Review and Revision of Bulk Water Rates for Agricultural Irrigation, Domestic, Industrial Use in Maharashtra State

Maharashtra Water Resources Regulatory Authority

9th floor, Center 1, World Trade Centre,

Cuffe Parade, Mumbai - 400005

Date: 29th March, 2022

### **Bulk Water Tariff Order**

- Ref: 1. Maharashtra Water Resources Regulatory Authority Act, 2005
  - 2. Approach Paper for Determination of Bulk Water Tariff (October 2019)
  - 3. Maharashtra Water Resources Regulatory Authority (Fixing Criteria for Bulk Water Tariff and Issuance of Tariff Order), Guidelines, 2019

#### 1. Introduction

1.1 Maharashtra Water Resources Regulatory Act 2005 (henceforth called "the Act") has been enacted to regulate water resources within the State, facilitate and ensure judicious, equitable and sustainable management, allocation and utilization of water resources as well as to fix the rates for use of water for all purposes and matters connected therewith and incidental thereto. Maharashtra Water Resources Regulatory Authority (henceforth called as "the Authority") has been established as per Section 3 (1) of the Act on 4th May, 2005.



- 1.2 Section 11 (d) of the Act empowers the Authority, to establish a water tariff system and to fix the criteria for water charges in such a way that the water charges shall reflect the recovery of full cost of irrigation management, administration, operation and maintenance of water resources project.
- 1.3 Vide Section 11(u) of the Act, the Authority is required to review and revise the water charges every three years.
- 1.4 Earlier, the Authority has finalized the Bulk Water Tariff for water use of agriculture, domestic and industrial categories vide its order dt. 11<sup>th</sup> January 2018.
- 1.5 Authority has finalized bulk water tariff for Agriculture, Domestic and Industrial based on Criteria fixed after ascertaining the views of the beneficiary public on draft Criteria and draft Tariff Proposal.

# Order of the Authority

- 2.0 The Authority, in exercise of the power conferred on it as per Section 11 (d) and 11 (u) of the Act, hereby decides the revised Bulk Water Tariff for agricultural irrigation, domestic and industrial purposes as per Annexure 1, 2 and 3 respectively, alongwith relevant provisions mentioned in it.
  - 2.1 The water rates for flow irrigation will be as per Table No.1 of the Annexure 1. The water rates for Private Lift Irrigation Scheme (PLISs) will be as per Table 2 of the Annexure 1.

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- 2.2 The water rates for Government Lift Irrigation Schemes (GLISs) will be as per relevant provisions stated in Para 2 of the Annexure 1.
- 2.3 In case there is no arrangement for measurement of water, area based Bulk Water Tariff for water use of individual beneficiaries by flow irrigation, has been proposed as per Table 3 in Annexure -1.
- 2.4 Applicable rates of the Domestic water use will be as per Annexure 2.
- 2.5 Applicable rates of the Industrial water use will be as per Annexure 3.
- 3.0 For accounting of water use, the water year shall be considered from 1st July to 30th June of the consecutive next year.
- 4.0 Bulk Water Tariff as per this order shall be applicable for three years starting from 1st July, 2022.
- 5.0 Bulk Water Tariff for the period from 1st July, 2020 to 30th June, 2022 will be same as that of last year (1st July, 2019 to 30th June, 2020) as determined by the previous order dt. 11th January, 2018, considering the exceptional situation of COVID-19 Pandamic in the State.
- 6.0 The water rates in the Annexures to this order with 10% annual increase shall be applicable for the water year from 1st July, 2023 to 30th June, 2024.
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- 8.0 The rates in Annexure 1, 2 and 3 are exclusive of local cess. The local cess as decided by the State Government from time to time shall be payable separately.
- 9.0 In order to ensure that water reserved for non-irrigation purpose shall not remain unutilized and available water shall be utilized optimally, non-irrigation water utilities are permitted to give phase-wise plan of utilization. In case, non-irrigation utility wants to use allocated water in phased manner, it has to plan so, prior to execution of agreement. Such phase-wise planned water use shall be incorporated in the agreement. The levy of water charges shall be based on such phase-wise planning. But, balance water quantity (total allocated quantity -phase-wise planned water use) should be charged at the rate of 5% towards commitment charges. Similarly, if variation in actual water use and phase-wise planned water use is more than 10%, the assessment shall be done as follows:

In case, actual water use happens to be less than 90% of the phase-wise planned quantity of water, the billing shall be done on the 90% of the quantity of water specified in the agreement. If the actual water use is between 90% to 100% of the corresponding phase-wise water use; billing shall be made as per the standard rate. However, if the actual water use is more than 100% of the planned quantity of water corresponding to that particular phase the billing of such excess quantity shall be made at penal rates given in the relevant provisions in the Annexures.

10.0 The WRD with an intention to control the uncontrolled water use and discourage the wastage of water in flow irrigation in its Tariff Proposal has proposed to adopt, here-in-after the volumetric system for supply and charging of water supply for irrigation. However, taking into consideration difficulties in implementation of volumetric tariff, area based bulk water tariff (crop wise and season wise) shall be charged to individual water



users, other than Water User Associations (WUAs) and Lift Irrigation Schemes, till installation of measuring devices.

- 11.0 The Urban Development Department of the State Government vide G.R. dated November 30, 2017 has declared its policy for wastewater treatment, recycle and reuse in urban areas. As per the provisions in the in Para 12 of the said policy, rights of fixing tariff for reuse of treated wastewater are vested with the committee / respective Urban Local Body (ULB). The Authority therefore, as per Section 12 (5) of the Act us consciously supporting the said policy. However, the following provisions must be complied with while implementing the said policy;
  - a) To reuse treated wastewater , it must be transported from Sewage Treatment Plant (STP), through closed pipeline or tankers .
  - b) The rates of treated wastewater to be reused for irrigation purpose shall not be more than 60% of applicable rates for flow irrigation.
  - c) If the treated wastewater is discharged in canal / natural river-nalla then regulation of such water shall be done as per the provisions in the Section 11 (1) of Maharashtra Irrigation Act 1976. Rates for such water shall be as that of freshwater.
- 12.0 Bulk Water Supply Entity (BWSE) and Bulk Water User Entity (BWUE) shall ensure that following points shall be included in the agreement of non-irrigation water supply:
  - a) Accurate category of water source
  - b) Clear provision about applicable rate



- c) Dispute resolving mechanism / provision for any dispute about water source category, applicable rate and quantity of water use.
- d) While fixing quota for industrial water use, water for processing and water use for raw material and quantity of water use for domestic purpose in the colonies of industrial workers shall be quantified and it shall be ensured that actual water use is same as per quota fixed for specific purpose. If water use is not as per sanctioned quota penal rates shall be charged.
- 13.0 For the purpose of framing the future strategies, all Irrigation Development Corporations shall submit to the Authority the abstract of category -wise recovery of water charges, expenditure incurred on Maintenance and Repairs (M & R) of irrigation projects, expenditure incurred on electricity charges and M & R of Government lift irrigation schemes, reduction in revenue due to concessions /incentives offered to domestic and industrial uses and increase in revenue due to penalties. Such information pertaining to the year ending on 30th June shall be submitted to the Authority for future policy decisions by 30th September each year. Such information if not provided periodically within prescribed time limit, such non compliance will be liable for punishment under Section 26 of the Act.
- 14.0 The Government shall issue orders to the field officers to give wide publicity to this Bulk Water Tariff order through public notice for information of beneficiaries / stakeholders.

15.0 Powers to remove difficulties: In case of any difficulty in implementation of this Bulk Water Tariff order, concerned bulk water user / Irrigation Development Corporation / Government may make reference to the Authority. The decision of the Authority as regards to this shall be final and binding.

16.0 This order is available on Authority's website www.mwrra.maharashtra.gov.in

Note: If there is any descripancy between the Marathi and English version, the Marathi version will be considered as authenticate version for all legal purposes.

Encl: Annexure 1 to 3.

(Dr.Sadhana Mahashabde)

(Smt.Shwetali Thakare)

. Sanjay Kulkarni)

Member (Law)

Member (Eco)

Member (WRE)

Date: 29.03.2022

Place: Mumbai

(Dr. Ramnath Sonawane)

Secretary

Maharashtra Water Resources Regulatory Authority



# Annexure 1

## Agriculture Bulk Water Tariff

Table No.-1 Volumetric Rates For Flow Irrigation (Paise / cum)(Paise for 1000 Litre)

Sr. No.	Type of Beneficiary	Rates ( Paise / Cum) ( Paise for 1000 Litre )			
		Kharif	Rabbi	Hot Weather	
1	2	3	4	5	
1	Registered Water User Associations	5.50	11.00	16.50	
2	Individual Beneficiary	7.00	14.00	21.00	

Table No.-2 Bulk Water Tariff for Private Lift Irrigation Schemes (Paise / Cum) (Paise for 1000 Litre)

Sr.No.	Type & Source of Water Supply	Rates ( Paise / Cum) ( Paise for 1000 Litre )		
		Kharif	Rabi	Hot Weather
1	2	3	4	5
	Assured Water Supply	6.50	13.00	19.50
1	A) Reservoirs of Major Projects	0.50	13.00	
	B) Reservoirs of Medium Projects, Canals of Major & Medium Projects, Storage Tanks	5.00	10.00	15.00
2	Regulated Water Supply with transmission losses	5.00	10.00	15.00
3	Partly Regulated Water Supply	2.50	5.00	7.50
4	Reservoirs / Bhandhra constructed & maintained by water user entity at its own costs	0.80	1.60	2.40

Table No.-3 Area based Bulk Water Tariff for individual beneficiaries for flow irrigation

(Crop wise and Season wise)

Sr. No.	Type of Crop	Rates (Rs./Ha.)		Ha.)
		Kharif	Rabbi	Hot Weather
1	2	3	4	5
1	Food Grains and other Crops	600	1200	1800
2	Cash Crops			
	a) Sugarcane and Banana	1890	3780	5670
	b) Cotton	810	1620	2430
b	c) Horticulture	1422	2844	4266

### **Other Relevant Provisions:**

(1) Period of Kharif, Rabbi and Hot Weather seasons for konkan & Vidharbha regions and Rest of the Maharashtra for purpose of levying water charges, shall be as under;

Season	Period for Rest of Maharashtra	Period for Konkan and	
	- 1	Vidarbha regions	
Kharif	1st July to 14th October	1st July to 14th November	
Rabbi	15th October to 28th February	15th November to 31st	
		March	
Hot Weather	1st March to 30th June	1st April to 30th June	

(2) Tariff for area under Government LIS in the State will be the Basic Rate for flow irrigation plus expenditure towards electricity charges, M&R cost and operation cost of the head works of LIS. Out of this, 19%

expenditure to be borne by concerned beneficiaries and remaining 81% shall be divided among other category of users as per criteria. The scheme-wise tariff for Government Operated LIS shall be fixed by the Chief Engineer of respective River Basin Agency.

- (3) Water charges for cash crops (e.g. Sugarcane, Cotton, Banana and Horticulture etc.), irrigates with water from wells upto 35 m. from the canal (Canal as defined in Maharashtra Irrigation Act, 1976), shall be charged of 50% of Basic Rate of flow irrigation as per the provision of Section 55 of Maharashtra Irrigation Act, 1976.
- (4) The registered WUAs under Private LIS who have installed water meters and use water volumetricly will be given 25% concession in the rates given in Table No.2 of Annexure 1.
- (5) The beneficiaries of Private LIS should install the water meter at the source on delivery pipeline at its own cost. During transition period before installation of water meter, the water charges shall be levied on the basis of area based tariff to private or individual LIS user. This concession will be applicable for a period of 1 year from the date of this Order. After this, water charges shall be levied at 2 times applicable rate for flow irrigation.
- (6) If Private LIS, fails to install water meter / water meter is not working / water meter is tampered, the assessment will be done at the rate, 2 times applicable water rate for flow irrigation with quantity calculated as per area based tariff.
- (7) If the water is supplied by BWSE up to the decentralized storages as provided in Government Resolution dated 02/05/2017 then the water rates given in Table No.-1 of Annexure 1 corresponding to the conveyance system viz. flow or lift will be applicable. If water is supplied regularly to decentralized storage through natural stream,



then conveyance loss @ 10 % shall be applicable. However, if the beneficiary takes water to decentralized storage by means of closed pipe line from canal then conveyance losses shall not be levied.

- (8) Water rates for fishery shall be as per Sr.No.2, Table No.1 of Annexure 1, same as volumetric rates applicable to individual beneficiaries of Agriculture.
- (9) Project affected farmers, having been allotted compensatory land in the command area, shall be entitled to get water at 75% of the applicable water rates. Further, if project affected farmer has resorted to Lift Irrigation at his/her own cost, 50% of the applicable rates shall be charged.
- (10) If the water is taken for an extended Kharif crop in Rabbi season or for an extended Rabbi crop in Hot Weather, relevant Kharif / Rabbi rates will be charged for such water.
- (11) Water charges should not be levied for the irrigation in the first year of irrigation (trial irrigation for testing) of the project.
- (12) In the absence of measuring devices, water supply to beneficiaries shall be charged on area based tariff. For this purpose two crop groups i.e. Cash Crops and Food grains & other crops be taken into consideration for charging prescribed area based tariff. Following principles should be followed while fixing area-based tariff
  - a) Area based tariff shall be made applicable after conducting 'Geographical Information System (GIS)' survey to ascertain the area and crops.

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- b) If water is supplied for more than two rotations, then full rate for the season will be charged. For water supply in two or less rotations, water rates will be at one fourth (1/4) of applicable rate per rotation will be charged.
- c) Area based tariff declared by Government vide GR.No./Misc.-2014/(43/14)/IM(P) dated 17.10.2018 will not be effective from the date of application of this tariff order.
- (13) If the individual farmer takes metered water supply for modern irrigation system (micro-irrigation) then the rates applicable shall be 75% of the flow rates of individual farmer. If registered WUA takes the metered water supply for micro irrigation then the rates applicable shall be 75% of the flow rates prescribed for registered WUA.
- (14) If water charges for a season is paid in advance i.e. before commencement of that season then rebate @ 10% shall be given in applicable water charges for that season.
- (15) Water rates in case of ex-malgujari tanks shall be governed by the order of the Supreme Court in case No. CIVIL Appeal No 2475 of 1968 dated 16/08/1978.
- (16) If water supplied for irrigation use is found to be used for industrial purpose without prior permission of WRD, then assessment will be done at 2 times the rate applicable for industrial use.



(17) If BWUE does not pay water charges within time limit stipulated by BWSE in the bill, penal interest of the rate of 10% per year shall be charged.



Annexure - 2 **Bulk Water Tariff for Domestic Water Use** 

Sr. No.	Type & source of Water	Rates (Rs./Cum) (Rs. For 1000 Litre)				
NO.	Supply					
	А.		Nagar	Municipal Corporation		
		Gram Panchayat	Palika/ Nagar Panchayat	Domestic	Commercial	
1	2	3	4	5	6	
1	Assured Water Supply	0.30	0.35	0.55	2.75	
2	Regulated Water Supply with transmission losses	0.60	0.70	1.10	5.50	
3	Partly Regulated Water Supply	0.15	0.18	0.28	1.38	
4	Water User Entity has shared proportionate cost and constructed basis infrastrcutre	0.05	0.06	0.09	0.44	

Note:

- 1) Transmission losses proportionate to the allocation or actual use whichever is more be borne by water users. Evaporation losses to be borne by WRD.
- 2) For past agreements on sharing in total / proportionate cost of infrastructure or where shared cost of infrastructure is agreed to at planning stage in new projects or where weir / bandhara for the capacity equal to annual water demand is constructed by entity below a dam to use its share, the water rate will be 16% of applicable rate in proportion to the cost shared. However, any payment in share cost will be treated only as advance water tariff to be adjusted against concessional water tariff of 16% applicable rate. The number method with 10% rate of interest. On full adjusted appropriate basic rate will become applicable. of years the concessional tariff will be operative will be calculated by NPV method with 10% rate of interest. On full adjustment of the advance tariff, the

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### Other Relevant Provisions:

- (1) While deciding annual demand as per the existing agreement with Municipal Corporation, Commercial use will be separately quantified and will be charged appropriate Commercial rate as per Column 6 of Annex. 2.
- (2) The Integrated Townships project, means a Project declared under Section 18 or 44 of Maharashtra Regional and Town Planning Act, 1966 and to which water is supplied directly by BWSE, will be charged at par with the Municipal Corporation as per Column 5 of Annexure 2.
- (3) During the construction phase of commercial entity, private colonies, townships; the water use will be charged at Commercial rate and after receipt of Completion Certificate and of Occupation Certificate, water use will be charged at the applicable rate of Municipal Corporations. If both uses are concurrent, different meters are to be installed and assessments be done accordingly.
- (4) If BWUE, dependent on the wells within influence zone or distance from the boundary of the canals as stated in Section 26 of Maharashtra Ground Water (Development & Management ) Act , 2009 then 50% of applicable rate will be charged. The definition of "Canal" is as per Sec. 2(3) of Maharashtra Irrigation Act, 1976.



- (5) Applicable rates will be charged fro annual water use. For more than 100% & less than 125% of sanctioned quota, water charges will be 1.50 times applicable rate and beyond 125% of sanctioned quantity, water charges will be 3.0 times applicable rate.
- (6) "Polluter pays" principle ULBs are expected to treat sewage to the standard specified by Maharashtra Pollution Control Board (MPCB) before its release into a natural water course or an irrigation canal. ULBs, who have not installed Sewage Treatment Plant (STPs) based upon their water allocation & STPs not working to its full capacity, will be charged 2 times applicable rate for the sanctioned quota or actual water use whichever is higher.
- (7) Water used without agreement, will be charged at 2 times applicable rate.
- (8) If ULBs are found to be supplying water from its drinking water entitlement to industrial users without prior approval of BWSE, such water use will be charged at 3 times the applicable industrial water rates retrospectively.
- (9) Where meter is installed but it is found not functioning / removed for reparing / tampered / faulty, one months written notice shall be given for repairing & commissioning of the meter. Water meter shall be repaired within 60 days. Water charges for this period will at the applicable rate on the sanctioned quantity of water or recent water use whichever is higher. Extension of one month can be given for repairing the water meter depending on specific local situation. If this defect is not rectified within stipulated period, water charges will be 2 times applicable rate.



(10) If BWUE does not pay water charges within time limit stipulated by BWSE in the bill, penal interest of the rate of 10% per year shall be charged.



Annexure – 3
Bulk Water Tariff for Industrial water use

Sr. No.	Type & source of Water Supply	Rates ( Rs. / Cum) ( Rs. For 1000 Litre )			
1		Process Industry	Water as Raw Material in Manufacturing Industry	Domestic Use in Industrial Units	
1	2	3	4	5	
1	Assured Water Supply	11.00	165.00	0.55	
2	Regulated Water Supply with transmission losses	22.00	330.00	1.10	
3	Partly Regulated Water Supply	5.50	82.50	0.28	
4	Water User Entity has shared proportionate cost and constructed basis infrastrcutre	1.76	26.40	0.09	

#### Note:-

- Transmission losses proportionate to the allocation or actual use whichever is more be borne by water users. Evaporation losses at storage to be borne by WRD.
- 2) For past agreements on sharing in total / proportionate cost of infrastructure or where shared cost of infrastructure is agreed to at planning stage in new projects or where weir / bandhara for the capacity equal to annual water demand is constructed by entity below a dam to use its share, the water rate will be 16% of applicable rate in proportion to the cost shared. However, any payment in share cost will be treated only as advance water tariff to be adjusted against concessional water tariff of 16% on applicable rate. The number of years the concessional tariff will be operative will be calculated by NPV method with 10% rate of interest. On full adjustment of the advance tariff, the appropriate basic rate will become applicable.



### **Other Relevant Provisions:**

- (1) Water Use for Processing and Raw Material Industry:
  - 1.1 "Processing Industries" means the industries using water for cooling, washing and such other purposes where the water used in final product is not consumptive use.
  - 1.2 "Raw Material Iindustries" means water used in final product as consumptive use such as e.g. Bottled water plants, cold drinks, Spririt, Alcohol, Ethanol, Breweries & Distilleries or similar industries that will be charged at 15 times basic rate linked with source of supply i.e. as per Column 4 of Annexure 3.
  - 1.3 'Domestic Use in Industry" means water used for colony developed by concerned Industry for residential purpose for its officers / workers and will be charged at the rate given in Column 5 of Annexure 3. However, quantity for "Domestic use in Industry" shall be fixed before agreement and separate conveyance pipeline, water meter and other necessary infrastructure facilities shall be complied with.
- (2) If BWUE, dependent on the wells within influence zone or distance from the boundary of the canals as stated in Section 26 of Maharashtra Ground Water (Development & Management) Act, 2009 then 50% of applicable rate will be charged. The definition of "Canal" is as per Sec. 2(3) of Maharashtra Irrigation Act, 1976.



- (3) Water rates applicable for Agro-Industries like Sugar Industry with its cogeneration plant, Food grains and Fruits processing, Poultry, Rice Mill, Dairy, Vegetable Oil & Ghee etc. will be charged 75% of the applicable rate. However, this concession will not be applicable for industries manufacturing alcohol, spirit, ethanol, winery, breweries, distilleries from sugarcane, corn or similar crops, food grains, fruits and also to Perfume industries etc.
- (4) Applicable rates will be charged for annual water use up to 100% of sanctioned-quota. For water use more than 100% & less than 125% of sanctioned quota, water charges will be 1.50 times of AR and beyond 125% of sanctioned quota, water charges will be 3.0 times of AR.
  - (5) "Polluter pays" principle Every industry is expected to treat effluent to the standard specified by Maharashtra Pollution Control Board (MPCB) before its release into a natural water course or an irrigation canal. Industries, who have not installed Effluent Treatment Plant (ETPs) based upon their water allocation & ETPs not working to its full capacity, will be charged 2 times of Applicable Rate for the sanctioned quota or actual water use whichever is higher.
- (6) If an industry adopts Zero Liquid Discharge (ZLD) technology and draws only up to 25% of its allocation to cover pipeline loss, evaporation and process consumption, it will be charged only @ 25% of the applicable rate for the water drawn. However, this concession will be applicable to those



industries who reduce its annual sanctioned water demand upto minimum 75% or less. It will be mandatory to ascertain and certify this by the officer not below the rank of Executive Engineer.

- (7) Industries are entitled to reuse treated effluent. However, it is necessary to lift treated water for reuse by way of conveyance through closed pipeline from treatment plant (without discharging it into river /nalla ). If such water is supplied for irrigation, its rates shall not be more than 60% of rates specified for irrigation by fresh water. Similarly, they shall submit details of such water use to WRD.
- (8) Water used without agreement, will be charged at 2 times applicable rate.
- (9) Where meter is installed but if is found not functioning / removed for repairing / tampered / faulty, one month written notice shall be given for repairing & commissioning of the meter. Water meter shall be repaired within 60 days. Water charges for this period will at the applicable rate on the sanctioned quantity of water or recent water use whichever is higher. Extension of one month can be given for repairing the water meter depending on specific local situation. If this defect is not rectified within stipulated period, water charges will be 2 times applicable rate.



(10) If BWUE does not pay water charges within time limit stipulated by BWSE in the bill, penal interest of the rate of 10% per year shall be charged.

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