

**IN THE WATER TRIBUNAL  
HELD AT CRADOCK**

**REF: WT 04/07/2007**

In the following three appeals between:

<b>HP VAN NIEKERK FAMILY TRUST</b>	<b>APPELLANT</b>
and	
<b>THE DEPARTMENT OF WATER AFFAIRS AND FORESTRY</b>	<b>RESPONDENT</b>
(the first appeal)	

<b>D DU PLESSIS SCHEEPERS TRUST</b>	<b>APPELLANT</b>
and	
<b>THE DEPARTMENT OF WATER AFFAIRS AND FORESTRY</b>	<b>RESPONDENT</b>
(the second appeal)	

**AND**

<b>PP MICHAU</b>	<b>APPELLANT</b>
and	
<b>THE DEPARTMENT OF WATER AFFAIRS AND FORESTRY</b>	<b>RESPONDENT</b>
(the third appeal)	

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**APPEAL DECISIONS: 24 APRIL 2009**

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**APPEARANCES:**

Coram : Mr L J Lekale (Chairperson)  
Dr W Singo (Deputy Chairperson)  
Mr H Thompson (Member)  
Mr A S Makhanya (Member)  
Mr A S Hadebe (Member)

For the Appellant : Mr F Smit  
For the Respondent : Mr L Mtshotshisa

**1. DETAILS OF HEARING AND REPRESENTATION:**

- 1.1. This is a unanimous decision in the three appeal hearings held on the 13th February 2009 at Cradock;
- 1.2. The Water Tribunal decided in terms of Rule 10 of the Water Tribunal Rules to hear the three appeals together, as before the first hearing started, it appeared to the Tribunal that some common questions of fact and law would arise during the hearings and it was practical and appropriate to proceed to hear the appeals together. The three Appellants and the Respondent agreed before the decision was taken that the appeals could be heard together.

- 1.3. The three Appellants were represented by **Mr F Smit** from Nolte Smit, an Attorney's firm in Cradock and was assisted by **Mr J F Van Wyk**, a Consultant from Sektor Engineering;
- 1.4. The Respondent in all three appeals was represented by **Mr L Mtshotshisa** from the Directorate Legal Services from the National Office of the Respondent and was assisted by **Mr F P J van der Merwe**, a senior Specialist Engineer in the Directorate Water Allocation from the National Office of the Respondent, **Mr F A Stoffberg**, a consultant to the Directorate National Water Resource Planning from the National Office of the Respondent and **Mr P R de Wet** from the Regional Office in Cradock of the Respondent.

## **2. ISSUES TO BE DECIDED:**

- 2.1. The question to be answered by the Water Tribunal is whether sufficient water for irrigation usage is available in the Tarka River downstream of Lake Arthur Dam that presently are not allocated or designated for specific future needs; and
- 2.2. In the event that such water is available, whether the water should or could be allocated to the three Appellants.

## **3. BACKGROUND TO THE ISSUE:**

- 3.1. The Tarka River is a tributary of the Fish River, which forms part of the Orange-Fish-Sundays System (OFSS).
- 3.2. According to 2000 figures, the total yield of the Fish River (the quantity of water that originates within its catchment area) is about 84 million m<sup>3</sup>/a, while the total quantity of water transferred from the Orange River is about 575 million m<sup>3</sup>/a, of which about 117 million m<sup>3</sup>/a is transferred to the Sundays River. (See Table D15.4 in Appendix D15 of the National Water Resource Strategy (NWRS) as published in Government Notice 65 in *Government Gazette* 27199 dated 28 January 2005. This Strategy is published in terms of section 5(1) of the National Water Act of 1998 (Act 36 of 1998) (NWA) and effect must be given to it when exercising a power in terms of the NWA.)
- 3.3. Lake Arthur Dam was constructed in the Tarka River and water for various usages is made available from this dam. As water from this dam was not sufficient for all the allocated needs, either directly from the dam or from the Tarka River downstream of the dam, a canal from the Fish River to the Tarka River was constructed in the early 1990's and water is transferred from the Fish River to properties along the Tarka River downstream of Lake Arthur Dam for irrigation. The irrigation of these properties results in return flows into the Tarka River, and together with water from other sources in the river, it flows into the Fish River. The exact origin of the other sources are not clear, as it appears that the runoff of water from the catchment of Lake Arthur Dam is so limited that the dam lately hardly ever overflows, although some run-off from rain is generated in the area. These sources are probably mainly from fountains in the Tarka River, and the water from these may include seepages from the dam and/or return flows from the irrigation practices higher up in the area.

- 3.4. The three Appellants each applied to the Department of Water Affairs and Forestry (DWAF) during August 2005 for a license in terms of section 22(1)(b) of the NWA to abstract a portion of the water flowing in the Tarka River downstream of the Tarka Dam before it flows into the Fish River.
- 3.4.1. The Appellant HP van Niekerk Family Trust applied to take 297 000 m<sup>3</sup>/a of the water for irrigation on Portion 5 of the Farm Gannavlake 494;
- 3.4.2. The Appellant D du Plessis Scheepers Trust applied to take 459 000 m<sup>3</sup>/a of the water for irrigation on the Remaining Extent of the Farm 495; and
- 3.4.3. The Appellant PP Michau applied to take 702 000 m<sup>3</sup>/a of the water for irrigation on Portion 8 of the Farm Gannavlake 494.
- 3.5. The applications were prepared by Sektor Consulting Engineers based in Cradock with the assistance of the Regional Office of the Respondent in Cradock, who recommended the applications when they were submitted for approval to the National Office of the Respondent.
- 3.6. The Chief Director: Water Use of the Respondent decided during April and May 2007 not to approve the applications due to the following reasons, as indicated in writing to the three Appellants under reference B191/2/1544/1:

“The Fish-Sundays system is under stress and is totally dependent on water transferred from the Orange River. Local catchments contribute only a fraction of the total quantity of water used. The Tarka Sub-System is linked to the Orange-Fish-Sundays System (OFSS) and is as such also under stress. The Department of Water Affairs and Forestry is therefore having a firm position that there would be no sustainable availability of water in the Lower Tarka River for further allocation to irrigation expansion.

Even if water should be available in the Tarka River from time to time, it must be regarded as OFSS water which should be used to contribute to the reduction of the overall deficit and the enormous dependence on transferred Orange River water. The water from the Orange River has also been fully allocated. The awarding of further licences to abstract water from the Fish River catchment therefore cannot be justified.

In terms of the National Water Act, 1998 (Act 36 of 1998), any new water use as defined, such as the storing and taking of water from a water resource, has to be authorised by a water use licence. However, indications and observations to date confirm that the water resources in the Fish River are indeed under stress.”

- 3.7. Each of the Appellants appealed against the decision applicable to their application via their Attorney Nolte Smit on 15 June 2007 on, among others, the grounds that:

The Respondent did not take into consideration the fact that the local and Regional Offices of the Department Affairs and Forestry are supporting the applications;

The Report on Hydrological Calculations and Analysis by Sektor Consulting Engineers regarding the availability of water in the Lower Tarka River was not taken into account when considering the applications, as this report indicate so and which is also substantiated by the local offices of DWAF;

The available water in the lower Tarka River does not contribute to the water required for the OFSS or form part of it;

The lower Tarka River only contributes a fraction of the water to the OFSS and that this could not make a mentionable contribution to the availability of water in the OFSS;

Other water users are currently abstracting water from similar contributory rivers in the catchment area of the OFSS; and

There is no reasonable proof or indication that the relevant abstraction of water would be detrimental to the OFSS.

#### **4. SURVEY OF EVIDENCE AND ARGUMENTS:**

##### **Evidence and documents submitted**

- 4.1. The Appellants called as a witness Mr J F van Wyk, a Consultant from Sektor Engineering, who has a B Tech Civil degree from the Port Elizabeth University.
- 4.2. The Respondent on the other hand called Mr F P J van der Merwe, a senior Specialist Engineer in the Directorate Water Allocation from the National Office of the Respondent as a witness.
- 4.3. Both witnesses appear to the Tribunal to be honest and reliable witnesses.
- 4.4. After both witnesses gave their evidence under oath, the Tribunal asked the Representative of the Appellants to compile written heads of arguments for its case. This was done and the document was dated 27 February 2009. This document was made available to the Respondent who replied to it on 13 March 2009. This response was sent to the Representative of the Appellants for comments and no reply on it was received, in spite thereof that the Appellants were given until the 20<sup>th</sup> March 2009 to reply if they so wished.
- 4.5. Further the bundle from the Registrar of the Water Tribunal also forms part of the evidence and arguments analysed by the Tribunal.

##### **Evidence and arguments by the Appellants**

- 4.6. The Appellants based their case among others on the following aspects.

Mr van Wyk compiled the relevant water use licence applications with the assistance of the Regional Offices of DWAF.

The properties in question are situated in the quaternary catchment Q44C which is in the part of the Upper-Fish area and not the Tarka catchment area.

The water in the Lower-Tarka River which the Appellants seek to abstract, originates primarily from return flows and fountains.

Hydrological data obtained from the relevant gauging weir indicates that an average flow of 10 million m<sup>3</sup>/a at 80% sustainability in the lower Tarka River is available for the proposed abstraction.

The water the Appellants seek to abstract was not taken into account when the Internal Strategic Perspective (ISP) was compiled.

Only 2 million m<sup>3</sup>/a was taken into account from the whole Upper Fish Area as local yield in the ISP, while the hydrological data presented to the Tribunal prove that even the Lower-Tarka catchment exceeds this figure by far.

The OFSS is in balance according to the ISP and that there is currently a surplus available, according to p 46 of the ISP.

Neither the OFSS nor the Lower-Tarka Systems could be described as "stressed". For example in the Lower Tarka River (the area in question) owners may in terms of the applicable General Authorisation abstract up to 150 000 m<sup>3</sup>/a per property. The same applies for other tributaries. If the potential accumulative quantities are taken into account, it exceeds the quantities needed by the Applicants.

A quantity of 38 million m<sup>3</sup>/a water from the Orange River for 4000 ha have been reserved for future transfer to the OFSS for resource-poor farmer schemes.

- 4.7. According to the Representative of the Appellants Mr van der Merwe has conceded under cross-examination that the OFSS according to the ISP finds itself in a state of equilibrium and consequently that there is no deficit. He also conceded the sustainability of the water in the Lower-Tarka River. Further, according to the Representative, none of the facts and findings testified by Mr Van Wyk were contested or contradicted by the Respondent. Therefore the Appellants submit that the reasons given by the Chief Director: Water Use not to approve the applications are without substance.
- 4.8. As the area in which the Appellants have applied for licences falls within the Upper-Fish River catchment area (quaternary catchment Q44C), and not the upper part of the Tarka River catchment (upstream of Lake Arthur Dam), the Appellants reckon that their applications should, from a policy perspective, not be excluded from the granting of new licences. The ISP states "License applications for use from the following rivers could be authorised after very careful consideration ... - water abstraction can be considered in most catchments except in the Tarka and Groot Brak Rivers." (See Table 3.1 on page 48 and page 116 of the ISP.) The Appellants submit that the Lower Tarka River forms part of the Upper Fish River, as it falls within Q44C, and is therefore not part of the catchment of the Tarka River. Therefore these licences could be granted.

- 4.9. It is further submitted that the Chief Director: Water Use erred in not taking into account the local conditions and opportunities, in particular that surplus water is available in the form of locally generated yield.
- 4.10. Therefore, based on the above the Appellants submit that it would be just and equitable for the Tribunal to grant the necessary water use licences to the three Appellants.

#### **Evidence and arguments by the Respondent**

- 4.11. The Respondent stated the reason why the licence applications were not approved is that no additional water is available in the water resource to be allocated to the Appellants. The fact that the Regional Office supports the applications as it is of the opinion that the area is not water stressed should be disregarded, as it is not based on correct findings and is not the viewpoint of DWAF. Recommendations by the Regional Offices should not be looked at in isolation, as there may be other factors that could play a role in deciding whether to grant a licence or not.
- 4.12. According to the Respondent a dominant feature in respect of water resource management in the Fish River is the large transfer of water from the Orange River, part of which is also diverted from the Fish River to the lower parts of the Sunday's River. About 87% of the water used in the Fish River System is transferred from the Orange River (based on 2000 figures). The impact of this transfer of water on the Orange River is that about 30% of all water available in the Orange River upstream of Gariep Dam is transferred to the Fish River, which has a considerable impact on the availability of water in the Orange River. If it was not for these transfers, large deficits would be experienced and it would not be possible to meet the needs of the water users of the OFSS. The area would be under severe water stress.
- 4.13. The strategic use of water from the Orange River, among others, is to provide water to the Gauteng region, which is of national importance and should not be jeopardized through allocating water at random to less strategic users. The Fish River may for that reason not be treated in the same way as other rivers which are not involved in any water transfers.
- 4.14. The total quantity of water presently available in the Fish River is either already allocated or is designated for specific future needs of the area, including the growing domestic and industrial needs and a specific quantity reserved for future irrigation by historically disadvantaged farmers.
- 4.15. The Respondent stated further that no water that is flowing at any stage in the Fish River or any of its tributaries is therefore available to be allocated to the Appellants. The quantity transferred is managed in such a way that it could be regarded as "just enough" to satisfy the existing allocations and future designations. Any water that is allocated over and above this quantity will disturb the balance and can for that reason not be allowed. Because the Fish River can not by itself nearly supply the presently allocated entitlements, it should be treated as "stressed", but is kept in balance due to the proper management of the huge transfers from the Orange River.

- 4.16. Further, the Respondents stated that a quantity of water is continuously transferred through a canal from the Fish River to the lower parts of the Tarka River in order to satisfy the needs of the existing irrigation allocations along the Tarka River which could not be provided by the Tarka River itself. According to the Respondent any water that is at any stage observed to be flowing in the Tarka River, whether it is irrigation return flows, fountains or emanating from the Tarka River catchment, should be allowed to pass through to the Fish River to be available to existing downstream users.
- 4.17. The Respondent stated that the water in question was certainly taken into account in compiling the ISP as well as the NWRS. The efficient use of transferred water is also highlighted in the NWRS as a key element in respect of the management of the Fish River (page 227 of the NWRS).
- 4.18. The Respondent also stated that the flow measurements or hydrological records of the flows in the Tarka River is not relevant to the issuing of new licences, as none of the water is regarded as available to be allocated to new users and should be returned to the Fish River. In the future even less water will be available because of growing demand for water domestic and industrial purposes. For this reason the Respondent did not contest the findings of the Appellant's witness.
- 4.19. The Respondent further stated that among the principles on which inter-basin transfer are based, is that the transfer quantity is limited firstly by what surplus water the donor catchment can afford to make available, and secondly by reasonable and legitimate shortfalls of users in the receiving catchments. In assessing these shortfalls, all available water resources in the receiving catchments must be taken into account. This means that water needs in the receiving catchment must firstly and as far as possible be supplied from local sources, and the supply should only be topped up with water transferred in from another catchment.
- 4.20. Further, the Respondent stated that the OFSS was never intended to create surplus water in the receiving catchments. It should be operated to only satisfy the quantity requirements of the users with entitlements in those areas and not more. The Tarka River is one of the linked catchments and receives water from the Orange River.
- 4.21. Based on these principles, the Respondent stated that surplus water for irrigation expansion should not be allowed in the lower Tarka River. If water is observed in the river from time to time, or even on an ongoing basis, irrespective of whether it is directly or indirectly transferred from the Orange River or whether it is locally generated (for example by rainfall), that water belongs to the inter-basin transfer pool and contributes to the water balance of the whole system. Alternatively, the observed flows may be interpreted as an over-supply to the Tarka River area resulting from a less than optimal operation of the transfer scheme and should be adjusted as such.
- 4.22. The Respondent concluded that the only way applications for additional water for irrigation along the Tarka River could be approved from a water availability point of view would be to make a corresponding additional allocation from the Orange River. The point has however been reached where water currently available from

the Orange River at a given assurance of supply has already been fully allocated. Even some recent applications for longer term Orange River water allocation to urban users in the Eastern Cape could not be fully granted. These municipalities have been advised to purchase entitlements from farmers to meet their needs. Therefore allocating additional water to the three Applicants, water that is actually not available, simply does not make sense.

- 4.23. Therefore, according to the Respondent the Chief Director: Water Use has taken the correct decision. She has considered all aspects relevant to the licence applications, but the priority given to regional and national interest in terms of the availability of water is considered to weigh higher than the local agricultural and socio-economic development of the individual applications.

## **5. ANALYSIS OF EVIDENCE AND ARGUMENTS:**

- 5.1. The Appellants have shown that sufficient water for irrigation is available in the Tarka River downstream of Lake Arthur Dam that is not used in the Tarka River catchment. However, it is less than the average flow of 10 million m<sup>3</sup>/a at 80% sustainability as indicated by the Appellants in their written heads of arguments dated 27 February 2009, as there are also other users in the lower Tarka River that rely on this water and the ecological Reserve of the Tarka River should also be satisfied with this water.
- 5.2. This water flows down the Tarka River catchment into the Fish River. This water is derived from various sources, such as return flows from irrigation downstream of Lake Arthur Dam, which irrigation is supplied with water from a canal from the Fish River, rain water runoff and fountains in the Tarka River, and the water from these may include seepages from the dam and/or return flows from the irrigation practices higher up in the area.
- 5.3. The Appellants argued that this water is not accounted for in the ISP and could therefore be used in the lower portion of the Tarka River, as it is locally generated. This water is therefore not needed to meet the requirements of the OFSS, as the OFSS is currently not under stress and a surplus of water is available in the system. The Respondent on the other hand stated that the water is accounted for in the ISP. No evidences or arguments were put to the Tribunal to prove whether or not this water is accounted for in the ISP.
- 5.4. According to the policy and management approach of DWAF as stated by the Respondent, even if the water is generated locally, it should still form part of the whole system. It should be allowed to pass through to the Fish River where it is then used along that river by users with existing allocations.
- 5.5. In spite of this policy and management approach, the Respondent must still consider whether the three licences should be issued to the Appellants or not, after considering and taking into account all the relevant factors.
- 5.6. Large quantities of water are transferred from the Orange River, and if not for these transfers, severe deficits would be experienced in this area. The water generated in the Fish and Sunday Rivers would not be enough to meet the local



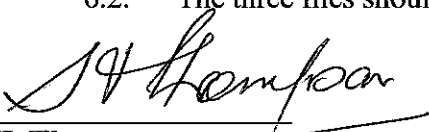
demands. About 87% of the water used in the OFSS is transferred from the Orange River.

- 5.7. The water transferred is to ensure that the OFSS is in balance or in a state of equilibrium, but the fact that it is in balance does not mean that it is not under stress. There is an overall deficit in this area and the transferred water is necessary to reduce this deficit. Any new abstraction will increase the deficit except if further water is transferred from the Orange River into the area, which will have an impact on the provision of water from the Orange River.
- 5.8. The area downstream of the Tarka Dam is also linked with the Fish River via a canal that provides water continuously for irrigation in the area, as the existing water resources in the catchment of the Tarka River is not sufficient for the actual water needs in that catchment. Therefore, the locally generated sources of water should not be looked at in isolation. It forms part of the bigger system and that should in terms of section 3(2) of the NWA be allocated equitably in the public interest.
- 5.9. If the applications are approved, it means that water is removed from the system and this water should be supplement with water from the Orange River. This would be against the principles on which inter-basin transfers are based and would also place an extra demand on how to meet the needs of strategic water users.
- 5.10. The ISP on page 116 according to the Appellants allows that new licences could be issued in the area downstream of Lake Arthur Dam after very careful consideration. Their argument is based on the fact that reference to the Tarka River on page 116 is only reference to the portion of the Tarka River upstream of Lake Arthur Dam. This argument is probably based on the situation assessment dealing with General Authorisations in Paragraph 7.1 of the ISP on page 112. In this paragraph under Tarka River only quaternary catchments Q41A, Q41B, Q41C, Q41D, Q44A and Q44B are listed. Quaternary catchment Q44C is not listed, and therefore, according to this argument, any reference to Tarka River in the ISP should exclude quaternary catchment Q44C automatically, and if that is not the case, the ISP should be amended to reflect that.
- 5.11. The Tribunal does not support this viewpoint if only the actual wording in the ISP is analysed. Under Paragraph 7.1 the quaternary catchments within the catchment of Tarka River that are actually excluded from the provisions of the General Authorisation are listed. These exclusions are only applicable for the purpose of Paragraph 7.1.
- 5.12. If a quaternary catchment should be excluded from a catchment of a specific river under any other provision of the ISP, for example for the granting of licences in respect of the excluded part, then it must be so mentioned under that part. If not, all quaternary catchments are then included.
- 5.13. Therefore the Tribunal is of the opinion that the Tarka River mentioned on page 116 includes the whole catchment of the Tarka River, including quaternary catchment Q44C. If correct, new licences may not in terms of the ISP be issued in the catchment of the Tarka River.

- 5.14. There might be management reasons why quaternary catchment Q44C is included for the purpose of the general authorisation application but excluded for the purpose of granting of new licences. The same applies to the Appellants arguments regarding the fact that the provisions of the General Authorisation apply to certain catchments and not others. It is not necessary for the Tribunal to look into these matters as the Tribunal could decide on the appeal without dealing with these matters.
- 5.15. The Tribunal has no jurisdiction to review the policy and management approach of DWAF dealing with the inter-basin transfer or to decide whether it is reasonable and justifiable. These would therefore guide the Tribunal when it makes its decision on the matter. Further, it is not necessary for the Tribunal to determine the quantity of water available down stream of the Tarka Dam and whether or not the water in question is accounted for in the ISP, as the Tribunal could make its decision without taking this into account.
- 5.16. After the Tribunal has considered all the information put to it by the three Appellants and the Respondent, it comes to the conclusion that the OFSS is indeed under water stress and is dependent on water transferred from the Orange River. The total quantity of water presently available is either already allocated or is designated for specific future needs of the area, including the growing domestic and industrial needs and specific quantity reserved for future irrigation by historically disadvantaged farmers (a quantity of 38 million m<sup>3</sup>/a water for 4000 ha). Although locally generated water is available in the Tarka River downstream of Lake Arthur Dam for irrigation purposes, this water should due to the policy and management approach of DWAF be regarded as OFSS water which should be used to contribute to the reduction of the overall deficit and enormous dependence on transferred Orange River water. This water could therefore not be allocated to the three Appellants.
- 5.17. The Tribunal is therefore of the opinion that the reasons given by the Respondent for the decision give effect to the policy and management approach of DWAF dealing with the inter-basin transfer. The Tribunal is further of the opinion that the Chief Director: Water Use has not erred in the matter as submitted by the three Appellants, as she has taken into account the local conditions and opportunities as well as that surplus water is available in the form of locally generated yield (in spite thereof that she in her decision refers to the fact that this water is available only from time to time and the Appellants argues that an average flow of 10 million m<sup>3</sup>/a at 80% sustainability is available) before she decided that this water should not be allocated to the three Appellants.

6. **DECISION:**

- 6.1. In this result, the three appeals should fail and the decisions of the Respondent are confirmed.
- 6.2. The three files should therefore be closed.

  
H. Thompson