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DEVELOPMENT OF A RECONCILIATION STRATEGY FOR THE OLIFANTS RIVER WATER SUPPLY SYSTEM WP10197

Liability of the Responsible Authority for Changes in Yield Assessment

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FINAL

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Report no.: P WMA 04/B50/00/8310/17



Contact person:

WP Comrie Aurecon Centre, Lynnwood Bridge Office Park, 4 Daventry Str, Lynnwood Manor, 0081, South Africa

> T: +27 12 427 3108 F: +27 86 764 3649 M: +27 82 808 0435 E: Werner.Comrie@aurecongroup.com

> > In association with:

ILISO Consulting (Pty) Ltd

MBB Consulting Services (Nelspruit) (Pty) Ltd

WFA Aquatic Ecology (Pty) Ltd

Chuma Development Consultants CC

WFA Water Resources (Pty) Ltd

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AUTHORS	:	Maritza Uys (BA LLB LLM (Stell)
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W.P. COMRIE Water Unit Manager

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(Date)				

3 - 11 - 2011 (Date)

J BEUMER Study Leader

Approved for the Department of Water Affairs:

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T NDITWANI Chief Water Resource Planner : NWRP (North)

/7 - // - 20// (Date)

YEN Direc

(Date)

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List of Abbreviations & Acronyms

DWA	Department of Water Affairs
NWA	National Water Act (Act 36 of 1998)
ORWRDP	Olifants River Water Resources Development Project
OWAAS	Olifants Water Availability Study
WMA	Water Management Area
WRYM	Water Resources Yield Model Analysis
WSDP	Water Services Development Plan
WUA	Water User Association

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PART A. LEGAL QUESTION 1: LIABILITY OF THE RESPONSIBLE AUTHORITY FOR INACCURATE YIELD ASSESSMENT FOR PURPOSES OF WATER RESOURCES DEVELOPMENT

1. Background and Legal Question

Certain water resources development projects had been undertaken by DWA for the Olifants WMA on the strength of feasibility studies (ORWRDP) submitted in 2005.¹ This investigation included yield assessments for the proposed De Hoop and Flag Boshielo Dams, which were intended to increase the supply of water to, *inter alia,* mining and industry in the catchment, in attempt to supply the assurances guaranteed in mine water permits, as well as to provide water supplies for future industrial development. The more important lawful mines in the area were listed to include ATOK/Lebowa Platinum; Messina/LPL Baobab; Phalabora Mining Company; Foskor; Marula; Modikwa and Tubatse Ferrochrome.

In 2009, in a Systems Analysis Report as Part of the development of an integrated water resource management plan for the upper and middle Olifants catchment², it was reported that "there has been significant growth in the water requirements in the WMA with the development of the platinum and chrome mines in the Burgersfort and Steelpoort areas of the WMA. The construction of the De Hoop Dam and the raising of the Flag Boshielo Dam has been undertaken to supply the growth in water requirements in these areas. Despite the construction of the additional water infrastructure, the reconciliation of water requirements and available water still shows a deficit in the WMA."

Later in the same year, a subsequent re-assessment of yields (OWAAS) produced different calculations of natural flow patterns and water use in the catchment, to the effect that the re-assessed dam yields differed materially from the original assessment.³

A Yield Analysis was commissioned in 2009, to clarify the difference in yields,⁴ which reported on 4 November 2010. According to this report, the yield assessment differences were attributed to especially changes in natural flow, updated data and changes in water use upstream of the dams, and changed assumptions regarding the operation of the dams. During the Yield Analysis, it was stated that

"there is a measure of uncertainty in all the parameters influencing the yield of a dam, these factors also changed over time and hence, the yield of dams is likely to change. In order to realise the yields calculated during the planning phase of a dam, the

¹ Knight Piésold - Stewart Scott Joint Venture *OLIFANTS RIVER WATER RESOURCES DEVELOPMENT PROJECT (ORWRDP)* P WMA 04/B50/00/1404 19 September 2005.

² WRP Consulting Engineers, Golder Associates Africa and Zitholele Consulting, 2009.

³ Olifants Water Availability Assessment Study: ASSESSMENT OF WATER AVAILABILITY IN THE OLIFANTS WMA BY MEANS OF WATER RESOURCE RELATED MODELS (OWAAS) (VOLUME 5 of 12 WATER RESOURCES YIELD MODEL ANALYSIS (WRYM)) March 2010

⁴ Aurecon DEVELOPMENT OF A RECONCILIATION STRATEGY FOR THE OLIFANTS RIVER WATER SUPPLY SYSTEM Yield Analysis of the De Hoop and Flag Boshielo Dams WP10197 P WMA 04/B50/00/8310/16

catchment managers should be made aware of the assumptions made and operate the catchment accordingly".

The report advised that the important assumptions to note included the following:

"The De Hoop Dam will be very sensitive to any additional water use upstream of the dam. The yield will need to be re-calculated should the verified water use prove to be different from the water use obtained from the Validation Study" and "The lawfulness of the irrigation use upstream of the Flag Boshielo Dam needs to be verified".

It is clear from the above that the water resources development projects had been undertaken on the strength of variable data, and that the yield assessments were fluctuating.

The report recommended the review of water use allocations as follows:

"The balance of the 1 in 50 year yield against the water allocation is as follows:

De Hoop Dam

Original (ORWRDP): {Primary(37.3) + Mining(37.3) + Irrigation(5.4)} = 80.0 Proposed: {Primary(30.3) + Mining(30.3) + Irrigation(5.4)} = 66.0

Flag Boshielo Dam

Original (ORWRDP): {Transfer to Mokopane(40) + Reserve(18.6) + Irrigation(18) } = 76.6 Proposed: {Transfer to Mokopane(19.4) + Reserve(18.6) + Irrigation(18) } = 56.0"

According to this recommendation, mining allocations from the De Hoop Dam (under construction) will have to be reduced with 7 million m^3/a .

The study also recommended that a moratorium should be placed on the issuing of new licences upstream of the dam in order to secure the yield of the dam.

The reduction of water use rights for mining, where these rights are exercised in terms of lawful allocations, can be a severely damaging intervention in existing rights and investment. This has given rise to the question as to the liability of the Department for damages suffered by the mining industry in the case of the reduction of mining allocations.

2. Water Use for Mining

In terms of the National Water Act 36 of 1998 (NWA or the Act), the system for the recognition of water use rights and the system for the authorisation of water rights for mining are subject to the same legal principles as the licensing system for other water uses in terms of section 21.5 The use of water may be exercised only as a continuation of a lawful existing water use entitlement⁶ or if it has been authorised in terms of the Act.⁷ The application procedures for mining and other water uses, however, differ materially, especially as regards the environmental management plans, integrated water resources management plans and water use. However, these procedures are not relevant for purposes of the legal question here.

In terms of previous legislation, viz. the Water Act 54 of 1956 and its predecessor the Irrigation and Conservation of Waters Act 8 of 1912, mining was regarded as tertiary or industrial use, for which the statutory riparian principle for the acquisition of water rights was not applicable. This means that water could not be used for mining without authorisation (which unauthorised *ex lege* use was indeed possible for agriculture and domestic use). The effect of this, is that the determination of existing lawful water uses (ELWU) and the verification of mining rights in terms of the NWA, is much less complicated than for irrigation: this is because proof a permit in terms of previous legislation is necessary for the existence of a water right, whereas, in the case of agriculture, an undefined exercised *ex lege* right is difficult to prove or verify.⁸ In a Validation Study undertaken by GeoTerraImage (Pty) Ltd (GTI) *et al* in 2006,⁹ it was stated that the validation and verification problems for the Olifants WUA were vested in land-based water uses, as the non-land-based water uses were less and determinable.¹⁰

The permits issued to mines to use or dispose of or affect water quality, are recognised in terms of the current Act as ELWU's, the exercise of which may be continued until replaced by license. Unlike the situation with irrigation, where ELWUs are largely undocumented, the

¹⁰ "The non land based water usage (water use that does not use land area as a factor of production) in the Olifants and Inkomati WMAs is considerably less than that from the irrigation sector. A large number of these registrations represent minimal use and can be attributed to schedule 1 water use. The main other water users are large industries, municipalities and mines who have higher water use requirements. This information is shown in *Figure 7.11* which shows the water use per cadastral for non land based water use activities. It would be expected that these water uses would correspond with the large towns and mining activities within the area. It can be seen that in general this is the case however one would expect consumption around the Nelspruit are to be higher. Other high water uses correspond to mining or power generation activities in the area."



Figure 7.11: Non land based water use per cadastral.

See M Uys The legal effect of the incorporation of unverified water uses into yield assessment 2011 for the legal background to water rights and ELWUs.

 $[\]frac{6}{2}$ As defined in s 32 of the Act.

⁷ S 40 *et seq* provides for the licensing of water uses.

⁸ Ss 9, 10 of the Water Act 54 of 1956.

⁹ GeoTerralmage (Pty) Ltd (GTI) et al Undertake the validation and verification of registered water use in the Olifants and Inkomati Water Management Areas WFSP/WRM/CON2004 June 2006.

registration of a mine water right is not possible for a use different from the mine water permit issued by the Department. Any water use in excess of the water permit is per definition illegal and may not be continued. Moreover, the conditions of use and the termination date of the right are contained in the permits, and may not be exceeded or changed without a license. Should the yield in a catchment change to the effect that the assurances of supply is no longer attainable, then the department may take steps in terms of the Act to reduce or cancel ELWUs, subject to the conditions and procedures provided for in the Act, as set out in Chapter 4.

It is submitted that the commitment of DWA to supply the water which it had allocated by way of mine water permits, is binding on the department. Should the water situation in the catchment change to such an extent that the department can no longer meet the allocations it had made in the past, then it will incur legal liability in accordance with the conditions of each of these permits.

Should the yield from the dams change due to the department not taking steps against illegal water users upstream, then the department will be legally responsible. Should the yield change as a result of natural changes in flow conditions, over which the department has no control, and then the conditions of the mine water permits and the respective guaranteed assurance of supply will determine the liability of the department, which will probably indicate water resources development action.

The question here is however to what extent the department is liable for and can be bound by an excessive yield assessment, on the basis of which it had taken specified resource development activities.

3. Departmental Liability towards Lawful Mine Water Rights for Inaccurate Yield

Once the Department has authorised a mine or industry to use a specified volume of water against specified conditions,¹¹ it takes up both statutory and contractual responsibility to supply that water, but usually subject to the assurance stated in the permit, and mostly also subject to unforeseen natural yield drops. However, in order to supply the assurance, the department is constantly busy with the necessary water resource development steps which are required to sustain the supply, and serve the guarantees.

Should the department assess the yield of proposed resource development projects, and after the completion of the projects the yields prove to be still inadequate, then the department remains responsible to continue to investigate and undertake resource development in order to serve the guarantees to existing lawful permit holders. Should the yields turn out to be inadequate not as a result of incorrect assessment, but as a result of departmental negligence to ensure that illegal taking of water is controlled, then it is submitted that the holders of water use entitlements will be in a position to force the department to take the necessary steps to stop unlawful use, and restore the yields.

In the case in question, it seems from the available reports and documents that the original yield assessment (2005) was made on the strength of available water use data under departmental control. The land-based water use data was, by that time, supposed to be contained in a database which was subject to verification, in order to pin-point illegal uses and take the necessary steps to stop such uses.¹² However, at the time of the yield assessment, no reliable database and no verified registration system was as yet available, due to various reasons, mostly attributed to the complexities of verification. This means that the yield assessments were mere estimated yield assessments. However, the benefits of increasing water supply from the proposed resource development projects (the De Hoop and Flag Boshielo dams), based on these estimated yield assessments, were regarded by the department as sufficient reason to proceed with the construction of these dams, being the best option at the time.

In due course, it seemed that the impact of illegal water use upstream of these developments, among other factors, proved to prevent the realizing of the yields, and that the guaranteed supply could still not be achieved. The responsibility of the department would then be to investigate the reasons for the supply shortages and the failure to attain the forecasted yields, and then to take the necessary steps to rectify this, towards being able to supply the assured water.

Very soon after undertaking the proposed water development works, it was realized by the department that the yields could not be achieved, and the necessary steps were indeed taken to re-assess yields, and investigate the failure to attain these yields. It was then concluded

¹¹ Whether in terms of previous or current water laws.

¹² In 1999, the registration of all water uses was commanded, with a due date set for 2001, where after the database would be ready for verification. By 2005, due to various factors, the departmental database of registered water users was still not completed and rather unreliable.

that both natural flow conditions as well as a failure to control illegal upstream uses, were responsible for the problem. A recommendation was received from the investigations that it was urgently necessary to verify upstream water uses, and stop illegal use.

It is submitted that the department has probably failed to efficiently control illegal water uses, which is clear from the material increase in probable illegal water use by irrigators upstream. To the extent that departmental negligence can be proved by affected parties (holders of lawful mine water use entitlements) for the failure to control illegal abstraction, the department can be held liable for losses incurred by these users, due to failed guarantees for assurance of supply.

To the extent that these affected water users wish to hold the department bound to the original yields as recommended to it by its consultants in the yield assessments, it is submitted that this exercise would be futile in that it will be hard to prove that the department has failed its responsibility to take the necessary steps to investigate water supply in the catchment and undertake water resources development to attempt to serve assured supplies. The department had and is still probably taking reasonable steps to attempt to serve assurances to lawful water users.

It should also be taken into consideration that the department has strong powers to reduce or cancel water uses where necessary. In terms of section 43, compulsory licensing can be enforced on a geographical area to achieve fair water allocation from a water resource which is under water stress; or

- i. when it is necessary to review prevailing water use to achieve equity in allocations;
- ii. to promote beneficial use of water in the public interest;
- iii. to facilitate efficient management of the water resource; or
- iv. to protect water resource quality.13

Section 22 provides that a person whose application in terms of section 43 has been refused or who has been granted a licence for a lesser use than the existing lawful water use, resulting in severe prejudice to the economic viability of an undertaking in respect of which the water was beneficially used, may claim compensation for his financial loss.. However, the amount of any compensation payable may disregard any reduction in the existing lawful water use made in order to

- i. provide for the Reserve;
- ii. rectify an over-allocation of water use from the resource in question; or
- iii. rectify an unfair or disproportionate water use.¹⁴

¹³ S 43(1).

¹⁴ S 22(7).

4. Conclusion and Recommendations

It is concluded that, in as far as it can be proved that the department has failed to effectively control illegal water use which impact on the catchment yields, and which failure negates the intended purpose of resource development projects, the proof of negligence will put affected lawful mine water permit holders in a position to hold the department liable for guaranteed assurance of supply.

It is further submitted that in as far as the department has taken reasonable steps to comply with its responsibility to service guaranteed assurances of supply to holders of mine water permits, by continually investigating and planning resources development, that these water holders will probably not be in a favourable legal position to keep the department responsible for its losses resulting from failed supply. This submission is however subject to the conditions of the respective mine water permits: These conditions were not available to for purposes of this opinion, and it is therefore submitted that a detailed opinion on the respective responsibilities of the department towards these different permit holders, will depend on the availability of same.

It is further submitted that the department has powers to reduce or terminate existing lawful water uses, whether by permits under previous legislation for mine water use or licenses issued under the Act, which may in certain cases be done without compensation. The reduction, however, of water uses to mend the effect of uncontrolled illegal upstream use, will probably indicate an obligation to compensate. The imposing of compulsory licensing on the mining sector in the WMA, prior to the verification of upstream water uses, is therefore not recommended.

It is therefore recommended that the department, among on-going resources development investigation and planning, and in order to avoid possible liability for losses suffered by holders of lawful mine water rights, pay urgent attention to the control of illegal water abstraction in the catchment, by way of verification and/or compulsory licensing, together with the enforcement of the law on identified illegal users.

PART B. LEGAL QUESTION 2: THE LEGAL EFFECT OF THE **INCORPORATION OF UNVERIFIED WATER USES INTO YIEL** ASSESSMENT

BACKGROUND AND LEGAL QUESTION 1.

For purposes of water resources development in the Olifants River WMA, certain feasibility studies were undertaken, including a yield assessment for the De Hoop and Flag Boshielo Dams¹⁵ (ORWRDP), on the basis of which the said water resources development had been done.

A subsequent re-assessment of yields in 2009 (OWAAS) produced different calculations of water use in the catchment, to the effect that the later dam yields differed materially from the original assessment.¹⁶

A Yield Analysis (ORSYA) was commissioned in 2009, to clarify the difference in yields,¹⁷ which reported on 4 November 2010. According to this report, the yield assessment differences were attributed to especially updated and change in natural flow, updated and change in water use upstream of the dams and changed assumptions regarding the operation of the dams. A re-evaluation of all these factors led to a recommendation of a yield of 66 million m³/a for De Hoop, and 56 million m³/a for Flag Boshielo.¹⁸

The calculation of dam yields for purposes of the OWAAS (2009), determined water use rights on the basis of a Validation Report (CON2004) of 2006,¹⁹ which largely drew its data from the DWA WARMS registration system. However, this report found that "it was not possible to determine the lawfulness of 67% (27 095) of the identified uses", and it recommended that the WARMS database ought to be updated towards verification and compulsory licencing, to establish legal certainty on water use rights.

During the Yield Analysis, it was stated that "there is a measure of uncertainty in all the parameters influencing the yield of a dam, these factors also changes over time and hence, the yield of dams is likely to change. In order to realise the yields calculated during the planning phase of a dam, the catchment managers should be made aware of the assumptions made and operate the catchment accordingly". It advised that the important assumptions to note included the following:

"The De Hoop Dam will be very sensitive to any additional water use upstream of the dam.

¹⁵ Knight Piésold - Stewart Scott Joint Venture OLIFANTS RIVER WATER RESOURCES DEVELOPMENT PROJECT (ORWRDP) P WMA 04/B50/00/1404 19th SEPTEMBER 2005

Olifants Water Availability Assessment Study: ASSESSMENT OF WATER AVAILABILITY IN THE OLIFANTS WMA BY MEANS OF WATER RESOURCE RÉLATED MODELS (OWAAS) (VOLUME 5 of 12 WATER RESOURCES YIELD MODEL ANALYSIS (WRYM)) March 2010

¹⁷ Aurecon DEVELOPMENT OF A RECONCILIATION STRATEGY FOR THE OLIFANTS RIVER WATER SUPPLY SYSTEM

Yield Analysis of the De Hoop and Flag Boshielo Dams WP10197 P WMA 04/B50/00/8310/16

¹⁸ ORWRDP calculated a 84 million m³/a for the raised Flag Boshielo Dam and 80 million m³/a for the De Hoop Dam, while OWAAS calculated Flag Boshielo and De Hoop Dams on 44.5 and 64.0 million m³/a respectively. GeoTerraImage (Pty) Ltd *et al UNDERTAKE THE VALIDATION AND VERIFICATION OF REGISTERED WATER USE IN THE*

OLIFANTS AND INKOMATI WATER MANAGEMENT AREAS, WFSP/WRM/CON2004 12/06/2006

The yield will need to be re-calculated should the verified water use prove to be different from the water use obtained from the Validation Study" and "The lawfulness of the irrigation use upstream of the Flag Boshielo Dam needs to be verified".

It is clear that the different studies made assumptions on the water uses influencing the dam yields, because no reliable verified data on the exact water uses and especially lawful water uses were available at the times of the different yield assessments.

The legal liability of the responsible authority in respect of the water use assumptions made in the various yield assessments necessitated this opinion: The responsible authority (DWA) is desirable to know what legal responsibilities towards upstream water users had arisen from erroneous and differing water use data leading to erroneous and differing yield assessments, and to what extent the department is bound to supply water to these users accordingly.

2. WATER USE RIGHTS

In terms of the National Water Act 36 of 1998 (NWA), water uses are defined in terms of a numerus clausus listed in section 21. Water uses may be exercised in terms of an authorisation issued in terms of the Act, or the continuation of an existing lawful water use (ELWU), which is defined as a water use which has taken place at any time during a period of two years immediately before the date of commencement of the Act; or which has been declared an existing lawful water use under section 33, and which was authorised by or under any law which was in force immediately before the date of commencement of the Act.20

Section 34 of the Act provides as follows:

- 34. (1) A person, or that person's successor in title, may continue with an existing lawful water use, subject to
 - (a) any existing conditions or obligations attaching to that use;
 - (b) its replacement by a licence in terms of this Act; or
 - (c) any other limitation or prohibition by or under this Act.
 - (2) A responsible authority may, subject to any regulation made under section 26(1)(c), require the registration of an existing lawful water use.²¹

Registration of all ELWU's was directed by Reg 1352 of 12 November 1999. Registered water use rights are currently billed with water use charges, and may be continued as set out in section 34(1). In spite of the registration period having closed, late registrations are still done, though often subject to late-registration fines.

Section 35 provides that the responsible authority (RA) may verify the lawfulness or extent of an existing water use by requiring those who claim water use entitlements to apply for verification, after which the RA may determine the extent and lawfulness of the water use. Verification serves to limit, confirm or reject the use of water.22

ELWUs may be replaced by licenses, and the process of licensing is set out in sections 40-42 of the Act.

Compulsory licensing is one of the processes to license water use in respect of a water resource within a specific geographic area, in order to achieve a fair allocation of water from the resource, aimed at relieving water stress; achieving equity in allocations; promoting beneficial use of water in the public interest; facilitating efficient management of the water

²⁰ Section 32(1).

²¹ And see s 22(1): 22. (1) A person may only use water

⁽a) without a licence

 ⁽i) if that water use is permissible under Schedule 1;
(ii) if that water use is permissible as a continuation of an existing lawful use; or

⁽ii) if that water use is permissible as a continuation of a general authorisation issued under section 39;

⁽b) if the water use is authorised by a licence under this Act; or

⁽c) if the responsible authority has dispensed with a licence requirement under subsection (3).

²² The procedure for verification is prescribed in section 35.

resource; or protecting water resource quality. Through this process, ELWUs are replaced by licenses, and the ELWUs may no longer be exercised.23

In terms of section 22, the issuance of licenses for water use (by compulsory licensing), is subject to the conditions of subsections (6)-(8):

- (6) Any person who has applied for a licence in terms of section 43 in respect of an existing lawful water use as contemplated in section 32, and whose application has been refused or who has been granted a licence for a lesser use than the existing lawful water use, resulting in severe prejudice to the economic viability of an undertaking in respect of which the water was beneficially used, may, subject to subsections (7) and (8), claim compensation for any financial loss suffered in consequence.
- (7) The amount of any compensation payable must be determined
 - (a) in accordance with section 25(3) of the Constitution; and
 - (b) by disregarding any reduction in the existing lawful water use made in order to
 - (i) provide for the Reserve;
 - (ii) rectify an over allocation of water use from the resource in question; or
 - (iii) rectify an unfair or disproportionate water use.
- (8) A claim for compensation must be lodged with the Water Tribunal within six months of the relevant decision of the responsible authority.

According to the sources made available, neither the process of verification nor the envisaged process of compulsory licensing in the Olifants WMA have as yet been completed, with the effect that the water uses exercised in the WMA are mostly ELWUs, except where these have to date been replaced by individual licenses (mostly from water use transfers in terms of section 25(2)). The continuation of these ELWUs, whether verified or not, is lawful, but subject to verification and licensing.

The Act does not place a time limit on the RA's power to verify, and neither is the RA compelled to verify. The effect is that, should the RA not verify the use, the registered water use (which represents the water user's claim to a lawful water right) may be continued until such verification is done or the ELWU is replaced by license. An unverified ELWU is therefore a statutorily lawful water use, but at all times subject to limitation or suspension by verification, and therefore not guaranteed by the RA as a permanent right.

Water uses exercised under Irrigation Boards or WUA scheduling may be continued as if they had been verified or declared to be ELWUs under section 33 of the Act.24 However, when compulsory licensing is done, these rights are subject to suspension or limitation similar to any other verified or unverified water uses not so scheduled under Irrigation Boards or WUAs.

Although verification is not an obligatory process, the need to validate and eventually verify water uses is a necessary step towards eventual compulsory licensing, because it is hardly of value to review water uses by compulsory licensing, if the extent of current lawful use is

²³ Ss 43 et seq.

²⁴ Policy Directive 10 May 1999.

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unknown and therefore not applied. The limitation of water use in a WMA to lawful water use - i.e. the suspension of unlawful use - will determine the need to replace water uses by licensing.

3. LIABILITY FOR CONDONATION OF UNLAWFUL WATER USE

The Olifants River WUA water resources development initiatives have, as far as water use rights are concerned, been based on the DWA WARMS data. Currently, this registration system exists of the unverified volumes of water use registered by water users who claim to have these ELWUs in terms of section 32 of the Act. It is submitted in the source reports that of 8082 identified irrigation users, only 5435 have registered their water uses, of which possibly 3850 are incorrectly registered.

According to the sources, more than 65% of the uses have not yet been matched, validated, verified, licensed or declared. The effect of this is that certain estimated percentages of these water uses could be unlawful, and could have been erroneously included in the calculations for dam yields. Should these all be verified, the total current irrigation water use of 1 677 million m^3/a could be cut to possibly 60% of this estimated use.

However, in spite of this unreliable WARMS data, calculated dam yields have been relied on for purposes of water resources development. The recent reduced calculations for the dam yields, based on slightly improved water use data (through on-going registration and validation since 2005), have emphasised the need to verify and finalize water use rights in the catchments of the dams, so as to come to a more reliable calculation of dam yields.

The question as to what extent DWA is bound to its reported irrigation water uses and to regard them as lawful existing water uses, depends on to what extent these water uses are lawfully recognised and verified:

As was set out above, water uses may be continued until they are confirmed or limited by verification, after which they may further be continued until they are replaced by license.²⁵ During this period of continuation, they are lawful water uses, in respect of which water use charges are payable. But they are temporary, and may at any time be suspended or restricted or reduced or replaced. The only lawful and official statutory mechanisms available to the RA to impact on lawful water uses are the prescribed mechanisms of verification and licensing. The recognition of registered or even unregistered water uses in a water yield assessment, feasibility study, hydrology report or any other official water resources management study or report done for whatever purposes, does not serve as a verification in terms of section 35, nor an authorisation in terms of section 40 *et seq.* The reason for this is that the processes for both verification and licensing are prescribed in much detail in the Act, consisting of formal notices, written applications, investigations, validations and procedural conditions, as set out above. Irrespective of where the data on existing water uses are quoted, these uses may not be regarded as final or permanent water uses unless they have been properly verified or authorised.

²⁵ 48. (1) Any licence issued pursuant to an application contemplated in section 43(1) replaces any existing lawful water use entitlement of that person in respect of the water use in question.

It is therefore submitted that although the water yield assessments at various points in time have been based on available data and official sources of current water use, these versions of water use data were mere databases of claimed or exercised water uses, which water uses at all times remained subject to confirmation, amendment or nullification by the prescribed processes of verification and licensing.

Once a water use has been recognised and confirmed by way of a proper section 35 verification process, or once a water use has been replaced by license (whether by individual authorisation or by compulsory licensing), the department will pick up legal liability should it decide to reduce these rights, unless by prescribed reduction processes.²⁶

It is submitted that the usage of available unverified water use data for official purposes cannot serve as condonation of unregistered or incorrectly registered water uses, unlawful water uses, or illegal water uses, and cannot replace the binding effect of verification or authorisation.

Water users who wish to rely on water resources development or management reports and studies as a means to seek condonation for unlawful or unverified water uses, are attempting to found their uses on illegal grounds, and will not succeed in the courts of law. Registration certificates clearly state that the registration of a water use does not entitle the user to regard it as an authorisation, and that the use remains subject to proper procedural verification or authorisation as set out in the Act.

²⁶ See Parts 9 and 10 of Chapter 4 of the Act, relating to review and suspension of entitlements. And see s 22(7)(b).

4. CONCLUSION AND RECOMMENDATIONS

The inclusion of water use data in the official studies and reports on water resources development in the Olifants WMA, whether this data was derived from field surveys, official sources or databases, or other sources, remains merely a version of what water uses are exercised, and cannot serve as official condonation of unlawful water uses.

Water use rights can only be acquired by authorisation under the Act (including licensing, water transfers or compulsory licensing) or by the verification of ELWU's. Unless these mechanisms have duly been used to verify or authorise water uses under the Act, the water uses which are exercised, whether registered or not, may be continued as ELWUs, but are at all times subject to verification or licensing. This is irrespective of whether or not the uses are mentioned in reports or used as the basis to determine dam yields, hydrology or catchment data.

The RA is bound to water uses only once these uses have been officially confirmed by proper verification in terms of the prescribed processes, or by proper authorisation in terms of the different licensing processes. Until then, all uses are indeed lawfully exercised, yet they are merely ELWUs and therefore of temporary nature.

The consultants undertaking the different dam yield assessments and hydrology studies, have referred to the problems and complexities of confirming water uses, and have repeatedly recommended the verification or compulsory licensing of water uses upstream of the respective dams, in order to attain legal certainty.

It is submitted in conclusion that the RA is not legally bound to supply water in accordance with water use data quoted in official water resources management reports and studies used for yield assessments or other purposes. The RA is therefore not liable for claims by users that the data be confirmed as permanent water use rights.

It is recommended that the verification and compulsory licensing of water uses be undertaken as a matter of urgency, in order to determine the correct water yields for the WMA. Without these, the volume of water lawfully used by irrigators and other users upstream of the dams will remain uncertain, with the result that DWA cannot guarantee water yields.