



water affairs

Department:
Water Affairs
REPUBLIC OF SOUTH AFRICA

PROGRESS REPORT: VAAL RIVER STRATEGY STEERING COMMITTEE MEETING NO. 6, ON 18 APRIL 2012

Water Use Compliance Enforcement (Eradication of Illegal Irrigation Water Use) in the Vaal River

1. BACKGROUND

Validation and verification of water use are two of the major components forming part of the project to address unlawful use in the Vaal River System. During the validation of water use and the determination of the lawful use, very little formal communication between the water user and DWA took place. The classification of the registered use and the identification of unlawful water use were “internal” investigations and the answers obtained are not final.

The main aim of the verification process is to inform a water user of the outcomes of the validation process and to offer the water user (if he disagrees) the opportunity to make representations regarding any determinations made during the validation process. The verification of water use is a formal process described under Section 35 of the National Water Act, and the process can therefore only be initiated by the DWA. All the correspondence is between the DWA and the water user.

The validation and verification of irrigation water use in the Upper- and Middle Vaal Water Management Areas (WMA) have been under way in the Gauteng and Free State Regional Offices respectively, whilst these processes have commenced in the Lower Vaal WMA (resorting under the Northern Cape Region). During the validation process significant unlawful water use in the catchment of the Vaal Dam and in the rest of the Vaal River system was identified. These unlawful uses and users are now putting the Vaal River System and those users who are using their water lawfully, at risk.

2. PROGRESS

2.1 Validation and Verification

Work has been proceeding in parallel in all three WMAs since the appointment of the PSP for this project in June 2010. The verification of water use has commenced for all the properties where possible unlawful water has been identified and these properties are receiving the highest priority.

The number of properties involved and the progress in terms of the validation/verification process, together with the possible unlawful use is shown in Table 1.

Table 1: Status quo in Vaal River System

Item	Vaal System			
	Upper	Middle	Lower	Total
Irrigation properties	3 527	3 046	1 952	8 525
Validation in process	0	0	1 894	1 894
Validation completed	3 527	3 046	327	6 900
Verification in process	1 824	2 075	28	3 927
Verification not started	796	531	1 924	3 251
Verification completed	907	440	14	1 361
Properties - unlawful use *	877	325	<i>Under assessment</i>	1 202
Unlawful volume (mil m3) *	180	34	30	244

* At project inception

Priority case lists for the Upper and Middle Vaal WMAs were compiled based on the volume of the possible illegal use on each property (from surface water resources). The initial focus is on properties with a possible illegal use of more than 250 000 m³ per annum. A summary of the initial prioritisation exercise for the two WMAs is presented in Table 2. The Lower Vaal WMA is excluded from this table as the validation process has only recently commenced.

Table 2: Initial prioritisation in the Upper- and Middle Vaal WMAs (surface water)

Item	Upper Vaal	Middle Vaal	Total
Total number of properties with illegal use	877	190	1 097
Total illegal use volume (m ³ /annum)	170 900 000	32 200 000	203 100 000
Properties with illegal use > 250 000 m ³ /a	227	41	268
% of total illegal properties	26 %	22 %	24 %
Volume of illegal use > 250 000 m ³ /a	120 886 350	21 608 386	142 494 736
% of total illegal volume	71%	67 %	70 %

A regulation to enforce the measurement of taking water for irrigation purposes is a prerequisite for efficient and effective action against partially unlawful water users. Until such regulations have been published, action against partially unlawful water users would be problematic. In light of the above the priority lists were revised and now only includes properties where all the current water use was classified as possible unlawful use or where the metering of water use was a pre-requisite when permits were issued under the previous Water Act. A summary of the revised priority list is shown in Table 3.

Table 3: Revised prioritisation in the Upper- and Middle Vaal WMAs (surface water)

Item	Upper Vaal	Middle Vaal	Total
Total number of properties with unlawful use	877	190	1 097
Total unlawful use volume (m ³ /annum)	170 900 000	32 200 000	203 100 000
Properties with blatant unlawful use	354	96	450
% of total unlawful properties	40 %	50 %	41 %
Volume of blatant unlawful use	65 482 383	14 154 387	79 636 770
% of total unlawful volume	38 %	44 %	39 %

2.2 Regulations

The Department has had some success in dealing with unlawful use in cases where the use is clearly unlawful. However, where there is existing lawful use and part of the current use is unlawful, it is difficult to deal with from a legal perspective as the present legal tools are not sufficiently robust to successfully prosecute transgressors. A large percentage (61%) of unlawful use falls in this category.

A submission for the publishing of the draft Regulations for public comment was submitted to the Minister during November 2011. The Minister however requested that a stakeholder consultation process be undertaken. The issues regarding water for irrigation purposes have multiple stakeholder groups and the Minister would like to see a more formal stakeholder engagement plan that ensures gender inclusion and relevant stakeholder representation (Municipalities, NDA, NGOs, etc.). A team to undertake this task has been composed and they are driving the process. The completion date for this task has not been finalised.

2.3 Compliance Monitoring and Enforcement (CME)

Addressing unlawful water use is receiving a high priority in the Regional Offices. Although new CME appointments have been made in some of the Regional Offices and CME officials from Head Office have been made available to assist in the enforcement process, additional capacity is required to address the temporary high work load associated with the related processes. Priority case lists for the Upper and Middle Vaal WMAs have been compiled based on the volume of the possible unlawful use on each property and the main perpetrators are dealt with first.

Effective monitoring and enforcement due to the present lack of personnel in the Regional Offices is hampering progress in eradicating illegal water use for irrigation. Additions to the Terms of Reference for the present assignment were approved by the Departmental Bid Adjudication Committee and the PSP can now assist the Regional Offices in the task of monitoring and enforcement.

The initial project plan was based on the premise that the regulations to enforce measurement of water use will be published during the third quarter of 2011. This did not materialise and it is uncertain whether the publication of the regulations will take place before the current project expires in May 2013. The project targets were therefore revised accordingly and the targets for addressing the balance of the illegal use for the remainder of the project are shown in Table 4.

Table 4: Project targets (surface water)

Description	Up to Mar 2012	Apr - Jun 2012	Jul - Sep 2012	Oct - Dec 2012	Jan - Mar 2013	Jan - May 2013
Unlawful use addressed ($\text{m}^3 \times 10^6$)	24	25	25	25	25	10
Cumulative unlawful use addressed ($\text{m}^3 \times 10^6$)	24	49	74	99	124	134
% of unlawful use addressed	12	24	36	49	61	66

A complete re-evaluation is done for each property under investigation (which includes the use of the latest SPOT satellite imagery) and the results are amended where necessary. The initial validation results may change due to the following:

- The availability of more satellite images for the qualifying period (where irrigation can be identified)
- Section 33 approvals
- Water users who have stopped their water use
- Cases referred to the Tribunal

There are 278 properties receiving urgent attention and the progress in term of compliance monitoring and enforcement is shown in Table 5.

Table 5: CME progress

Description	Number of Properties	Volume (m ³ /a)	% of Total
Illegal water use was stopped	61	23 920 133	26.4
Re-evaluation showed the use is partially unlawful	8	828 717	0.9
Partially unlawful – Metering required	48	17 942 735	19.8
Section 33 applications still to be evaluated	18	5 046 664	5.6
Tribunal judgements – use is lawful	5	3 262 750	3.6
Busy with Section 35 process	97	25 116 122	27.7
Pre-directives sent	37	13 584 193	15.0
Directives sent	4	962 271	1.1
Total	278	90 663 585	100.0

To date a total of 69 Pre-Directives and 18 Directives were issued by the Department as part of the CME process.

A very successful CME campaign was undertaken during the National Water Week when the Minister visited a property where illegal water supply to irrigation systems were sealed and a Pre-directive delivered to a user suspected of abstracting water illegally. The campaign was televised and widely published in the printed media.

2.3 Contingency plans

The draft report on possible contingency measures, should the desired results not be achieved, or not achieved in time is being finalised at present.

2.4 Communication

A communication strategy was developed as part of the Inception Phase and focuses on the communication aspects of the project, as these are critical in achieving the project objectives. It provides the communication tools used, the roles and responsibilities and a detailed programme for implementation.

Various contact sessions, especially with water users in the Lower Vaal WMA took place during the reporting period and the project was also introduced to water users through Regional newsletters.

3. SUMMARY AND CONCLUSION

In view of the above the aim is to address 49% of the illegal volume identified in the Vaal River System by the end of 2012. The publication of the regulations for comment has been delayed but until they are in place the focus will remain on water users where all the present water use is regarded as possible unlawful or where the metering of water use was a pre-requisite when permits were issued under the previous Water Act.

A programme for the project with deliverables based on the Project Execution Plan has been summarised in Table 4 and the revised aim is to address 66% of the identified unlawful water use by the end of May 2013.