



DETERMINATION OF CRITERIA FOR DISTRIBUTION OF SURFACE WATER ENTITLEMENTS FOR DOMESTIC & INDUSTRIAL USES

REPORT OF CONSULTATION

Maharashtra Water Resources Regulatory Authority

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Determination of Criteria for Distribution of Surface Water Entitlements for Domestic & Industrial Uses

Report of Consultation

Date : September 22, 2017

1. Background

Section 11(a) of the MWRRA Act, 2011 requires the Authority to determine the Criteria for distribution of entitlements by the River Basin Agencies within each category of use. Accordingly, the “Criteria for Distribution of Entitlements by River Basin Agencies for Domestic & Industrial Uses (criteria)” was evolved in November 2012 (**Annex I**).

As per Para 7 of this criteria, the said criteria is valid for a minimum period of three years at the end of which Authority may undertake the revision. The WRD GR dated 17/11/2016 has decided the Sectoral Allocation of water under section 16(A) of MWRRA Act, 2011. As per the said GR, water allocated to domestic, industry & irrigation sectors is 15%, 10% & 75% at the project level respectively. On this background, the process of revision of earlier criteria (November 2012) has been undertaken by the Authority. In the process of revision, Authority consulted stakeholders, experts in the water sector and representatives of the line departments of the State Government (stakeholders). This report briefly summarises the consultation process and its outcome.

2. Overall Objective of the Stakeholder Consultation:

The overall objectives of the stakeholder consultation were:

- to identify the expectations and concerns of the community
- to tap the expertise of experts working in water sector
- to capture the views of those involved in the implementation process
- to ensure that the criteria that would be evolved shall be transparent, well-targeted & coherent with the other policies of the State Government.

3. Outline of Consultation Process :

MWRRA has adopted a participatory approach to tap the collective wisdom of various stakeholders. The consultations were conducted in two stages. In the first, the Criteria evolved in November 2012, (**Annex I**) was circulated

vide Authority's letter dated July 6, 2017 amongst already mapped stakeholders, requesting them to offer suggestions regarding modifications necessitated in the criteria. Earlier, Criteria was revised on the basis of responses received from stakeholders in the first stage of consultation. In the second stage of consultation, the so revised Criteria (**Annex III**) was again circulated amongst the stakeholders vide Authority's letter dated August 11, 2017. Thereafter, stakeholders consultation meeting was conducted on August 23-24, 2017 in the office of the Authority.

4. Response of the Stakeholders:

The Authority received very good response from the stakeholders. Experts in the water sector, non-governmental organizations, water user associations, representatives of the line departments of the State Government and implementing agencies participated in the consultation process. Some of the stakeholders contributed through written communication whereas others did the same by attending the targeted consultation sessions. The consultations were successful in drawing the active discussions, feedbacks and generating insights from stakeholders. The list of stakeholders who offered their views in the first stage of consultations is enclosed as **Annex II**. The list of stakeholders who offered comments in writing in second stage of consultation is enclosed as **Annex IV** & list of participants who participated personally in the consultation meeting is enclosed as **Annex V**.

5. Inputs Received in First Stage of Consultations:

The list of the stakeholders who contributed in the first stage of consultation is enclosed as **Annex II**. The gist of the inputs received is as below.

- 5.1. Rural water supply norms need upward revision necessitated by launch of 'Swachha Bharat Abhiyan'.
- 5.2. Treatment of 100 % domestic sewage should be made mandatory. Lighter view in this regard may prove to be hazardous to the health of the people. MWRRA should monitor this activity.
- 5.3. MWRRA should monitor diversion of agricultural water to non - irrigation uses.
- 5.4. Industrial water requirement should be based on best alternatives available elsewhere in the world by which water is saved or recycled.
- 5.5. Telescopic tariff should be made applicable to improve water use efficiency.

5.6. Entitlements should be strictly monitored. Water use should be restricted to the entitlements. Recovering penal charges should not be the goal.

5.7. The terminology used such as 'Sectoral Allocation, Entitlement and Allocation' need to be reviewed considering the meaning in the Act.

5.8. Industries should have ultimate target of zero discharge.

6. Stakeholder Consultations Meeting :

Consultation Meeting was convened on August 23-24, 2017 in the office of the Authority. List of stakeholders who attended the meeting is annexed as **Annex V**. Following 12 key issues were flagged to steer the discussions during the meeting. The gist of issue-specific inputs received through written communications and during the deliberations in the meeting is summarized as below.

6.1. Norms for Domestic Use :-

Inputs Received:

- a) Non-irrigation entitlement data should be made public.
- b) Criteria for categorizing sub-basins for purpose of non-irrigation use of water should be per capita availability rather than water availability per ha of CCA.
- c) Groundwater availability should also be considered for categorizing the sub-basins.
- d) CCA is a more appropriate parameter for categorizing of sub-basins as it is fixed whereas population is variable.
- e) Instead of water availability, 'the Annual Precipitation' should be the criteria for categorization of sub-basins.
- f) Gap between rural and urban domestic consumption norms is very wide. It should be narrowed down.
- g) Considering the requirements of public places like schools, collages etc. in urban areas, more water demand is inevitable. However, consumption beyond standard norms needs to be considered as commercial consumption & needs to be charged at higher tariff.
- h) Mumbai city has its own substantial water resources. The demand of other metropolitan cities may not be fulfilled due to supply side constraints. Hence, norm for Mumbai should be kept on a different

footing. Higher norms may be considered for metropolitan centers having population equal or more than 50 lakh.

- i) All the participants except representatives of Maharashtra Jeevan Pradhikaran agreed upon the proposed per capita consumption in Table No.1 of draft criteria.
- j) Drinking water norms should be on the basis of GoI Guidelines issued in year 2015 ranging as,
 - a. Standard 1 - Metered supply to all household - 70 lpcd
 - b. Standard 2 - Mixture of household connections, public taps & hand pumps - 55 lpcd
 - c. Standard 3 - Hand pumps, protected open wells & protected ponds - 40 lpcd
- k) Revision of norms in consonance with the recommendations of Kelkar Committee would have very serious effect on irrigation at this juncture.
- l) Urban area norm should be decided considering both availability & requirement of water.
- m) WRD should give due importance to domestic & industrial use also.
- n) Contribution of groundwater also to be considered while arriving at water demand for domestic & industrial uses. Proper records of wells & extractions from wells should be maintained by MIDCs & ULBs to bring out annual Environmental Status Report (ESR) every year by 1st July. In this regard, MWRRRA should coordinate with GSDA.

6.2 Issue No.2: Provision for Unaccounted for Water (UFW): -

Inputs Received:

- a) All the members present for the meeting concurred on permissible distribution losses of 10% to be counted over & above the standard norms while giving Entitlement.
- b) Average current level of NRW is 35% to 40 %.
- c) Norms of Ministry of Urban Development, GoI is 20 % which should be adopted.

6.3 Issue No.3: Recycling of used water (Sewage / Effluent):-

Inputs Received:

- a) Recycling of water up to 20% may be considered mandatory while issuing the surface water entitlements.

- b) As per revised MoEF notification, period to develop necessary infrastructure for “Treatment” by existing agencies is 3 years and by new agencies is 5 years.
- c) MoEF has already taken steps to reduce norms to achieve “zero discharge”.
- d) In Maharashtra all sugar factories generate effluent at the average rate of not more than 100 ltr/ton.
- e) Allowing industries to use groundwater flatly is not advisable as MIDC is not in a position to monitor the extraction of groundwater. It may be allowed for domestic use.
- f) In case industrial requirement is more than 100 cum, CGWB permission is required.
- g) MPCB is monitoring 24 CETPs on weekly basis and results are posted on MPCB’s website.
- h) Industry shall be made to follow the rule of zero discharge.
- i) Recycling of used water should be made mandatory. Industries should be allowed to top up with freshwater up to 15% to 20%. They may not be given full quantity as worked out based on specific water consumption values. Penal rates for not recycling and using excess water should be minimum twice. This will also help to protect the surface & groundwater resources.
- j) Domestic as well as industrial treated waste water should not be allowed to discharge into river or natural nalla for its further use to agriculture etc.
- k) The treated waste water should be utilised for non-agricultural and agricultural (only for crops like sugarcane, cotton, jute, floriculture, forest trees) uses.
- l) ULBs should be allowed to sell treated effluent to meet their expenses for effluent treatment.
- m) For new industries, no freshwater shall be provided by WRD & they must make use of treated urban effluent.
- n) If treated effluent could not be used for industries, it must be pumped back into the canals of same project to partly restore the curtailed irrigation area & WRD should compensate the ULBs by paying at WRD rates for freshwater. WRD should exercise the strict control on the quality of treated effluent prior to release in the canals. If ULBs

release the treated effluent back into river, no payment shall be made to ULBs. The quality control of treated effluent should be monitored by MPCB.

6.4 Issue No. 4: Water Audit :-

Inputs Received

- a) Water audit is a welcome initiative but reports of the water audit shall be made public.
- b) The procedure of water audit be formulated in consultation with the stakeholders in due course.
- c) Water audit should be made mandatory on the part of a Water User Entity.
- d) Grampanchayats may be excluded from carrying out water audit.

6.5 Issue No. 5 : Criteria for industrial use :-

Inputs Received :

- a) References for industrial norms should be indicated.
- b) Proposed norms for sugar factories need to be reviewed considering the fact that while crushing, 12% to 14 % recovery is achieved and balance quantity of water is available for recycling and reuse.
- c) Norms for water for production of sugar and for domestic supply to nearby areas should be separate.
- d) The water requirements of tanneries, dairy development (processing & cattle) need to be cross-verified with MoEF norms.

6.6 Issue No.6: Water use beyond entitlement :-

Inputs Received:

- a) There was a general consensus regarding provision of making DBWU mandatory to compensate for water use over and above sectoral allocation by making available equal quantity of treated sewage for agricultural use. Only issue raised by representative DBWU that location where water is to be made available can be a point of dispute, as it adds to the cost of treatment substantially if RBA decides the location far away from the treatment plant.
- b) The penal rates for use of water beyond entitlement should be of the order of twice in order to ensure discipline among users.

6.7 Issue No. 7: - Measuring devices :-

Inputs Received

- a) The installation of measuring devices should be mandatory before commencement of actual water supply and not at the time of sanctioning the entitlements.
- b) Experience of MIDC in, metered supply of water to industries be used in domestic supply also.
- c) Concept of making mandatory the use of SCADA based ultrasonic measuring devices is a welcome move and it should be made mandatory.
- d) Grampanchayat water supply schemes may be excluded from SCADA based ultrasonic meters.

6.8 Issue No.8: Water Audit by Chief Auditor, WRD, Govt. of Maharashtra

Inputs Received:-

- a) There was a general consensus in getting the water audit done through the Chief Auditor, Water & Irrigation, Aurangabad.
- b) There is a provision in Maharashtra Water Supply & Sewerage Act 1976 which empowers the MJP to inspect all water supply and sewerage facilities in the State. Thus getting done water audit through MJP is another alternative. However, arrangements for funds need to be made for this.

6.9 Issue No. 9: All Water Use in Industrial premises to be charged at

Industrial Rate :-

Inputs Received

- a) Water distributed by MIDC for domestic use from reservoir owned by MIDC is to the tune of 80% and it is billed at industrial rate.
- b) Such provision should have prospective effect.
- c) Industries should not be burdened anymore; already they are contributing substantially in total water revenue.

6.10 Issue No. 10: Sale of treated effluent:-

Inputs Received

- a) Cities like Kolhapur, Pune, Pimpri-Chinchwad daily generate around 1100 mld sewage which is released after treatment into the natural water courses and used for irrigation downstream.
- b) WRD should give permission of sale of treated water for industrial use if agricultural area is not available in the vicinity.

- c) Ownership of treated water needs to be clearly defined.
- d) Treated effluent from urban & industrial area should remain the property of users. They may be allowed to earn revenue by selling it freely to make their treatment activity sustainable. The WRD should not have any right on the treated effluent. Once it is sold to users at an appropriate rate, it becomes the latter's property.

6.11 Issue No.11: Sharing Water Deficit by Domestic Sector :-

Input Received:

The formula proposed for sharing water deficit is logical.

6.12 Issue No.12: Sharing Water Deficit by Industrial Sector :-

Inputs Received:

- a) If live storage on 15th October is 50%, cut of 50% cannot be applied to industrial sector for reason that the industries will not run resulting into layoff, loss of productivity, reduction in GDP & loss of employment. This prompts to lay down a threshold limit for cut to be applied to industrial sector.
- b) Industries are contributing major share in water cess and a cut in industrial water shall result in less revenue which will affect canal maintenance and indirectly the farmers.
- c) Instead of applying variable cut during a deficit year to industries, discretionary powers to concerned CE, WRD / Commissioner of Industries be conferred.
- d) The consumption of industrial sector is meager. If it is further curtailed, industries will be required to shut down leading to widespread unemployment.
- e) If agriculture sector is deprived of its share of water, there will be migration. This issue should also be considered.

7. Outcome of the Consultation :

The final outcome of the consultation exercise is summarized in what follows;

- 7.1. Non-irrigation entitlement data should be made public.
- 7.2. Norm for rural water supply needs upward revision.
- 7.3. Domestic water supply should be restricted within norms rather than charging the excess use at higher rate.
- 7.4. Telescopic tariff is necessary to increase water use efficiency.

- 7.5. MWRRRA should monitor diversion of water of agricultural sector to other sectors.
- 7.6. Hundred percent treatment of domestic sewage and industrial effluent to CPCB/MPCB standards is essential. Lighter view in this regard may prove to be hazardous to public health.
- 7.7. Ownership of the treated water should be with water user entity. It should be allowed to sell the treated sewage and earn revenue to make operation & maintenance of the STP self-sustainable.
- 7.8. SCADA based ultrasonic metering should be mandatory on supply side.
- 7.9. Water audit should be made mandatory on the part of bulk users. Water audit report should be made public.
- 7.10. Industries should strive for zero discharge norms.
- 7.11. Side effects of applying water cut to industrial sector, during deficit years, like shutting down of industries, layoffs, unemployment, reduction in GDP, reduction in water cess and its consequent impact on maintenance of canal system, be given a serious thought.
- 7.12. ULBs should make capital investment in constructing separate storages rather than diverting agricultural water for domestic uses.

8. Acknowledgement:

MWRRRA would like to acknowledge the contribution made by the NGOs, water experts and the implementing agencies who took time to contribute through the consultation process. These inputs proved to be extremely useful in finalizing the Criteria for Distribution of Non-irrigation Entitlements. MWRRRA looks forward to further productive relationship with the stakeholders in policy formulation so as to make the water sector more responsive to the needs of the community.



Dr. Suresh Kulkarni)
Secretary, MWRRRA.

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Annexure I

Criteria for Distribution of Entitlements by River Basin Agencies for Domestic & Industrial Uses (November 2012)

1.0. PREFACE

- 1.1. The Maharashtra Water Resources Regulatory Authority (MWRRA) was established under an Act of the Government of Maharashtra on 8th June 2005. Its stated objective is to regulate water resources within the State, facilitate and ensure judicious, equitable and sustainable management, allocation and utilization of water resources and to fix the rates for use of water for agriculture, industrial, drinking and other purposes. The powers, duties and functions of the Authority are further clarified in the MWRRA (Amendment and Continuance) Act (Mah Act No. XXI of 2011) issued on 22nd April 2011.
- 1.2. An Approach Paper for the Criteria for Distribution of Entitlements by River Basin Agencies for Domestic & Industrial Uses had been prepared by the Authority and sent for comments to the stakeholders and NGOs active in the water sector vide letter dated June 7, 2011. The same was also made available on the web site of the Authority. Comments on the Approach Paper were received from various parties in due course were subject to scrutiny. After due scrutiny of the comments received, the Authority has finalised the Criteria and the same are laid down in the following paragraphs. A background note giving the raison d'être for the Criteria is enclosed in abridged form as Annexure.

2.0. APPLICABILITY OF THE CRITERIA

This Criteria is applicable to domestic and industrial (non-irrigation) categories of use in all water resources projects and will be followed by WRD & RBAs in issuance of Entitlement to non-irrigation Water Use Entities in a project after sectoral allocation is decided by the State government. However, for projects included under the irrigation Entitlement programme of the Authority and where all relevant provisions of the MMISF Act 2005, including delineation, have been complied for changes in sectoral allocation, the State government will have to approach the Authority for a review of Entitlements under Section 11 (j) of the MWRRA Act. Further, if an existing Water User Entity (WUE) seeks a change in the volume of its Entitlement, the State government will have to approach the Authority for taking action under

Section 11 (h) (ii) of the Act. The Authority shall develop separate Criteria for operationalising Sections 11 (j) and 11 (h) (ii) of the Act.

3.0. **PROPOSED ALLOCATION PRINCIPLES**

3.1. **Definition**

'Domestic user' means any public body or organisation (Gram Panchayat, Urban Local Body, Municipal Corporation, Maharashtra Jeevan Pradhikaran, Maharashtra Industrial Development Corporation) to whom bulk water is made available by the Water Resources Department/Irrigation Development Corporation for distribution to domestic and other users, with or without treatment.

'Industrial User' means any industry (including industrial development corporations) to whom bulk water is made available by the Water Resources Department/Irrigation Development Corporation for use as raw material or in process.

3.2. **Allocation Principles**

While non-irrigation uses are about 20% of the total water use in the State, the demand is likely to increase in the coming years putting pressure on freshwater sources and leading to curtailment in irrigation as non-irrigation users viz. drinking water have a higher priority in the water policy as compared to irrigation. Water use efficiency has to be thus the lynch pin for an allocation policy with the objective of meeting increasing demands from non-irrigation users by recycling and reuse or from other sources like groundwater. Since municipal and industrial effluents are not being treated to the required standards or are not treated at all before being let into the rivers, the allocation policy has also to serve as a vehicle for water quality improvement. These twin objectives have to be kept in view while framing the Criteria.

3.3. **Transparency in Intimation of Availability of Allocation**

Once sectoral allocation is decided by the State government at AA/RAA stage, RBAs will inform domestic and industrial WUEs through press and its web site details about the project and availability of quantum of sectoral allocation in the project to each non-irrigation category of user. RBAs will invite applications from WUEs for allocation after deducting the provision made for non-irrigation uses at Administrative Approval stage.

4.0. CRITERIA FOR DOMESTIC USE

4.1. The applicable per capita norm for sanction of permission to domestic bulk users will be as under

<u>Category</u>	<u>Litres per capita per day (Lpcd)</u>	
Rural water supply (Gram Panchayat)	40	
Municipal Councils		
C-class (less than 20,000 population)	70	}
B-class (20,000 – 60,000 population)	100	
A-class (60,000-100,000 population)	125	
Corporations (more than 1 lakh population)	135/150	Includes sanitation requirement

4.2. The inter-se priority for allocation among various domestic demands will be determined by RBAs after consultation with concerned local authorities viz. MJP & urban local bodies keeping in view of the principles laid down in approved Integrated State Water Plan.

4.3. Data to be furnished by users seeking allocation for domestic use

4.3.1 Gram Panchayats

- (i) justification for demand with population and norm
- (ii) quantum met from groundwater based rural water supply schemes and other traditional water harvesting schemes
- (iii) any traditional water harvesting structure now defunct which can be revived and likely availability

ULB / Municipal Council or Corporation

- (i) population served / to be served and requirement as per norm.
- (ii) present/proposed arrangement for measurement of withdrawal at intake
- (iii) present / proposed use out of total by domestic / industrial and commercial sectors and how industrial use is measured viz. separate metered pipeline for industrial supply.

- (iv) for present users, level of unaccounted for water comprising thefts, pilferages, leakages and steps taken / to be taken to reduce this. For proposed users, steps planned to reduce this.
 - (v) present share of groundwater in total supply and whether scope exists to augment this availability. For proposed users, groundwater contribution planned.
 - (vi) whether roof top rain water harvesting bye-laws exist and progress in its implementation. If not, time frame for its introduction
 - (vii) present/planned arrangement for sewage collection, treatment and disposal including quantum
 - (viii) for present users, whether water audit carried out, if not programme of commencement
- 4.4. All new agreements with ULBs & Municipal Corporations should include a stipulation that by the end of the three year period, a minimum of 20% or more of the sewage effluent over and above the present level of such reuse will be progressively recycled by the utility either for its own use or use by other categories of users after treatment to MPCB standards provided there are no prior commitments for irrigation or other purposes stipulated by WRD
- 4.5. The agreement should also reflect the conditions imposed, if any, by the Competent Authority while authorizing the allocation and the time frame for its compliance.
- 4.6. Failure to achieve the above targets may invite such punitive measures at the time of renewal as the Authority may lay down including penal bulk tariff rate, reduction in allocation etc.
- 4.7. All new agreements will have a maximum validity of five years
- 4.8. The bulk water tariff including charges for reservation, excess use, late payment etc. will be as per Criteria for Bulk Water Tariff determined by the Authority for the relevant Control Period.
- 5.0. CRITERIA FOR INDUSTRIAL USE**
- 5.1. The norms for industrial water required for various products are given below as guidance

<u>Product</u>	<u>Water required</u>
Dairy	6-10 litres/litre of milk
Sugar	15-40 litres/kg. of sugar
Distillery	20 litres/litre of alcohol
Cotton	1 litre/metre of cloth
Viscose rayon	1600 litres/kg. fiber
Pulp	270-450 litres/kg. paper
Tannery	40-45 litres/kg.
Steel	20-50 litres/kg. steel
Urea	6-8 litres/kg. urea
Thermal plant	5 Mm ³ /year/100 mw
Copper/zinc smelter	55-110 m ³ /tonne
Petro chemicals	17 m ³ /tonne
Chemicals	5.5 m ³ /tonne
Cement	55m ³ /tonne
Fertilizer	16.5 m ³ /tonne
Food processing	2.5 to 11m ³ /tonne

5.2. Data to be furnished by users seeking allocation for industrial use

5.2.1 Data to be furnished along with application

- i) nature of the product and whether licence of Competent Authority is obtained for setting up the industry.
- ii) water use norms for per unit of production and total water use as per norm and as proposed. Reason for difference.
- iii) whether the industry requires water intermittently or continuously with justification
- iv) water required for domestic purposes for colonies with population and norm
- v) arrangement for measurement of water at intake
- vi) type and quantum of effluent generated /to be generated with BOD/COD levels and treatment being done/proposed to bring it to required standard before release

- vii) point of release of effluent
- viii) whether clearance of MPCB obtained for above
 - ix) whether recycling being done / proposed to be done, whether the sought allocation can be met by treating domestic sewage effluent and using it
 - x) whether groundwater used/proposed and if so quantum

5.2.2. A Committee comprising Joint Director, Industrial Development and CE, WRD will examine the water requirement projected by the industry keeping above norms and other factors in view. The Committee will also decide on inter-se priority among competing industries for allocation of water keeping various factors in view like importance of the product to the economy of the State, employment potential and pollution aspects and principles laid down in the approved Integrated State Water Plan.

5.2.3. The agreement to be entered into with WUE should reflect the conditions imposed, if any, by the Competent Authority while authorizing the allocation and the time frame for its compliance.

6.0. SHARING OF SHORTAGE

6.1. While entering into new agreements with WUEs, WRD/RBA will reflect the following formula for sharing of the shortage in years when reservoir does not attain design storage on Oct. 15th.

For domestic WUEs - only for Municipal Corporations

- (i) reservoir is between 100% to 75% of design storage no cut in Entitlement.
- (ii) reservoir is between 75% to 50% of design storage 10% cut in Entitlement
- (iii) reservoir is between 50% and 33% of design storage 20% cut in Entitlement
- (iv) reservoir below 33% of design storage (water scarcity or distress situation) Entitlement as determined by the State Government.

For Industrial WUEs

- (i) reservoir is between 100% to 75% of design storage no cut in Entitlement.
- (ii) reservoir is between 75% to 50% of design storage
 - 10% cut for bulk users viz. individual industrial units / industrial estates / MIDC (who subsequently supply retail also)
 - No cut for thermal plants
 - 10% cut for industries drawing directly from reservoirs to be identified separately at agreement stage
 - 15% cut for industries using water as a raw material
- (iii) reservoir is between 50% and 33% of design storage
 - 20% cut for bulk users viz. individual industrial units / industrial estates / MIDC (who subsequently supply retail also)
 - No cut for thermal plants
 - 20% cut for industries drawing directly from reservoirs to be identified separately at agreement stage
 - 25% cut for industries using water as a raw material.
- (iv) reservoir below 33% of design storage (water scarcity or distress situation)..... Entitlement as determined by the State Government.

7.0. VALIDITY OF THE CRITERIA

The Criteria is valid for a minimum period of three years at the end of which the Authority will initiate the consultation process for its revision, if considered necessary.

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1.0. Background

1.1. Section 11 (a) of the MWRRA Act, as amended, requires the Authority to determine the Criteria for the distribution of Entitlements by the River Basin Agencies “within each Category of Use”, on such terms and conditions as may be prescribed, after sectoral allocation is made by the Competent Authority.

- i. **Sectoral allocation** is defined in the amended Section 2 (u) (1) as the allocation made from the water resources project by the State government to various User Categories.
- ii. Section 2 (f) of the Act defines ‘**Category of Use**’ as the use of water for different purposes such as domestic, agricultural irrigation, agro based industries, industrial or commercial environmental and such other purposes as may be prescribed.

1.2. Before discussing the approach to be adopted for the preparation of the Criteria for distribution of Entitlement under Section 11 (a) of the MWRRA Act, 2005, it is necessary to examine the scope and ambit of the new Section 31 A in the MWRRA (Amendment and Continuance) Act 2011 issued by the State Government on 22.4.2011 to amend the MWRRA Act and its implications on the various other provisions on Entitlement in the Act. The said Section 31 A reads as under

“31 A. Notwithstanding anything contained in this Act or in any other law for the time being in force, the term ‘Entitlement’ shall apply only to such areas where compliance of all relevant provisions including delineation under the Maharashtra Management of Irrigation Systems by Farmers Act, 2005 is made.”

1.3. From a reading of the above section, it appears that the term ‘Entitlement’ referred to here means Entitlements issued to WUAs in delineated command areas of projects where other provisions of the Farmer’s Act have become applicable. These provisions vide Section 22 of Farmers Act include. identification of Priority I & II works for rehabilitation, completion of their rehabilitation within the stipulated time and signing of agreements between WRD and the WUAs in the CCA of such projects.

- 1.4. The MWRRA Act uses the term Entitlements as a broad concept applicable in different contexts. In the context of irrigation the term refers to “Entitlements” issued to WUAs. In this case the term is used specifically by its proper name viz “Entitlement”. On the other hand in other contexts i.e. in the context of non-irrigation sectors (Domestic & Industry) the term Entitlements is used in the Act in its generic sense. It refers to any document by which the RBA agrees to make available to any water user entity a specified quantum of water during a specified period or periods. Consequently, it follows that non-irrigation agreements between WRD and Water User Entities (WUE) for supply of water to water utilities/industries within sectoral allocation are not Entitlements as referred to in the amended Section 31 A. In other words, the term ‘Entitlement’ referred to in Section 31 A are only those Entitlements which are issued to WUAs in delineated areas.
- 1.5. An examination of other provisions in the MWRRA Act relating to Entitlements supports the abovementioned conclusion for the following reasons
- (i) By definition [Section 2 (i)], Entitlement means any authorization by River Basin Agency to use the water for the purposes of the Act. In other words it is not merely those authorizations which are issued to WUAs. The amended section 31 A can only apply to authorizations issued to WUAs since provisions of the MMISF Act including delineation are only applicable to CCAs for the purpose of irrigation.
 - (ii) Section 2 (zc) defines a Water User Entity to include WUAs, utilities, industrial users which are authorised to receive and utilize an Entitlement. Thus WUAs are only one among many water user entities and section 31 A by its very nature cannot be applied to water user entities other than WUAs
 - (iii) Under amended Section 11 (a), the Authority has to determine the Criteria for distribution of Entitlements by the RBAs *within each category of use*. Category of use is further defined in Section 2 (f) to mean use of water for different purposes such as domestic, agricultural, industrial, commercial, environmental etc. Since the provisions of the MMISF Act including delineation cannot be applied to non-agricultural purposes the limitations imposed on the term “Entitlement” by section 31 (A) cannot be applicable to Entitlements issued to water user entities for non-irrigation purposes.
 - (iv) Section 11 (h) (ii) of the MWRRA Act deals with modifications in entitlements of *all* water user entities and not merely those of WUAs. If

the term Entitlement as used in section 31 A is interpreted to cover Entitlements of all water user entities then the section 11(h) (ii) will become infructuous. Since the Amended Act does not repeal 11 (h) (ii) both the sections which 11 (h) (ii) and section 31 (A) have to given a harmonious construction. This can only be done by restricting section 31 (A) to entitlements given to WUAs within the sectoral allocation for the irrigation sector.

- 1.6. From the foregoing discussions it is clear that Section 31 A relates only to Irrigation Entitlements in the delineated areas. Its main import is that deliveries for irrigation become legal Entitlements only when the provisions of the Farmer's Act have been complied with in the command areas. The term 'Entitlement' mentioned in Section 11 (h) is a broader term and applies therefore to all categories of users and the various provisions in the Act relating to Entitlement including especially Section 11 (h) (ii) are not diluted or neutralized by Section 31A. The term 'areas' in section 31 A cannot mean anything other than command areas of WUAs to whom water deliveries are made. The term cannot be applied for non-irrigation users who may or may not have any areas in the CCA of a project.
- 1.7. The foregoing arguments are further confirmed in the Draft Rules of the MWRRA Act notified on August 21, 2010. The 'Explanation' note under Section 10 of the Rules states as under

"In so far as agricultural irrigation use is concerned, the term 'Entitlement' except 'Individual Water Entitlement' shall apply to such areas where compliance to all relevant provisions, including delineation, under the Maharashtra Management of Irrigation Systems by Farmers' Act, 2005 is made."

2.0. NEED FOR CRITERIA

- 2.1. Currently, Entitlements or authorizations to non-irrigation users are being issued by RBAs mainly on first-come-first served or demand basis, within the sanctioned sectoral allocations. In some cases, Entitlements are specifically provided in the administratively approved report itself. This is being done without the application of any pre-determined norms. Criteria are therefore required to be in place to ensure that there is no ad-hocism in the issue of authorizations by RBAs for non-irrigation uses.

- 2.2 An important objective of the Criteria as stated in Section 10 (7) of the Draft Rules also will also be to promote recycling and reuse of water, which is also one of the objectives of the National Water Mission, to reduce the pressure on freshwater sources in the State and ensure that municipal and industrial effluents are treated to the required standards before their discharge into rivers. The National Water Mission is one of the eight missions being implemented at the national level within the National Action Plan on Climate change. The State government has also vide GR dt. 6-10-2010 constituted a Steering Committee headed by Secretary, CAD with the same objective.
- 2.3. The Criteria for distribution of Entitlements for irrigation are already prescribed in the rules of the MMISF Act 2005. Further the Authority has brought out the following two technical manuals to detail the procedure for determination of Entitlements for irrigation viz.
- (i) Technical Manual for Fixing, Regulating and Enforcing the Entitlements in irrigation projects.
 - (ii) Procedure for Regulation and Enforcement of Entitlements - Powers & Function of Regulators and Responsibility of WRD officials.

In the non-irrigation sectors there are no such criteria and it is necessary to prescribe these in the interest of improving efficiency and equity and in the interest of sustainable development. Although non-irrigation use is on an average about 20% of total use, this is likely to increase in the coming years due to urbanization and industrialization. In certain projects in the State, the percentage of allocation of storage to non-irrigation is in the range of 40% - 50%. In many projects, the original allocation has been revisited by the Competent Authority to increase the allocation to non-irrigation at the expense of irrigation.

3.0. PROVISIONS IN THE STATE WATER POLICY AND THE MWRRRA ACT RELATING TO WATER CONSERVATION AND WATER QUALITY

- 3.1. Water conservation means the efficient use and saving of water through prevention of wastage of water to achieve productive and consumptive efficiency of water. This can be achieved by various measures like use of water saving devices, water efficient process, water demand management and water rationing. To usher in water conservation, the first requirement is to carry out a water audit for each project (in case of irrigation), industrial unit and domestic water utility.

A water audit is merely a water account of total supply and total use carried out through measurement of flows at various points to identify the actual use, transmission losses, pilferage and thefts and end flows of unutilized water or return flows from the system, in which case its quality is also required to be assessed.

- 3.2. The State Water Policy has the following provisions for water audit and water conservation.

(A) Water Audit

For increasing utilization of available potential, water audit is necessary. Water audit will be compulsory for all water resources projects. The service providers shall be accountable for providing measuring devices for volumetric supply and for giving the account of water use in various sectors.

(B) Conservation of Water

The efficiency of utilization in all the diverse uses of water shall be improved and an awareness of water as a scarce resource shall be fostered. Conservation consciousness shall be promoted through education, regulation, incentives and disincentives.

Recycling and reuse of water have to be attempted for augmentation of water resource. This will include reclaiming usable water from sewage after necessary effluent treatment. This should be made mandatory for industries use.

Measures to control the evaporation from the water bodies is taken up and efforts made to make the process more cost-effective."

- 3.3. The MWRRA Act enjoins the Authority to promote water use efficiency in the State in the following sections

"11. (q) to promote efficient use of water and to minimize the wastage of water and to fix reasonable use criteria for each Category of Use;

12. (4) The Authority shall, in accordance with State Water Policy, promote and implement sound water conservation and management practices throughout the State.

- 3.4. Water Quality is dealt in the State Water Policy in Section 2.3. as under

"The quality of water resources of the State shall be protected to preserve their usability in a sustainable manner for the peoples of the State. The State shall establish a programme of control of discharge of any pollutants to the surface and sub-surface waters of the State including the ocean, bays and saltwater marshes of the State. This programme shall include the registration of any such discharges, the licensing and monitoring of

such discharges and the establishment of standards for the waters of the State and acceptable and appropriate limits for any discharge of pollutants into these waters. The river basin agencies shall consider the maintenance of water quality in the preparation of river basin plans, operations plans and watershed development plans.

The pollution of the waters resources of the State will be prohibited and those polluting, contributing to the pollution or abetting the pollution of the water resources of the State shall be penalized as provided in the laws and the regulations of the State through its relevant State agencies."

- 3.5. The MWRRA Act requires the Authority to assist the MPCB in enhancement and preservation of water quality

"12 (5) The Authority shall support and aid the enhancement, and preservation of water quality within the State in close coordination with the relevant State agencies and in doing so the principle that 'the person who pollutes shall pay' shall be followed."

4.0. WATER POLLUTION

- 4.1. Pollution means the direct or indirect alteration of the physical, chemical or biological properties of a water resource so as to make it less fit for any beneficial purpose for which it may reasonably be expected to be used or harmful or potentially harmful to the welfare, health or safety of human beings the aquatic or non-aquatic organisms the resource quality property
- 4.2. Maharashtra is a highly urbanized and industrialized State. Thus the State Water Policy allocates a higher priority to industry, after drinking water, both over agriculture. About 40% of the total population is urban. This is going to increase at a faster rate in the years to come. River water pollution has thus assumed importance in the State as it has the maximum number of polluted river stretches in the country (28 out of 150). 8 stretches are identified as Priority 1 with BOD above 30 mg/l.
- 4.3. Sewage pollution is the main water quality problem in the rivers in the State. Of the 6200 mld of sewage generated in urban areas, 90% is generated by Corporations, about 78% goes untreated and. B&C class cities have no treatment facility at all.
- 4.4. No study has been made on the non-point pollution from irrigation return flows which are polluted with chemicals from fertilizer,

pesticide and weedicide uses. However compared to non-irrigation volume of return flows, return flows from irrigation are only 10-15% of the drawal.

- 4.5. The position regarding point source industrial pollution is more satisfactory as about 30% of the 600 mld effluent generated by industries is treated in ETP/CETP.
- 4.6. There is thus immense scope in the State to treat and recycle/reuse sewage effluent for irrigation/gardening/dual domestic supply or industrial use as the BOD level of 30 mg/lit can be brought down to below 5 mg/lit in 5 days by oxidation in a sewage treatment plant or by natural oxidation methods by retaining sewage water in ponds. In fact, sewage effluent of 30-100 mg/lit BOD can be directly used for irrigation/gardening. Tertiary treated sewage effluent can be used by process industries.
- 4.7. Recycle and reuse of industrial effluents is more costly as it involves other hazardous chemicals like chromium, mercury, arsenic and other organic elements like phosphorus and nitrogen which take time to oxidize. Localized treatment, industry-wise, followed by treatment in a CETP for cluster of industries to bring down COD levels to 250-500 mg/lit before release into water bodies, is to be ensured.

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Annexure II

List of Stakeholders who gave Written Inputs in First Stage Consultation

Sr. No.	Name	Place	Category
1	Shri. M. N. Khadase	Amravati	Ex. Member, Water Conservation Advisory Committee, Technical Adviser Watershed Development Mission.
2	Shri. Gowardhan Kulkarni	Ozar, Tal. Niphad, Dist. Nashik	Chairman, M.J. Phule Water User Association
3	Shri. Sanjay Ghanekar	Amravati	Chief Engineer, WRD
4	Dr. Bharat Patankar	Pune	Lokabhimukh Pani Dhoran Sangharsha Manch (NGO)
5	Shri. M. V. Ranade	Pune	Retired Secretary WRD
6	Nagpur Municipal Corporation	Nagpur	DBWU

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Annexure III

Draft Criteria for Distribution of Surface Water Entitlements by River Basin Agencies for Domestic & Industrial Uses (August 2017)

1.0. PREFACE

- 1.1. In a normal year, the total surface water use of the State is expected to be about 34000 Mcum (1200 TMC). The domestic water use is about 20% and industrial use is below 3%. As domestic water supply has the highest priority, in deficit year comparatively a sizable cut is applied on other sectors & thus in deficit year, the domestic water use rises to about 35%- 38%.

In industrial sector prominent bulk water user are MIDC (37%), thermal power plants (30%), agro-based industries (5%), sugar factories (5%) and metal industries (4%). The water used by distilleries, beverages, mineral water together is 0.03% of total water use (1.37% of industrial use)¹.

Due to rapid urbanization & industrialization, non-irrigation water use demands are likely to increase in coming years putting pressure on freshwater resources. It can't be assumed that future hydrological regime will be the same as that of the past. Climate change phenomenon has further posed additional challenges in water resources planning and management. Hence, demand side management with proper regulatory approach has attained vital importance.

- 1.2. The Maharashtra Water Resources Regulatory Authority (MWRRA) has been established as per the provisions in Section 3 of the MWRRA Act 2005 vide notification dated June 8, 2005. Maharashtra is the first State in the country to establish such a water resources regulatory authority. The mandate given to the Authority is to regulate water resources within the State, facilitate & ensure judicious, equitable & sustainable management, allocation and utilisation of water resources, fix the rates for use of water for agriculture, industrial, drinking and other purposes. The powers, duties and functions of the Authority are set down in MWRRA Act 2005 which were amended first in April 2011 & second time in January 2017. The Maharashtra Groundwater (Development & Management) Act 2009 came into force on December 3, 2013. Section 3 of that Act has entrusted

¹ Source - Maharashtra Water Resources Department Website (www.wrd.maharashtra.gov.in).

MWRRA the additionally responsibility of regulating groundwater resources of the State.

1.3. The Section 11(a) of the MWRRA (Amendment & Continuance) Act, 2011 stipulates that MWRRA shall determine the criteria for the distribution of Entitlements by the River Basin Agency (RBAs) within each category of use, after Sectoral Allocation is made by the Government under Section 16(A) of the said Act.

1.4. Criteria for Distribution of Entitlements by RBAs for domestic and industrial uses was evolved by the Authority earlier in November, 2012. The criteria includes water use norms and related stipulations. As per Para 7 of this criteria, the said criteria are valid for a minimum period of 3 years at the end of which Authority may undertake revision, if considered necessary.

The Government Resolution dated November 17, 2016 has decided the sectoral allocation of water under Section 16(A) of the MWRRA Act, 2011. As per the said GR, water allocated to domestic, industry & irrigation sectors is 15, 10 and 75 percent at project level respectively. On this background the process of revision of earlier criteria (November 2012) has been undertaken by the Authority.

As an initial step in the process of revision of criteria for distribution of entitlements by RBAs for domestic and industrial uses, the criteria of November 2012 was circulated amongst various line departments of the Government, municipal corporations, NGOs and experts in water sector inviting their comments / suggestions. Based on comments and suggestions received and experience gained by the Authority during last 5 years, the criteria has been modified. It is now proposed to discuss this modified draft criteria in the meeting of the stakeholders to give a final shape to the draft.

2.0. APPLICABILITY OF THE CRITERIA

This Criteria is applicable for all entitlements given through surface water (rivers, reservoirs) to domestic and industrial (non-irrigation) categories of use and will be followed by WRD & RBAs for issuance of Entitlement to non-irrigation Water Use Entities.

3.0. DEFINITION

- (i) Domestic Bulk Water User (DBWU) means any public body or organisation (Gram Panchayat, Urban Local Body, Municipal Corporation, Maharashtra Jeevan Pradhikaran, Maharashtra Industrial Development Corporation) to whom bulk water is made available by the Irrigation Development Corporation for distribution with or without treatment.
- (ii) Industrial Bulk Water User (IBWU) means any industry (including Maharashtra Industrial Development Corporation) to whom bulk water is made available by the Irrigation Development Corporation for use as raw material or in process.
- (iii) River Basin Agencies (RBAs) means River Basin Development Corporations [(Irrigation Development Corporations (IDCs)] operating in the various river basins in Maharashtra.
- (iv) Urban Local Bodies (ULBs) means municipal councils and municipal corporations.

4.0. APPROACH AND GUIDING PRINCIPLES

- (i) State Water Policy, 2003 as amended on May 18, 2011 has given first priority for water use in domestic sector followed by agriculture. Industrial sector stands at third priority. This aspect has been considered while evolving the criteria for sharing of water deficit (Para 7.0).
- (ii) As per the recommendations of the Maharashtra Water & Irrigation Commission (Report, 1999) for the planning purpose, the sub-basins have been categorized on the basis of natural surface water availability per hectare of Culturable Command Area (CCA). The categories proposed by the Commission are as under

Category of sub-basin	Surface water availability in cum / ha of CCA
Highly Deficit	Less than 1500 cum
Deficit	Between 1500 - 3000 cum
Normal	Between 3000 - 8000 cum
Surplus	Between 8000 - 12000 cum
Abundant	More than 12000 cum

The different norms of domestic bulk water entitlements have been proposed for different category of sub-basins based on water availability scenarios.

- (iii) In rural economy, cattle is an important component. Swach Bharat Mission envisages a toilet in every house. Considering these aspects, norm for rural water supply has been increased from 40 LPCD to 55 / 70 LPCD.
- (iv) Requirement of water for various industries has been critically examined and specific water consumption values have been reviewed wherever necessary with an intention to promote best technological alternatives available anywhere in the world for water saving / recycling.
- (v) To improve water use efficiency and reduce per capita consumption in domestic sector, the control measures like water audit of civic bodies and charging for water used beyond entitlement at higher rate have been proposed.
- (vi) Also, it has been made mandatory to domestic water use entities to compensate for water used beyond project-level sectoral allocation by making available equivalent quantity of water to agricultural sector after treating it to agricultural use standards.
- (vii) The policy adopted here for distribution of entitlement has also been used as a vehicle for water quality improvement. Certain time based actions have been mandated on domestic water use entities regarding waste water treatment. It is proposed to stop industrial water supply, if the industry fails to comply with the MPCB norms.

5.0. CRITERIA FOR DOMESTIC USE

- 5.1.** The applicable per capita norm for sanction of entitlement to BDWU shall be as under;

Table No 1

Liters per capita per day (LPCD)

Sr. No.	Category	Normal, Surplus & Abundant sub-basins	Deficit, Highly-deficit sub-basins	As per November 2012 Criteria
1	2	3	4	5
1)	Rural water supply (Gram Panchayat including Cattle Requirement)	70	55 (NRDW)	40
2)	Municipal councils (Including sanitation requirement)			
	C - Class	70	55	70
	B - Class	100	70	100
	A - Class	125	85	125
3)	Municipal corporations (having population less than 10 lakh)	150	130	135
4)	Metropolitan center (having population more than 10 lakh)	165	140	150

5.2. The RBA shall observe following stipulations while distributing the entitlements.

- (i) The entitlements shall be given and monitored yearly, based on year- wise population to be served, standard norms, allowing 10% distribution losses on the prescribed norms (not on the basis of futuristic requirements). The water use beyond the entitlement limits shall be charged at higher rate, as indicated in tariff order.
- (ii) The entitlement shall be given for the net quantity after giving due consideration to the amount of water that can be made available from other surface sources, groundwater sources, rainwater harvesting, recycling etc.
- (iii) The entitlement beyond sectoral allocation shall only be given after approval of the competent authority declared by the Government from time to time. However, in such instances, water use entity shall compensate the extra water (over and above the sectoral allocation) by making it available for agriculture use at location decided by RBA, after duly treating it to agricultural

water use standards as defined by the Central Pollution Control Board (CPCB) for E-class water.

- (iv) The entitlement shall be given only after installation of the measuring devices (for municipal corporations, preferably of ultrasonic / electronic) by the water use entity and its inspection by the representative of the RBA.
- (v) So as to ensure optimum water use efficiency, the Chief Auditor, Water & Irrigation, Maharashtra State shall mandatorily carry out water audit of DBWU and shall submit the consolidated water audit report to the MWRRA.
- (vi) RBA shall ensure that all municipal corporations and municipal councils shall submit within one year a time bound program to MWRRA to achieve treatment of 100 % of effluent generated by March 2022.

5.3. The inter-se priority for entitlement among various future domestic demands will be determined by RBAs after consultation with concerned local authorities viz. MJP & ULBs.

5.4. All new agreements shall have a maximum validity of five years. The following clause shall be included in the agreements;

“During the contract period, the tariff along with the entitlement and or tariff related stipulations made applicable by the MWRRA shall be binding on both the parties.”

5.5. The Bulk Water Tariff (BWT) including charges for reservation, excess use, late payment etc. will be as per BWT decided by the MWRRA from time to time.

6.0. CRITERIA FOR INDUSTRIAL USE

6.1. The water use standards for various industries shall be as under;

Table No 2

Sr. No.	Name of Industry	Category	Entitlement Criteria	As per November 2012 Criteria
(1)	(2)	(3)	(4)	(5)
1.	Power	Thermal Power Station	3.5 Mcum / MWh*	5.0 Mcum / 100 MW / Year
2.	Paper	Agro Residue Based Mill	200 cum / ton of paper produced	270 - 450 cum / ton of paper
		Waste Paper Based Mill	75 cum / ton of paper produce	
3.	Ferrous Metallurgical Steel	Iron & Steel	20 cum / ton of finished product	20 - 50 cum / ton of Steel
4.	Non-Ferrous Metallurgical Produce	Copper Smelters	100 cum / ton of Copper Metal produced	55 - 110 cum / ton
		Zinc Smelters	50 cum / ton of Zinc Metal produced	
5.	Textile	Nylon & Polyester	170 cum / ton of fiber produced	--
		Viscose Rayon / Cotton	200 cum / ton of fiber produced	1600 cum / ton of fiber
6.	Processing of Vegetable & Animal Products	Sugar	2 cum / ton of sugarcane crushed	15 - 40 cum / ton of Sugar
		Maltry	8.5 cum / ton of grain processed	--
		Brewery	1 cum / 1000 liter of Beer produced	---
		Distillery	15 cum / 1000 liter of alcohol produced	20 cum / cum of Alcohol
		Starch, Glucose related products	10 cum / ton of maize	--
		Jute	1.5 cum / ton of Jute produced	---
		Tanneries	30 cum / ton of raw hide	40 - 45 cum / ton
		Dairy	4 cum / 1000 liter of milk	6 - 10 cum / 1000 liter of milk
7.	Fertilisers	Nitrogenous Fertiliser plant / Complex fertilisers having primary product as nitrogenous fertiliser	15 cum / ton	16.5 cum / ton

Stakeholder Consultation: Criteria For Distribution of Non-Irrigation Entitlements

Sr. No.	Name of Industry	Category	Entitlement Criteria	As per November 2012 Criteria
(1)	(2)	(3)	(4)	(5)
		Single Super Phosphate or Triple Super Phosphate / Complex fertilisers having primary product as phosphatic fertiliser	2 cum / ton	
8.	Cement	Cement	0.3 cum / ton including domestic use in factory premises	55 cum / ton
9.	Petro chemicals	Petro chemicals	17 cum / ton	17 cum / ton
10.	Chemicals	Chemicals	5.5 cum / ton	5.5 cum / ton
11.	Automobile	Automobile	5 cum / vehicle	

* - As per revised Electricity Policy of GoI dated January 28, 2016, the thermal power stations (TPS) located within 50 km radius of STP of local bodies shall mandatorily use treated sewage water. RBA shall ensure that TPS switch over to treated sewage wherever possible as per the policy.

6.2. The RBA shall observe following stipulations while distributing the entitlements.

- (i) The entitlement shall be given for the net quantity after giving due consideration to the amount of water that can be made available from other surface sources, groundwater sources, rainwater harvesting, recycling etc.
- (ii) The water used beyond the entitlement shall be charged at higher rates, as indicated in tariff order.
- (iii) The entitlement shall be given only after installation of the ultrasonic / electronic measuring device by the water use entity and its inspection by the representative of the RBA.
- (iv) Chief Auditor, Water & Irrigation Maharashtra shall carry out water audit of all industrial water use entities and submit the consolidated report to the Authority.

- (v) All water used by the industry within its premises shall be considered as industrial use for billing purpose.
 - (vi) The industrial water use entity shall not sell water or treated effluent to any other water use entity without prior permission of the RBA.
 - (vii) MPCB shall send the list of industries to WRD every month whose effluents are not meeting the stipulated standards. WRD shall charge the water bills to polluting industries at higher rate retrospectively from the date of last inspection by the MPCB on which the industry has been declared as polluting industry by MPCB. Further WRD on recommendation of the MPCB shall totally stop the water of the polluting industry. The water supply so stopped shall be renewed only with NOC of MPCB & after payment of all arrears of water charges including higher charges.
- 6.3.** A committee comprising Joint Director of Industries and CE, WRD will decide inter-se priority among competing industries for distribution of entitlement keeping various factors in view like importance of the product to the economy of the State, employment potential, pollution aspects.
- 6.4.** The following clause should be included in the agreements with water use entities;
- During the contract period, the tariff along with the entitlement and / or tariff related stipulations made applicable by the MWRRA shall be binding on both the parties.*
- 7.0 SHARING OF WATER DEFICIT**
- 7.1.** As per State Water Policy, the domestic water use has the highest priority. However, during the deficit years, the domestic water use entity will also have to share some deficit. Domestic water entitlement (ED) in the deficit year shall be decided by following formula;

$$E_D \text{ (in percentage)} = 70 + [(P \times 30) / 100]$$

Where P = Percentage storage on 15th

$$\text{October Applicable cut in \%} = 100 - E_D$$

Note - In case the live storage in the reservoir on 15th October is less than or equal to domestic water entitlement for the balance year, all available water shall be kept reserved for domestic sector.

Illustration :- If the live storage as on 15th October is 90% i.e. deficit in storage is 10%, the deficit to be shared by domestic sector shall be calculated as under;

$$E_D = 70 + [(90 \times 30) / 100] = 97\%$$

$$\text{Applicable cut} = 100 - 97 = 3\%$$

So Bulk Water User in Sr. No. 4 in Table No 1 will get

$$165 \times 97\% = 160 \text{ LPCD}$$

7.2. No preferential priority will be given to industrial sector. The deficit in water storage as on 15th October with respect to designed live storage shall be proportionally applied to the industrial sector.

8.0. REVIEW OF THE CRITERIA

The Criteria is valid for minimum period of three years, atleast six months prior to the end of which the Authority will initiate the consultation process for its revision, if considered necessary.

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Annexure IV

List of Stakeholders who gave Written Inputs in Second Stage Consultation

Sr. No.	Name	Place	Category
1	Smt. Seema Kulkarni.	Pune	Lokabhimukh Pani Dhoran Sangharsh Manch, Pune (NGO)
2	Member Secretary, Maharashtra Jivan Pradhikaran (MJP)	Mumbai	Implementing Agency
3	Shri. Pradip Purandare	Aurangabad	Water Law Expert
5	Shri. M. V. Ranade	Pune	W.R. Expert, Retired Secretary WRD
6	Shri. D. M. More	Pune	Retired Director General, MERI.
7	Shri. R. D. Mohite	Aurangabad	Chief Auditor, Water and Irrigation
9	Shri. Vijay Paranjape	Pune	Gomukh Trust, Pune.

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Annexure V

List of Stakeholders who attended the Stakeholder Consultation Meeting on August 23-24, 2017

Sr. No.	Name	Place	Category
1	Shri. A. K. D. Jadhav	Mumbai	Special Invitee
2	Shri. C. A. Birajdar	Mumbai	Secretary (CAD), WRD
3	Shri. Sanjay Ghanekar	Amravati	Chief Engineer, WRD
4	Shri. R. V. Sonaje	Mumbai	Chief Engineer MIDC (Line Department)
5	Shri. R. D. Mohite	Aurangabad	Chief Auditor Water & Irrigation
6	Dr. Y. B. Sontakke	Mumbai	Joint Director MPCB (Line Department)
7	Shri. Pradip Purandare	Aurangabad	Retired Asstt. Professor WALMI
8	Dr. Bharat Patankar	Pune	Lokabhimukh Pani Dhoran Sangharsha Manch (NGO)
9	Shri. Vijay Paranjape	Pune	Gomukh Trust (NGO)
10	Shri. Atul Kapole	Mumbai	Dy. Secretary, WRD
11	Shri. A. D. Joshi	Mumbai	Dy. Secretary Planning Dept.
12	Shri. Subhash Bhujabal	Mumbai	S.E., M. J. P.
13	Shri. Manohar Sonawane	Navi Mumbai	Ex. Engineer NMMC
14	Shri. J. K. Kulkarni.	Mumbai	Dy. Engineer, MIDC

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