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The Department of Water Affairs and Forestry

Decision Support System for the Policy on Development at State Dams

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The Directorates:

- Administration;
- Civil Design;
- Legal Services; and
- Water Quality Management;

The Regional Director: North West Province; and

Special Advisor: Strategic Support

1. INTRODUCTION

Uncontrolled development increasingly takes place at Government Dams, which affects the operation of the dams in respect of the yield, water quality and safety and places the Department at risk to claims for damages and loss of life. The primary reason for this is a lack of clear guidelines on application of existing policy. This document serves as a decision support system to resolve the aforementioned issues, in conjunction with all other commensurate policies, plans and programmes.

The urgent need is exacerbated by developments in progress and pending at amongst others Hartebeespoort, Bronkhorstspuit and Loskop Dams where developers are and will be constructing peninsulas and marinas within the basins.

Such development in dam basins may have considerable negative social impacts for communities at large and places an unnecessary and unfair burden on those who have to pay for the dams while the developers are set to obtain considerable financial gain.

The Department's executive arm thus needs clear guidelines for decision-making with regard to proposed developments of this nature to ensure sustainable use of reservoirs without excluding reasonable development opportunities.

2. DECISION SUPPORT SYSTEM

2.1 Policies

The policy as spelled out in the National Water Act, 1998 (Act. No. 36 of 1998), National Environmental Management Act, 1998 (Act No. 107 of 1998) - NEMA - and Constitution, 1996 (Act No. 36 of 1996) as well as the approved zoning principles shall apply notwithstanding all other relevant legislation and policies, to the basins of Government Dams.

2.2 Scope of application

The Decision Support System is to be applied when considering any development which implies a change in land use or form on land on which the State has rights, be they rights of ownership or servitude. The categories of land rights thus considered include: State owned land (in which the State holds full title); private land over which the State currently has a servitude of storage in the form of either undefined and clearly defined or any intermediate definition of constraints.

Former tribal trust land which is presently in dispute is not addressed at this stage but will be included in the Decision Support System by way of an amendment.

2.2.1 State owned land

Explanatory note: When a dam is to be built, the State acquires the minimum land for the storage of water including the area of land which is expected to be exposed to a specific flood risk. To minimise survey and subdivision costs to the State, small areas of additional land to the absolute minimum are sometimes acquired.

No significant development such as accommodation or ablution facilities may be constructed within the buffer zone line which shall be no less than the greater of 0,6m vertically above or 15m horizontally from the 1:100 year flood line. The buffer zone is provided to cover uncertainties in the flood hydrology, possible changes in the catchment, which could increase floods, and to provide unhindered access to the water surface in the case of emergencies that could cause loss of life.

Significant developments above the buffer line (but still within the purchase line) and minor developments such as picnic and boat launching facilities (below the buffer line) must have the prior written approval of the Regional Director after consultation with the Director: Civil Design on safety as well as consideration of appropriate financial compensation and term for such use in consultation with the Director: Social and Ecological Services.

2.2.2 Private land over which the State (Department) currently has a servitude of storage

Explanatory note: It is sometimes in the interest of both communities and the Department for the land to remain in private ownership and the Department to acquire a servitude of storage only. This frequently is the case for small works which thus allows for landowners to continue for example grazing activities within the servitude area. The landowner however remains responsible for control of noxious weeds, fire breaks etc. which would otherwise have been the responsibility of the Department.

It should be noted that for new works the Department's policy is to have a uniform approach to either ownership or servitudes within the basin. This was however not done historically and resulted in a "patchwork" approach to rights and subsequent haphazard approach to development.

The following classes of servitude are thus addressed in pursuit of equity:

2.2.2.1 Servitudes explicitly detailed with respect to constraints (typically as taken out in the recent past)

There shall be no deviations from the servitude constraints.

2.2.2.2 Property over which the servitude line is delineated, but constraints are not explicit

If the resource is in a stressed state, no deviation from the servitude may take place unless satisfactory mitigating arrangements are made. Such a decision is to be taken in consultation with the Director: Civil Design in respect of dam safety and/or yield and with the Director: Water Quality Management in respect of water quality. Note however that if the resource is in an unsustainable state, potential impacts must be fully mitigated.

If full mitigation is considered satisfactory, the conditions i) - iv) listed below, also apply:

- i) Authorisation as required by environmental legislation (Environmental Conservation Act, 1989 (Act No. 73 of 1989) or NEMA) must be submitted along with a licence application made in terms of the National Water Act, 1998 (Act. No. 36 of 1998).
- ii) No change in landform nor accommodation may take place beneath the defined line without compensation being paid to the State. The compensation payable shall be in respect of the area within the servitude, which is changed and based on current market value. The amount shall be ratified by the Board on Land Matters of the Department of Public Works and shall be paid as a lump sum to the State.
- iii) Any impact on the function of the reservoir such as net storage; flood attenuation; sediment deposition patterns; safety; water quality and limnology shall be mitigated at the developers expense and the net cumulative impact shall be within the sustainable limit of the resource.
- iv) An annual levy shall be paid for all these uses which shall include *inter alia* recreation; consumption; diversion of a watercourse; storage and waste discharge. The levies are to be used to fund the Department's control activities at its dams.

2.2.2.3 Property over which the servitude line is not delineated

- i) The Department shall assess and define the servitude line.
- ii) The land owner shall be offered the opportunity to sell the land below the line to the department at a nominal fee (e.g. R1). In exchange the department will waive its rights to the servitude of storage above the line.
- iii) Should item ii) not be accepted by the property owner the strategy outlined in 2.2.2.1 , 2.2.2.2 will apply.

3. EXECUTIVE RESPONSIBILITY

The relevant Regional Director shall be responsible to apply the Decision Support System in the implementation of policy and shall deal directly with the public. Where necessary head office directorates such as Social and Ecological Services, Water Quality Management, Civil Design, Geomatics, Legal Services and Hydrology shall provide support to the Regional Director.

The Chief Director: Regions shall have overall responsibility and shall have the delegated authority to enter into agreements. Any agreements on change in land use, which will have financial consequences for the State, will have to be approved by the Department's Management Committee.

4. COMMENCEMENT

The above Decision Support System will apply forthwith to all considerations in which a final written decision has not yet been taken.