### BITOU LOCAL MUNICIPALITY

# DROUGHT MANAGEMENT POLICY

In terms of section 39 of the Municipal By-law relating to Water Services, the Municipality may impose measures to limit, discontinue or restrict the use of water for water conservation purposes, drought and other reasons. Now therefore the Municipal Council adopts this Drought Management Policy.

# 1. BACKGROUND

The vision of all water conservation and demand management endeavours should be the efficient and effective use of water by all and the minimisation of loss or wastage of water. Conservation is the efficient use and saving of water achieved through measures such as water saving devices, water-efficient processes, water demand management and water rationing.

Water demand management is a strategy to influence the water demand and usage of water in order to meet objectives like economic efficiency, environmental protection, sustainability of water supply and services and should be an integral part of the planning processes for management, water supply and the provisions of water services

The responsibility of the Municipality is to ensure the availability of water and it must do everything in its power to ensure a constant supply of water for use in the area under its jurisdiction and to create a water conservation and demand management culture between the service provider and users.

Therefore, this Policy determines a set of rules for the effective and efficient measures for water conservation and demand management.

# 2. SITUATIONAL EVALUATION

- (a) The Head of Department: Municipal Services and infrastructure Development in consultation with the Municipal Manager must establish a mechanism to monitor and continuously report on the status of the water demand.
- (b) The Head of Department: Municipal Services and infrastructure Development must ensure that there is an efficient information system to-
  - (i) record and provide data for water management;
  - (ii) the quality and quantity of water in the various water resources;
  - (iii) the use of water resources;

- (iv) register of water user authorisations;
- (v) waterworks which might fail or has failed;
- (vi) record information about a drought which has occurred or which seems imminent;
- (vii) identification and monitoring of and usage by bulk water and high water consumers;
- (viii) record and provide data for the development, enhancing or monitoring of this Policy; and
- (ix) any matter connected with water, water infrastructure, water resources and demand management that may serve as an early warning system to real or potential hazards effecting service delivery, water conservation and demand management.

# 3. WATER MANAGEMENT/AUDIT

For effective water demand management, the Municipality may require that

- (a) Major/Bulk water users (those using more than 2 400 kl/annum (Calculated at 200kl/month), including those comprising multiple dwelling units, to undertake a monthly and annual water audit. The final annual audit must be carried out no later than two weeks after the end of each financial year of the Municipality. The audit report must be forwarded/submitted to the Head of Department: Municipal Services and Infrastructure Development.
- (b) The audit must detail the following
  - (i) amount of water used during a financial year
  - (ii) amount paid for water for the financial year;
  - (iii) comparison of the above factors with those reported in each of the previous two years (where available);
  - (iv) estimate of consumption by various components in use at the various seasons (in season, peak season, peak week)
  - (v) differentiation between the different types of users (domestic, business, industry, farming) and their consumption
  - (vi) Annual consumption by the fire department
  - (vii) Number of occupants/people living on the premises including the workers (permanent staff)

## 4. WATER RESTRICTIONS AND CONSERVATION

- (1) The Municipality may in terms of section 39 of the By-law relating to Water Services, prohibit, restrict or limit the provisions of water supply services or consumption of water.
- (2) The following water restrictions, or additional or other measures, shall be applied, having regard to the state of the Keurbooms River and the Roodefontein Dam, which are the main water suppliers for the Bitou Municipality.
- (3) Where own water other than Municipal water, from a borehole or reservoir or grey water is used, the appropriate notice must be displayed on the premises, e.g. "OWN WATER/BOREHOLE WATER".

# (4) Stages of the drought:

# 1.1 Roodefontein Dam volume less than 60% and Keurbooms River at 600l/s

- 1.1.1 Watering of gardens may only be undertaken for two hour per day between 18:00–20:00, two days per week.
- 1.1.2 A fine in terms of Section 75A of the Systems Act, being a 50% penalty on tariffs for monthly consumption in excess of 20 kiloliter per month per household connection, excluding indigent households.
- 1.1.3 At sports fields only the watering of cricket pitches, golf course greens and bowling greens is permitted for two hours per day, twice per week, unless own source of water is used.
- 1.1.4 No hosing of roofs and driveways and no washing of vehicles with a garden hose will be permitted.
- 1.1.5 That the restriction referred to in 1.1.4 above not be applicable to any *bona fide* and full-time commercial enterprises whose business it is to wash cars.
- 1.1.4 An effective awareness and education campaign processes must be conducted. The public awareness campaign must be intensified. A specific service provider with the relevant experience, must be identified to fulfill this function. Where capacity does not exist within the

- Municipality an outside entity must be temporarily appointed
- 1.1.5 That water restrictions become effective immediately after being advertised in the media, and in public places.
- 1.1.6 Consumers must be closely monitored and those that do not heed the restrictions identified. A specific person, with the relevant experience, must be identified to fulfill this function. Where capacity does not exist within the Municipality an outside entity must be temporarily appointed
- 1.1.7 Maintenance teams must be made available to address leakages on erven in indigent households.
- 1.1.8 A service must be made available call centre number where contraventions can be reported and followed up immediately by the relevant department and/or Law Enforcement
- 1.1.9 Any person who contravenes these restrictions is guilty of an offence and is, upon conviction, liable to a fine as published in the annual tariffs list

## 1.2 Dam volume less than 40% and river flow below 400l/s:

- 1.2.1 No watering of gardens using Municipal water.
- 1.2.2 A fine, being a 100% penalty on tariffs for monthly consumption in excess of 20 kiloliter per month per household connection.
- 1.2.3 No hosing of structures, roofs and driveways and no filling of swimming pools.
- 1.2.4 Stricter policing and implementation of a complaint line and whistle blowers facility.
- 1.2.5 Consultation with bulk consumers in the industrial and business sectors as identified through the billing system
- 1.2.6 Installation of flow restrictors to non compliant consumers to water restrictions

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## 1.3 Dam volume less than 25% and river flow below 300l/s:

- 1.3.1 As mentioned in paragraph 1.2 above.
- 1.3.2 A fine, being a 200% penalty on consumption greater than 20 kiloliter per month per household connection.
- 1.3.3 Consumers to monitor their consumption to be 15 month, which amounts to the UN standard of 65l/s/person/day.
- 1.3.4 Installation of flow restrictors to non compliant consumers to water restrictions
- 1.3.5 Media to be utilized extensively for public awareness
- 1.3.6 Other users, industries, businesses and the entertainment industries to reduce consumption by 40% of the average use over the previous 6 months
- 1.3.7 The MDMC, the Provincial and the National Disaster Management Centers are to be alerted when the levels reach 25% (Roodefontein Dam) and below 300 l/s (Keurbooms River), and to prepare for possible intervention if an augmentation scheme is not at implementation readiness.
- 1.3.8 Eden MDMC to be requested to act as the primary responsible authority responsible for the co-ordination and management of the local disaster, refer A:54(1) (b) of the Disaster Management Act, 2002, (Act 57 of 2002)
- 1.3.9 A formal joint operations committee (JOC), to be established at the Eden MDMC, weekly meetings with all the relevant stakeholders to coordinate emergency intervention actions needed
- 1.3.10 Eden MDMC to alert the National Defense Force as well as the South African Police Force
- 1.3.4 That additional control measures be implemented as soon as the volume of the Keurbooms River decreases below 300l/s and that the Municipal Manager be authorized to execute any further measures in consultation with the Executive Mayor.

(5) The requirements of section 21A of the Municipal Systems Act, Act 32 of 2000, must be followed.

## 5. WATER DEMAND MANAGEMENT

- (1) The Municipality may in general or in emergencies by public notice, require any owner or consumer to comply with good water conservation and demand management practices as set out hereunder:
  - (a) No person may without prior written authority from the Head of Department: Municipal Services and Infrastructure Development water a garden, park, golf course or other grassed area using potable water, between the hours of 06:00 and 16:00.
  - (b) Where a hosepipe is used to irrigate a garden, park, or sports field from a potable water source a controlling device such as a sprayer shall be attached to the hose end, depending on the dam levels and river flows.
  - (c) A hosepipe used for washing vehicles, boats, and caravans must be fitted with an automatic self-closing device, depending on the dam levels and river flows.
  - (d) Automatic top up systems using a float valve fed from a potable water source to supply swimming pools and garden ponds are not allowed.
  - (e) Commercial car wash industries must recycle a minimum of 50% of the water used in operations.
  - (f) Wash-hand basins provided in public facilities must be fitted with demand type taps.
  - (g) Showers provided at public facilities must be fitted with demand type valves.
  - (h) Potable water may not be used to dampen building sand and other building material to prevent it from being blown away.
  - (i) Stand pipe draw-off taps must be at a height of at least 450mm, measured above ground level.
  - (j) Water closet cisterns may not exceed 9,5 liters in capacity and such cistern must be of dual flushing mechanisms.

- (k) No automatic cistern or tipping tank may be used for flushing a urinal.
- (l) Within two years after the promulgation of this Policy all automatic flushing cisterns fitted to urinals, must be replaced with either manually operated systems or non-manual apparatus which causes the flushing device to operate after each use of such urinal.
- (m) Terminal water fittings installed outside any buildings other than a residential dwelling must-
  - (i) incorporate a self-closing device;
  - (ii) have a removable handle for operating purposes;
  - (iii) be capable of being locked to prevent unauthorized use; or
  - (iv) be of a demand type that limits the quantity of water discharged in each operation;
- (n) Each new dwelling must be fitted with a 500l tank to collect rain water
- (o) turn around time for repairing water leaks must be reduced to 2hrs
- (2) Additional measures or practices, as deemed necessary may be implemented.
- (3) Infrastructure Maintenance Installation of isolation valves in the network, rezone the areas for maintenance purposes.

### 6. PLANNING

- (1) The Head of Department: Municipal Services and Infrastructure Development is responsible for the administration of the Water Services By-law and this Policy and must set up a multipurpose task team of Heads of Departments (or their duly authorised delegates) to develop programmes and establish frameworks:
  - (a) An internal Drought Management Task Team must be initiated, under the chairmanship of the Dept: Municipal Services and Infrastructure Development, to include the CFO and the Municipal Manager and the meetings must be minuted.

- (b) Council is to convene to take cognizance of the situation and discuss the appropriate actions
- (c) Bitou Disaster Management must inform Eden Disaster Management of the situation and monthly meetings must be held to co-ordinate and exchange information
- (d) When levels are at 40% (Roodefontein Dam) and 400l/s (Keurbooms River) and below, the options available to augment the raw water supplies must be carefully considered and the necessary planning must commence immediately to implement these as an emergency measure if required. The financial implications must be assessed and cost estimations compiled
- (e) Emergency procedures must be followed, where legislation permits it e.g. with the procurement of goods and services, appointment of personnel/service providers
- (f) for the identification, development and management of effective and efficient water conservation measures;
- (g) and set broad principles and appropriate criteria and mechanisms for the implementation and enforcement thereof;
- (h) the required organisational capacity and working relationships between the different role players and the financial implication and budget allocations;
- (i) to educate and raise awareness within the Municipality and the community, establish successful communication and co-operation between consumers, the Municipality and other spheres of government by implementing an effective communication programme as an ongoing activity;
- (j) for proper risk management and effective measures to minimise and identify fraudulent activities relating to the scope of this Policy and the instituting of administrative sanctions and disciplinary measures against transgressors and legal proceedings;
- (k) for recovering of money owed and the cost involved in the execution of the programmes;
- (l) for short, medium and long term solutions-
  - (i) designed to achieve sustainable reductions in water use;

- (ii) changes to the use of water with the purpose of gaining greater water use efficiency;
- (iii) the integration of the approved strategies into other water resources management functions;
- (iv) new and better management approaches, inter alia, for-
  - minimising the waste of and increasing the efficiency of water use by adopting water saving technologies by the Municipality and consumers;
  - removal of alien vegetation that negatively impact on catchment areas and rivers;
  - leak detection programmes;
  - any other measures to achieve the desired outcome.
- (v) for specific or in general water uses, conditions must be attached to the general authorisations and licences issued by
  - specifying management practices and general requirements for the different water uses and conservation measures;
  - by requiring, when applicable, the monitoring and analysis of and reporting and imposing a duty to measure and record aspects of the water uses;
  - specifying measuring and recording devices to be used:
  - requiring the preparation and approval of and adherence to water management plans.

### 7, GENERAL

The provisions of the By-law relating to Water Services are applicable and apply to this Policy.