socio-economic impacts, and authorities need to be aware of these impacts and factor them into their decision-making.

Recognising these needs, the Water Research Commission (WRC), Inkomati-Usuthu Catchment Management Agency (IUCMA) and Department of Water and Sanitation (DWS) collaborated on a project to evaluate previous compulsory licensing processes and propose a set of standardised tools for assessing the socio-economic impacts of water re-allocation. The project also set out to provide guidance on the practical interpretation of the provision in the NWA for water users to claim compensation if they suffer "severe economic prejudice" as a result of reduced allocations. The project was implemented by the International Water Management Institute, in collaboration with the University of the Witwatersrand and the Global Water Partnership.

Approach

Development of the tools was informed by a literature review, examination of the three compulsory licensing processes already completed in the Tosca-Molopo, Jan Dissels and Mhlathuze catchments, and relevant good international and national practices for inclusive socio-economic assessment. The re-allocation scenarios in the Water Allocation Plans developed by the IUCMA informed the application of the tools. For the testing in

the Inkomati-Usuthu Water Management Area, extensive engagements with user group representatives, field data collection, literature review and statistical analysis were conducted. A stakeholder validation workshop provided the opportunity to review and contribute to the draft findings.

Findings and policy recommendations

A spreadsheet-based tool was developed to assess the socio-economic impact of water re-allocation. The tool expands upon the conventional Cost Benefit Analysis/ Social Accounting Matrix. It calculates the monetary value generated (or contribution to GDP) per cubic metre of water, both for those who gain and those who lose in re-allocation. Expanding on this, the tool also analyses the related externalities and makes explicit numerous implicit assumptions for further assessment and quantification, depending on data availability.

The tool aligns with national policy and legal frameworks by using the hierarchy of water allocation priorities in the National Water Resource Strategy to make the socio-economic distinction between user groups and uses with higher priority (poverty eradication, livelihoods, and racial and gender equity) and lower priority (large-scale commercial uses).

Although tested and refined in the Inkomati-Usuthu Water Management Area, the tool is designed to be applicable in water re-allocation processes anywhere in the country. Its structure and data needs have been kept as simple as possible while achieving the policy intent and meeting the minimum requirements specified in law. Wherever possible, the tool was aligned with other relevant planning tools and approaches for water resource management and development.

The study concludes that it is unsurprising the innovative redistributive provisions of the NWA have proven too complex to implement effectively. Constitutional provisions on property rights, just administrative action, access to information and procedural fairness have provided opportunities to litigate against the state by those interested in maintaining the status quo. Designed to promote fairness and human rights in a democratic dispensation, these mechanisms have become unintended obstacles to interventions by the government to address the effects of past discriminatory laws. In this way, vested and entrenched interests, such as ELU, are protected by the very laws that were enacted to rearrange such interests given their roots in past discriminatory and unjust laws.

The question of severe economic prejudice has not yet been interpreted by any court in South Africa. In the absence of such interpretations, the study concludes that a water user may be able to establish that any degree of allocation reduction has economically jeopardised the undertaking for which the water was needed, thereby resulting in severe economic prejudice. However, the economic tools developed through the project empower the responsible authority in assessing when a re-allocation through compulsory licensing may lead to such prejudice, as well as determining the extent of such prejudice and whether it is compensable.

On the question of compensation, the study concludes that, even if "severe economic prejudice" is proved, payment of compensation is not automatic. A claimant must still provide evidence of financial prejudice suffered. The claimant must also show that the compulsory licensing process does not fall within the exceptions in section 22(7) of the NWA read with 25(8) of the Constitution. As long as the water re-allocation is aimed at promoting the public interest, protecting the Reserve and the interests of historically disadvantaged individuals, decisions made in pursuit of such redistributive justice will be constitutionally defensible in line with section 22(8) of the Constitution.

The study reaffirms that compulsory licensing continues to be the central mechanism for systematic conversion of ELU into water use licences, in the process enabling redress-driven re-allocation of water in catchments that are already fully allocated. The following recommendations are made for improving how compulsory licensing is implemented:

- 1. Relationship between validation and verification of existing lawful water use and compulsory licensing.** The completion of validation and verification of existing lawful water use remains a prerequisite for compulsory licensing. There is potential for innovation that will accelerate the completion and accuracy of these processes, including digitalisation of the administrative processes of validation and verification, and the development of decision-support tools to assist in prioritising catchments for compulsory licensing.
- 2. Participation is central to compulsory licensing.** While the administrative process for compulsory licensing is prescribed in law, there is room for innovation in the participatory dimensions of the process. Doing justice to the intensely consultative nature of compulsory licensing will enhance the prospects of reaching consensus on proposed allocations, thereby avoiding formal disputes by individual users that could significantly delay

completion of the process. The study highlights the value of Water Allocation Plans, developed by IUCMA as part of its Catchment Management Strategy, as vehicles for engagement and consensus building prior to the initiation of compulsory licensing.

- 3. Compliance with the legislated requirements for compulsory licensing is essential.** Claimants of ELU have taken full advantage of administrative and constitutional due process provisions to frustrate validation and verification processes at every procedural step. The procedural requirements for compulsory licensing are likely to be open to similar legal challenges. Successful compulsory licensing therefore hinges on the responsible authority following strict administrative processes that comply to the letter of the law, to avoid needless litigation aimed at frustrating the process.

Conclusion

The spreadsheet-based tool developed by the project for assessing the impacts of water re-allocation is included as an attachment in the final report published by the WRC. The tool expands upon the conventional Cost Benefit Analysis/Social Accounting Matrix by considering the need for two assessments, considering the economic value created and inclusion of socio-economic externalities. Furthermore, the guidance provided for water re-allocation planners and decision-makers is essential for interpreting what constitutes severe prejudice to the economic viability of an undertaking within the context of the NWA. The tools are an important first step, whose operationalisation must be situated within the broader political, legal, and constitutional context and the broader inclusive development objectives of South Africa.

Related report:

Development and application of standardised tools to support assessment of the socio-economic impact of water reallocation through compulsory licensing (WRC Report No. 3170/1/24). For more information, contact WRC Research Manager John Dini, johnd@wrc.org.za.