

# **WATER USE AUTHORISATION (STREAM FLOW REDUCTION ACTIVITIES)**

Extracted from DWAF (2007) Internal Guideline

## **1 BACKGROUND**

Afforestation has been regulated in South Africa since 1972. This was initially done by means of the Forest Act (No 72 of 1968). This act was amended by the Forest Amendment Act, no. 46 of 1972 to make provision for the control of afforestation by the inclusion of section 4A. This amendment came into effect on 26 May 1972. The 1968 Act was further amended and replaced a number of times. Since 1998, DWAF has issued water use licences for forestry as an SFRA in terms of the National Water Act (Act No. 36 of 1998) .

However, because SFRAs are land-based activities, the development, expansion and management of a SFRA also requires the authorisation of various other government authorities. Initially, these various authorisations were issued in isolation. This resulted in contradicting authorisations, as well as the exclusion of some authorities and ignorance of specific government mandates from the management of forestry plantations. It also caused unintentional "unlawful" development by land users and owners.

As a result of this, the processes of the principal government authorities were combined in 1995 by means of the establishment of the Afforestation Review Panels. These were provincial Panels established to co-operatively assess and authorise forestry development in the country. These panels were renamed to SFRA Licence Assessment Advisory Committees (LAACs) following the implementation of the National Water Act.

Before the implementation of the NWA in 1998, afforestation was regarded as lawful if it was:

- established before May 1972, or
- authorised by a permit from May 1972 until the change to NWA licences in 1998/1999,

provided that the plantation adhered to all applicable legislative requirements and permit conditions.

An example of such a legislative requirement is that of section 4 of the Forest Act (1968). This stated that no land which has been unafforested for a period of more than five years after the removal, harvesting or destruction of commercial timber crop, can be replanted without a permit. A permit specifies the hectares and tree genus that can be planted.

A water use that adheres to these requirements is regarded as an existing lawful water use in terms of the section 32 of the NWA provided that it existed between October 1996 and October 1998, and can continue without further declaration until it is licensed under the NWA. Section 33 allows a water user to apply to have a water use which is not one contemplated in section 32 declared to be an existing lawful water use.

## **2 LEGAL IMPERATIVES AND REQUIREMENTS**

### **2.1 The National Water Act (Act No 36 of 1998)**

*Chapter 4: Water Use* of the NWA provides the basis for the licensing procedure for all water uses, but since the development of forestry implies changes in the current land use, there

are a number of Acts and Regulations that must be complied with by the applicant and taken into consideration by the assessor.

Section 21(d), read with section 36 of the NWA regards commercial afforestation as a *water use* (SFRA), and it therefore needs to be authorised. According to the NWA, a person may only use water without a licence if the water use is permissible under Schedule 1, as a continuation of an existing lawful use, or in terms of a General Authorisation (GA) issued under section 39.

**NB:** Currently, no GA exists for SFRAs, and neither is any size of afforestation regarded as a schedule 1 activity. Therefore, all proposed afforestation should be licensed by DWAF.

Section 22(3) of the NWA makes provision that DWAF may dispense with the requirement for a licence for a water use if it is satisfied that the purpose of the Act will be met by the grant of a licence, permit or other authorisation under any other law.

Although commercial afforestation is currently the only declared SFRA, other activities may similarly be declared, in terms of section 36 of the NWA, by the Minister at a later date.

## **2.2 Section 21 (d) water uses: Stream flow reduction activities**

A SFRA is one of 11 water uses described in section 21 of the NWA. It is described as any activity (including the cultivation of any particular crop or other vegetation) likely to reduce the availability of water in a watercourse to the Reserve, to meet international obligations, or to other water users significantly. By implication, the definition of an SFRA limits it to land-based activities affecting the water resource. Currently, the only declared SFRA is commercial afforestation, but others may be added to this list in future.

Although the NWA talks specifically about commercial afforestation as a SFRA, invasive alien plant species which are not specifically used for commercial purposes also impact on the availability of water in the catchment.

Specifically, the cumulative impact of this “non-commercial” afforestation has a detrimental effect on the water resource and is therefore also managed in terms of the SFRA licensing process. In addition to licensing even small growers, and not allowing schedule 1 SFRA use, DWAF also attempts to control invasive alien plant species by means of the yield enhancement guidelines. The development and spread of jungle afforestation is therefore illegal, and has been since 1972. Specific control in terms of this is also exercised under the Conservation of Agricultural Resources Act, 1983 (Act No 43 of 1983). A licence is also needed to convert jungle afforestation into commercial forestry.

## **2.3 Other legislation**

### **2.3.1 Agricultural legislation**

The provincial and national Departments of Agriculture (DoA) are involved in SFRA applications, and administer the requirements of the Conservation of Agricultural Resources Act (CARA) (Act No 43 of 1983). The aim of CARA is to protect agricultural resources, i.e. soil, water, and vegetation.

In addition to the above, DoA is also responsible for regulating the use of agricultural land. This could include the transfer of agricultural land to forestry, the use of high potential agricultural soil for afforestation, and the transfer of water allocated to agriculture to afforestation.

### 2.3.2 Environmental legislation

The National Department of Environment Affairs and Tourism (DEAT) and Provincial Departments of Environment Affairs (PDEA) administer the National Environmental Management Act (NEMA) (Act No 107 of 1998). The aim of NEMA is to provide for co-operative environmental governance, by establishing:

- principles for decision-making on matters affecting the environment,
- institutions that will promote co-operative governance, and
- procedures for co-ordinating environmental functions exercised by organs of state, as well as to provide for matters connected therewith.

Listed activities in terms of section 24(5) of NEMA, read with section 44, were published on 21 April 2006. Government Notice (GN) No 386 lists activities for which a **basic assessment** is required and which must follow the procedure described in EIA regulations 22-26 (2006), promulgated in terms of section 24(5) of the Act.

GN No 387 lists activities for which a **comprehensive assessment** (i.e. scoping and an EIA) is required, and which must follow the procedure described in EIA regulations 27-36 (2006), promulgated in terms of section 24(5) of the Act. The processes required are scale-dependent, being either a basic assessment process, or a scoping/EIA assessment process.

### 2.3.3 Land Affairs legislation

In terms of the Interim Protection of Informal Land Rights Act (Act No 31 of 1996), land to which people have informal right is nominally held in trust by the Minister of Land Affairs. This includes communally owned land (see Section 1(1)(iii) of the Act), and implies that land development decisions on such land require the consent of the Minister of Land Affairs, as the nominal owner.

However, in terms of the Interim Procedures released by the Department of Land Affairs (DLA) in December 1997, decisions pertaining to ownership rights on communally owned land are most appropriately made by the majority of the community members. The Minister's role is simply to ratify such community resolutions. The Minister of Land Affairs and the relevant community are therefore regarded as co-owners of communal land.

This situation will change in the near future once the Communal Land Rights Act (CLARA) (Act No 11 of 2004) is implemented. In terms of CLARA, formal land ownership rights will be transferred from the Minister of Land Affairs to communities who currently have only informal rights to land. The legal framework within which land is held within communal areas where afforestation is being promoted is likely to change significantly once CLARA is implemented.

### 2.3.4 Forestry legislation

The purpose of the National Forests Act (NFA) (Act No 84 of 1998) is to promote the sustainable management and development of forests for the benefit of all. In terms of section 4, the NFA promotes the development of criteria to determine whether sustainable management occurs, indicators to measure the state of management, and appropriate standards in relation to the indicators. The NFA further aims to provide special measures for the protection of certain forests and trees, but it also promotes the sustainable use of forests for environmental, economic, educational, recreational, cultural, health and spiritual purposes.

More in line with the aim of the SFRA LAAC, the NFA promotes community forestry and also a greater participation in all aspects of forestry and the forest products industry by persons who have been disadvantaged by unfair discrimination.

The purpose of the National Veld and Forest Fire Act, Act No. 101 of 1998, is to prevent and combat veld, forest and mountain fires throughout South Africa. The Act applies to the open countryside beyond the urban limit and puts in place a range of requirements.

#### 2.3.5 Associated legislation

- Relevant national and provincial heritage legislation, e.g. National Heritage Resources Act (Act No 25 of 1999) and KwaZulu Natal Heritage Act (Act No 10 of 1997)
- Mpumalanga Nature Conservation Act (Act No 10 of 1998)
- Promotion of Administrative Justice Act (Act No 3 of 2000)
- Local Government Transition Act (Act No 61 of 1995)
- Development Facilitation Act (Act No 67 of 1995)

### 3.1 Small-scale grower applicants

In order to support poverty alleviation in South Africa, the government has, through the Forest Sector Transformation Charter undertaken to “streamline and expedite the afforestation licensing procedures to facilitate the establishment of a minimum of 100 000 ha net increase in planted area over ten years, based on a target average of 10 000 ha per annum...”. (DWAF. 2007. *Forest Sector Transformation Charter. Draft, June 2007*) This growth is expected to take place primarily among emerging small-scale growers.

The Charter further identifies measures aimed at expediting afforestation authorisation that are meant to directly benefit small-scale growers entering the forestry industry. These include:

- Creating an enabling regulatory environment that renders the costs of the water use authorisation application process affordable to small-scale growers
- Supporting and advising small-scale growers in the water use authorisation application process and in complying with environmental and other afforestation authorisation requirements.

Small-scale grower applicants are typically resource-poor, and may be applying to plant on either communal or freehold land. The majority of small-scale applications are from emerging growers.

During the application process, small-scale grower applicants may be assisted by those who promote forestry. These may either represent a commercial interest, such as one of the major forestry companies, or they may be officials of DWAF Regional Forest Advisory Services. In either case, their focus lies with encouraging and empowering the emerging grower to enter the forestry industry by helping them through the process of applying for an SFRA water use licence.

Such assistance would include:

- securing information on behalf of the applicant,
- the formation of legal entities where needed,
- verification of land ownership,
- assistance with the public consultation process,
- etc.

The Eastern Cape office of DWAF is developing a protocol that sets out acceptable processes and procedures that will facilitate the authorisation process where companies engage with communities in the implementation of afforestation on communally owned land within the province. This protocol is being developed together with industry and local government stakeholders, and considers social, developmental, and regulatory demands. It will have relevance to all company-community forestry developments in the country. The Eastern Cape protocol is expected to be completed during 2007.

Since the Department is committed to bringing development to the poor, licensing officials should therefore make every effort to make water available to these very small-scale users, through means such as:

- yield enhancement,
- a negotiated reduction in assurance of supply, or
- negotiations with existing users to make the required small volumes available from current allocations.

It should be recognised by all other licence holders that some water is likely to have to change hands under compulsory licensing, and that voluntary re-allocation now will serve to redress current imbalances in advance of compulsory licensing.

### **3.2 DWAF measures to expedite small-scale grower licensing**

DWAF has initiated several measures to expedite SFRA authorisation, including the following:

- In communal areas of KwaZulu-Natal, “small-scale grower maps” have been developed that identify land –
  - (a) where water resources are thought to be available,
  - (b) that is considered acceptable for forestry by agricultural officials, and
  - (c) with due consideration for biodiversity value.
- Small-scale grower applications that fall within these “pre-approved” areas are given priority and are assessed against less stringent measures. (This mapping exercise is currently being extended to the whole of KwaZulu-Natal and Eastern Cape, for afforestation applications of any size i.e. Forestry Grower Maps).
- In the Eastern Cape, a Strategic Environmental Assessment (SEA) was undertaken for Water Management Area 12. This study identified the likely extent of land that is potentially suitable and realistically available for afforestation, which is estimated to be in the order of 100 000 ha, (after making allowance for other uses and demands). This estimate needs to be refined in the light of the latest systematic biodiversity planning mapping exercise, and re-evaluated in the light of improved landcover maps which give a more realistic estimate of actual afforestation, but the total available area is not expected to change significantly, except perhaps in Umzimkulu. As with the KwaZulu-Natal small-scale grower maps, applications arising in areas which are suitable will be prioritised, whilst those in areas known to be less suitable will not be promoted, which reduces uncertainty, unreasonable expectations, and unnecessary cost.
- In an effort to support and advise small-scale growers in the licensing application process, the SD:SFR is developing a series of supplementary information brochures specifically aimed at emerging growers. The series will include a guide for the applicant on how to complete licence application forms; a general information booklet describing the licensing process and critical issues related thereto; and a guide to understanding and implementing licence conditions, e.g. what happens after the licence has been granted, etc. These booklets will complement the Generic external guideline and the external SFRA guideline.

- In order to reduce the time taken for approval, applications for areas of 10 ha or less (i.e. small-scale grower applications) that have been recommended by an SFRA LAAC can be approved by the relevant DWAF Regional Director, rather than the Chief Directorate: Water Use (CD:WU) at National Office. However, an application for an area larger than 10 ha must be approved by the National Office (CD:WU) through the licensing office (Sub-directorate: Authorisation Administration in Directorate: Water Allocation. This may add approximately four weeks (22 days) to the licensing process. The Regional Offices have requested an increase in the delegated power to approve forestry water use licences for larger areas.

Whilst every effort is made to promote small-scale forestry, protection of the water resource remains a priority. Licence conditions will still be imposed on small-scale growers in accordance with relevant statutes.

Permission is also required from the National DoA, should virgin land be broken, steep land be afforested or flood plains be affected by the proposed activity (according to regulations 2, 3, 7 or 8 of CARA). Permission is also required from the relevant Provincial Environmental Authority to undertake various changes in current land use. Applicants are also required to undertake a public participation process and a site inspection of the property is needed in most applications.

### **3.3 Water use pricing**

The cost of water may affect the profitability of the small-scale grower. In such cases, the water user may apply to the Department to have the charge waived.

Whilst all water users are required to pay for their consumption, payments for forestry water use are limited, given the primary nature of the use (i.e. using rainfall as distinct from stored or otherwise available water).

With the price currently pegged at about R10/ha/year (2007), a 2-3 ha small-scale grower plot would only be billed R20-R30 annually. This amount might not warrant the cost of billing.

## **4 STREAM FLOW REDUCTION ACTIVITY LICENCE ASSESSMENT ADVISORY COMMITTEES**

### **4.1 Structure and function**

The Stream Flow Reduction Activity Licence Assessment Advisory Committees (SFRA LAACs) are responsible for reviewing SFRA licence applications and recommending to the delegated DWAF officer (Chief Director: Water Use or Regional Director/ Regional Chief Director) whether to approve or refuse such applications. They bring together three authorising departments, as well as a broad range of local stakeholders in assessing SFRA licence applications within the DWAF Regions.

An SFRA LAAC is a co-operative governance structure. Co-operative governance includes public and private sectors and non-governmental organisations in the decision making process. Section 2 of the National Environmental Management Act (NEMA) (Act No 107 of 1998) sets principles regarding co-operative governance. The LAAC also supports co-operative government of SFRA in the relevant provinces. Although no formal definition for co-operative government exists, it is regarded as combined decision-making between all spheres and relevant sectors of government in order to ensure that the mandates of all relevant governing organisations are adequately addressed in the decision.

Each authority (member), other members and observers on an SFRA LAAC forms an integral part of the committee, and plays an essential role in ensuring economic, social and environmental sustainable development. The absence of any of them is detrimental to the SFRA licensing process and results in poor service delivery, which impacts on the economic viability of forestry, as well as the physical and social environment.

Timber plantations today are being established primarily by small-scale growers and others who have historically been excluded from development opportunities. This is due partly to the availability of undeveloped communal land, but crucially also to trends in the allocation of water resources in the quest for equity, one of the tenets of the NWA. It is thus the resource-poor timber farmers who are most likely to suffer adversely when an SFRA LAAC does not function properly. This impacts on *Batho Pele*, and government then fails in its mission to eradicate/alleviate poverty.

A SFRA LAAC functions properly only if all the members and observers participate and provide input on site visits, during meetings, in the handling/issuing of authorisations as well as providing assistance to emerging small-scale growers by obtaining/ providing the information needed for applications (i.e. reconnaissance soil surveys, heritage or environmental impact assessments) and capacitating them in the implementation of conditions of authorisations.

The membership, structure, and functioning of the SFRA LAAC is guided by the *TOR and Guidelines for SFRA LAACS* (Currently under review)

## **4.2 Membership**

The principal government organisations responsible for the regulation, control and management of SFRA activities are:

- Department of Water Affairs and Forestry (Water Resources Management Branch), or, once established, the CMA
- Provincial Departments of Environmental Affairs (PDEA)
- National and Provincial Agricultural Authorities (DoA and PDA)

### 4.2.1 Authorising departments

#### *DWAF (Water Resource Management)*

- Issues water use licences in respect of applications for afforestation
- Is the lead agent on the SFRA LAAC and in respect of SFRA licence applications
- Ensures that the available water resource is able to support SFRAs and that it does not negatively impact on water required for ecological and human use
- Ensures that the resource quality of the water resource is maintained at acceptable standards (by means of the implementation of the Reserve, issuing and monitoring of licences for water use, etc.)

The DWAF Regional Offices are currently responsible for the assessment of licence applications. In future, this role might be delegated to the Catchment Management Agency (CMA) responsible for a Water Management Area (WMA).

The DWAF National Office provides guidance in terms of policy and regulations pertaining to SFRA.

### *Catchment Management Agencies*

Currently, DWAF manages water resources in 19 different WMAs. CMAs will eventually be established to protect, use, develop, conserve, manage and control water resources in all WMAs, once the Minister transfers these functions to the CMAs.

### *Provincial Departments of Environment Affairs*

- Issue environmental authorisations/ exemptions
- Are permanent members on the SFRA LAAC
- Manage the environmental impacts of development such as forestry, including the protection of veld types and habitats, endangered animals and red data plants, as well as ensuring the sustainability of systems and processes affected by development.

### *National/Provincial Departments of Agriculture*

- Issue directives and consents in
- Are permanent members on the SFRA LAAC
- Have a responsibility in respect of the authorisation of cultivation of virgin land and the protection of agricultural resources, i.e. soil, water and vegetation, including the cultivation of land with a slope (i.e. erosion protection), the control of invasive alien plants and the demarcation of category 2 plants, as well as the protection of vleis, marshes, etc.

#### 4.2.2 Non-authorising government departments and non-governmental organisations

In addition to these authorising government organisations, the mandate of other non-authorising government organisations, for instance the Department of Land Affairs (DLA), can also be affected by SFRA development. The role of these non-authorising government organisations is equally important and they should also take part in the SFRA licence assessment process.

Similarly, semi-government organisations such as conservation agencies, non-government organisations (NGOs), and the commercial forestry industry also have vested interests in the process, and are therefore consulted as during the process.

### *DWAF Forestry*

- Is a permanent member on the SFRA LAAC
- Promotes and supports sustainable forestry development in South Africa, by offering assistance to small-scale grower applicants during the SFRA licence application process
- Implements compliance monitoring and enforcement with regard to protected trees and all indigenous or natural forests
- Gathers plantation statistics on a regular basis and reports annually on the State of the Forest
- Administers the NFA and the National Veld and Forest Fire Act (Act No 101 of 1998) by forming Fire Protection Associations and establishing safety standards.

### *DWAF Working for Water*

- May be observers on the LAAC
- Can form part of an SFRA LAAC and would advise on the nature of exotic species and extent of invasive alien plants in a catchment
- Can assist DWAF in the execution of directives not complied to by the water user.

### *Department of Land Affairs*

- Is a permanent member on the SFRA LAAC and advises on issues of land rights and ownership, and the implications of relevant land legislation
- Represents the Minister of Land Affairs on the SFRA LAACs as the co-owner of land held in trust (communal land)
- Has an administrative responsibility over land held in trust by the Minister of Land Affairs
- Is responsible for land reform and the promotion of security of tenure
- Has a role to play in development planning through promoting security of tenure, representing land rights holders and encouraging fair beneficiation.

### *District and Local Municipalities*

- Are permanent members on the SFRA LAAC and advise on applications within their jurisdiction
- Have a responsibility to co-ordinate and integrate development at local and district level
- Are responsible for the provision and maintenance of development infrastructure
- Are mandated with facilitating local economic development.

### *Provincial heritage conservation agencies*

- Are permanent members on the SFRA LAAC
- Comprise organisations such as Amafa aKwaZulu Natali; the National or Provincial Heritage Agency
- Identify heritage resources in areas proposed for SFRA development
- Ensure the protection of heritage resources such as places, buildings, graves, tools or other structures of historical and cultural significance.

### *Provincial authorities for conservation of biodiversity(Parks Board)*

- Are permanent members on the SFRA LAAC
- Comprise organisations such as Ezemvelo KZN Wildlife; CapeNature and Mpumalanga Tourism and Parks Agency
- Comment on all development and land-use changes that may adversely impact on the province's biodiversity, in terms of their mandate and provincial legislation
- Provide specialist biodiversity knowledge to applicants and various organs of state, in terms of their mandate and provincial legislation.

### *NGOs*

- Are observers/ members on the SFRA LAAC
- Comprise a wide variety of organisations concerned with water, biodiversity, forestry development, etc. (including Wildlife and Environmental Society of South Africa (WESSA), Southern African Water Crisis (SAWaC), Geosphere, Timberwatch)

- Highlight concerns regarding the impact of forestry development relative to the particular vision/mission of the organisation.

#### 4.2.3 Other role players

##### *Forestry industry*

- Are permanent members on the SFRA LAAC
- Represent the interests of the industry
- Advise on suitability of forestry in a particular area, for example making recommendations on species to be planted, economic benefits of forestry in a particular area, forestry management, etc.

##### *Local leadership*

- May be observers on the LAAC as appropriate per relevant application
- Can be either Traditional Leaders or SANCO Chairpersons, depending on the area
- Have a complementary role to play in community leadership at a local level
- Play a significant role in local afforestation development (and have to endorse SFRA licence applications).

##### *The SFRA licence applicant*

- May be observers on the LAAC when their application is tabled
- May be a small, medium or large scale grower
- In terms of legal status, the applicant can either be an Individual, or a Company/Business/Partnership (a community application currently falls under the latter status).

##### *Representative of the applicant*

- May be observers on the LAAC when their application is tabled
- Is employed by the applicant to conduct an appropriate environmental impact assessment on their behalf, as required by NEMA regulations
- Is employed by the applicant to conduct a reconnaissance soil survey and/ or hydrological or heritage assessment on their behalf, as required by the relevant regulations
- Can be either an Environmental Assessment Practitioner as defined in terms of the EIA regulations, or another professional service provider such as a hydrological or forestry consultant. Emerging applicants will seldom have resources to employ such services and are therefore assisted by either DWAF forestry officials or representatives from commercial forestry.

##### *Interested and affected parties*

- May be observers on the LAAC as appropriate per relevant application on which they have lodged their interest
- Are interested in, or may be affected by a proposed forestry development
- Have the right to be informed and be given opportunity to comment thereon, within the statutory requirements
- Would typically be neighbours to the property where the proposed SFRA is to take place, and any organ of state that has jurisdiction over any aspect of the forestry development.

## **5 TYPES OF SFRA WATER USE LICENCE APPLICATIONS**

### **5.1 Licensing of forestry already recognised as an existing lawful water use**

This would normally only take place under compulsory licensing, but advance licensing may be requested or required (as in the case of genus exchanges).

### **5.2 New afforestation**

Most applications received for SFRA fall within this category. These applications can vary in size but currently authorisation or exemption is required from the relevant Authorising Departments for any size application.

A woodlot is generally defined as afforestation that covers up to one percent (1%) of the surface area of a separately registered property to a maximum of 10 ha. A full authorisation application process is required for a woodlot.

An area exchange application refers to afforestation regarded as an existing lawful water use in terms of the NWA, cleared from a sensitive environment, e.g. wetland or riparian zone, and replanted on other (previously unauthorised) land. An area exchange application would require a full licensing process if the land to be afforested has not been planted in the last 9 years (in terms of NEMA) or the last 10 years (in terms of CARA). Area exchanges would mostly apply to plantations established before 1972 or to permitted plantations where the wetland/ riparian delineation as well as the required buffer zone was incorrectly implemented due to the lack of a standard delineation method. Area exchange applications can be denied due to various reasons.

In brief, water cannot be allocated to new afforestation (or to genera using additional water) unless:

- there is water available,
- other water users are not significantly affected,
- wetlands and riparian zones are protected,
- the demands of the Reserve are accommodated, and
- equity, sustainability and beneficial use is achieved.

### **5.3 Category 2 plant demarcation process**

Demarcation is a requirement under CARA, which applies to both new and existing afforestation. It can also be used when existing unauthorised afforestation (i.e. jungle) has been earmarked for clearance, (e.g. by Working for Water) but an applicant motivates for the area to be left uncleared due to its being used for purposes such as biological control habitat, woodlots, windbreaks, bee feeding habitat, etc.

The application may require the involvement of DEAT, or PDEA, but DoA and DWAF will always be involved as there are implications for water use as well as the spread of alien invasive plants.

### **5.4 Yield enhancement/conversion**

These applications refer to situations where invasive jungle (comprising species such as wattle, eucalyptus, pine and poplar) is cleared in order to enhance the available water on the property or in the catchment, thus making it available for other uses.

Two relevant yield enhancement guidelines have been developed to assist with these applications:

- *Yield enhancement: Allocating water released through the clearing of invasive alien plants, A framework for decision-making*
- *Allocating water use licences for stream flow reduction activities (forestry) on invaded land, based on the principle of yield enhancement, A supporting guideline for decision-makers.*

Under certain conditions the water made available through these clearing actions can be reallocated by DWAF to afforestation (often referred to as a conversion application), or it can be used in a section 21(a) “taking water from a water resource” application (or perhaps also a section 21(b) “storing water” application).

### **5.5 Genus exchange**

A genus exchange application is made in order to change the authorised genus of a plantation which was licensed or permitted or existed before 1972. Typically, this would be to change from pines to eucalypts, or *vice versa*. These applications can have implications for water use, the spreading of invasive alien plants, etc.

### **5.6 Windbreaks**

Windbreaks are regarded as a protective belt, comprising trees used to break the force of the wind. A standard windbreak:

- Is a maximum of four rows deep (width), usually to protect agricultural crops (but also buildings or animals)
- Has a minimum distance of 100 m between the windbreaks.

The length of the windbreak is specified based on the particular crop or purpose of the windbreak.

DWAF guidelines for windbreaks exist, and if these standards are adhered to, a water use licence should not be necessary. However, authorisations from other Departments may be required due to other implications of the activity, such as:

- planting of virgin land,
- spreading of invasive plants,
- planting distance to watercourses,
- loss of biodiversity, etc.

### **5.7 Water trading**

Section 25 of the NWA makes provision for the transfer between water uses and properties and although the act specifically refers to irrigation, this could also be applied to other uses. Here the water is made available, but the particular nature and impact of forestry water use on water availability and the environment in general must be taken into consideration. These applications are assessed and decided on, on a case by case basis and it is important from a DWAF perspective that the actual existing, lawful, allocated water can be taken up in the proposed transfer. DoA should provide specific comment on the transfer of water allocated to agriculture, to forestry.

## **5.8 Exchange from dryland sugarcane**

At present, dryland sugarcane is not a declared SFRA and therefore has no formal water allocation. Exchange applications from dryland sugarcane **cannot** be licensed on the basis of water use transfer (section 25) until such time as dryland sugarcane is declared an SFRA.

## **5.9 Existing but unlawful forestry**

Sections 53 to 55 of the NWA are strict in terms of unlawful development and state the actions that must be taken in such circumstances to address the contravention. When an application for a licence is received “after the fact”, such applications would normally be denied, particularly where there is no available water.

However, there may be special circumstances, and in such instances the application must be assessed as if the development has not yet taken place, meaning that authorities should not be influenced in their decision by the fact that the development already exists.

Therefore the usual precepts would apply, i.e. that development would not be allowed:

- in stressed catchments
- on virgin land that the DoA or PDEA do not wish to grant authorisation
- affecting critical ecosystems
- in erosion prone areas
- in wetlands
- in riparian areas
- on too steep slopes

Any other relevant matters brought to the table by a member/ observer of the LAAC or by an interested and affected party should also be considered in a similar light and a decision made based on the principles mentioned. Such applications will be dealt with on a case by case basis.

Section 24(g) of NEMA also allows for the evaluation of applications after a development has occurred unlawfully. Where SFRA matters are concerned such applications should be evaluated considering the comments/ recommendations made by the LAAC.

The implementation of a fine, in cases where the application is approved but also where the application is denied and rectification is required, should be considered.

Flag: Guidelines is needed to address unlawful SFRA water use.

## **5.10 Declaration of water use as existing lawful water use**

Section 33 of the NWA allows a water user to apply to a responsible authority (DWAF or CMA) to have a water use which is not one contemplated in section 32 declared to be an existing lawful water use. The requirements of section 41 applies to an application for such declaration.