



# CONSERVATION OF GROUND WATER

## *NEED OF EFFECTIVE LEGISLATION TO MANAGE AND REGULATE GROUNDWATER FOR THE STATE OF MAHARASHTRA*

**Name of Author: Mr. Sagar Sunil Mahashabde**

Designation: Law Professor, Ph.D. Student

Name of Department: Department of Law

Name of Organization: Bharati Vidyapeeth, New Law College, Pune, India.

**Abstract:** Alarming fall of ground water level which highlights the need of effective legislation to manage and regulate groundwater for the state of Maharashtra. Conservation of ground water starts by knowing by the process of law about existing number of wells/bore-wells and drilling of new wells/bore-wells and estimated extraction of ground water.

### 1. INTRODUCTION:

Under Constitution of India water is the matter of state list and all acts and bills regarding its use and monitoring lie with the state. At present Maharashtra Ground Water Act 2009 (MGW Act 2009) is enacted to ensure sustainable, equitable and adequate supply of groundwater of prescribed quality, for various category of users through supply and demand management measures, protecting public drinking water sources and to establish the State Ground Water Authority and District level Authorities to manage and regulate the exploitation of Groundwater with community participation within the State of Maharashtra. Conservation of ground water starts by knowing by the process of law about existing number of wells/bore-wells and drilling of new wells/bore-wells and estimated extraction of ground water.

### 2. LEGISLATIONS FOR CONSERVATION OF GROUND WATER:

Under Constitution of India water is the matter of state list and all acts and bills regarding its use and monitoring lie with the state.

2.1 Maharashtra Ground Water Act 2009 (MGW Act 2009) is enacted to ensure sustainable, equitable and adequate supply of groundwater of prescribed quality, for various category of users through supply and demand management measures, protecting public drinking water sources and to establish the State Ground Water Authority and District level Authorities to manage and regulate the exploitation of Groundwater with community participation within the State of Maharashtra. Maharashtra Groundwater Rules 2009 needs to be notified

2.2 Central Ground Water Authority This Authority is constituted under Section 3 & 5 of Environment Protection Act, 1986 (EP Act, 1986) vide notification dated 14/01/1997 of MOEF, GoI. The Authority has been regulating Ground Water Development and Management by way of issuing 'No Objection Certificate' for ground water extraction to industries, infrastructure projects and Mining Projects etc., since 1999. These Guidelines are time to time modified and the latest Guidelines are notified on 24/09/2020 and amended on 29/03/2023. These guidelines are Pan India

applicable and at present these guidelines are applicable in 19 States / 2 Union Territories (including Maharashtra), where ground water Development and Management is not being regulated by the State Govt.

2.3 New State Legislation as per Central Government's Model State Legislation Recently Central Government issued model state ground water legislation. State of Maharashtra is considering the option of changing the state legislation by replacing new piece of state ground water legislation on the basis of suggestions of central government's model state ground water legislation. The process of new legislation is very lengthy process. Until the new piece of state ground water legislation enactment is completed and enforced and the old legislations are repealed there has to be simultaneous working of central and state legislation.

2.4 Groundwater Surveys and Development Agency (GSDA) is technical expert agency under the Water Supply and Sanitation Department of the Govt. of Maharashtra which carries out required technical studies related to the periodic status of groundwater availability, protecting the existing groundwater resources through technical assistance under Groundwater Act. GSDA is the only technical advisory body wherever required at all levels from Village to State Level.

### **3. INDEPENDENT AND SIMULTANEOUS WORKING OF CGWA GUIDELINES 2020 AND MAHARASHTRA GROUND WATER ACT 2009:**

Earlier MWRRA approached CGWA for handing over of CGWA to State Government. CGWA, via letter dated 6/10/2021 pointed out comparison of 23 points where suitable additions / modifications need to be incorporated in MGW Act 2009 and Rules then only handing over of CGWA is possible. Amendment in law and rules is lengthy and time consuming process. Till State Government carry out those additions / modifications in the Act and Rules, discussing the possibility of Independent and simultaneous working of CGWA Guidelines 2020 and Maharashtra Ground Water Act 2009.

3.1 Regulation of Ground water under CGWA Guidelines: Ground Water Regulation in Maharashtra is based on MGW Act 2009 whereas CGWA Regulation is based on Environment Protection (EP) Act, 1986. Central Government is empowered under EP Act 1986 for the purpose of protecting and improving the quality of environment and preventing, controlling and abating environmental pollution. Thus, CGWA Guidelines 2020 are mainly regulating Ground Water for preventing depletion of Ground Water by issuing No Objection Certificate (NOC) to Commercial Activities and Domestic use of Residential Apartment/Group Housing by establishing robust monitoring mechanism against unauthorized extractions, computation of environment compensation, etc. CGWA Guidelines do not regulate ground water depletion due to agriculture use and hence agriculture sector is exempted from NOC's due to large no. of users.

However, CGWA Guidelines 2020 states in Para 3 that, "*Regulation of Ground Water in agriculture sector through a 'Command and Control' strategy will prove to be an arduous task. Therefore, a participatory approach for sustainable ground water management would be more productive.*" MGW Act 2009 is mainly working in this area and the provisions covered for regulating commercial / domestic activities under CGWA guidelines 2020 are not covered in MGW Act, 2009.

3.2 Regulation of Ground water under in MGW Act 2009: MGW Act 2009 is regulating ground water through supply and demand management and with community participation for various categories of users and to establish State Ground Water Authority and District Level Authorities to manage and regulate exploitation of Ground Water.

3.3 Independent working areas of CGWA Guidelines 2020 and MGW Act 2009: Management and Development of Ground Water and preventing depletion of ground water is the common objective of CGWA Guidelines and MGW Act 2009. Discussion on working areas of CGWA guidelines 2020 and MGW Act 2009 is useful for deciding Simultaneous and independent working of both.

**Working area of CGWA Guidelines:**

Para no. 2, 4, and 6 of CGWA Guidelines 2020 are regulating and controlling the Ground Water Management and Development by way of issuance of NOC's and charging for following activities namely as per Para no.

- 2.0 Drinking and Domestic use of Ground Water in Residential Apartments, Group Housing Societies and Govt. Water Supply Agencies in Urban Area.
- 4.1 Industrial Use (inclusive of packaged drinking water)
- 4.2 Mining Projects
- 4.3 Infrastructure Projects
- 6.0 Bulk Water Supply / Water Supply by Tankers

Rates of ground water extraction and restoration charges are to be levied as stated in Para 5 for above activities. Also rates for, environmental compensation are to be levied as stated in Para 15. Provision for charging at various rates for non-compliance of NOC conditions are given in Para 16.

CGWA has appointed various authorities for implementation of CGWA guidelines as per Para 13 of the Guidelines. These include sub divisional Magistrate of each Revenue District / sub division as authorised officers, who have been delegated the necessary powers.

**Working area of MGW Act 2009:**

Sections 8, 21, 22, 23, 26, 27, 31, 32 and 35 of MGW Act 2009 are managing and regulating the exploitation of ground water with community participation and through supply and demand management measures. The above sections are namely;

- 8.0 Prohibition of drilling of deep-wells, withdrawal of ground water from existing deep-wells and provisions for levy of cess.
- 21. Prohibition of Construction of wells within certain limits for notified areas of public drinking water sources.
- 22. Prohibition of Extraction of Water from existing wells for a certain period.
- 23. Protection of drinking water sources against contamination.
- 26. Regulation of extraction of water from wells in water scarcity area.
- 27. Payment of Compensation for temporary closing down of wells in water scarcity areas.
- 31. Prohibit or limit the use of chemical fertilizers or pesticides etc.
- 32. Regulating construction of new well in the notified areas through Watershed Water Resources Committee (WWRC) constituted for that area under Section 29 of MGW Act 2009.
- 35. Regulation or prohibition of sand mining through WWRC of that area.

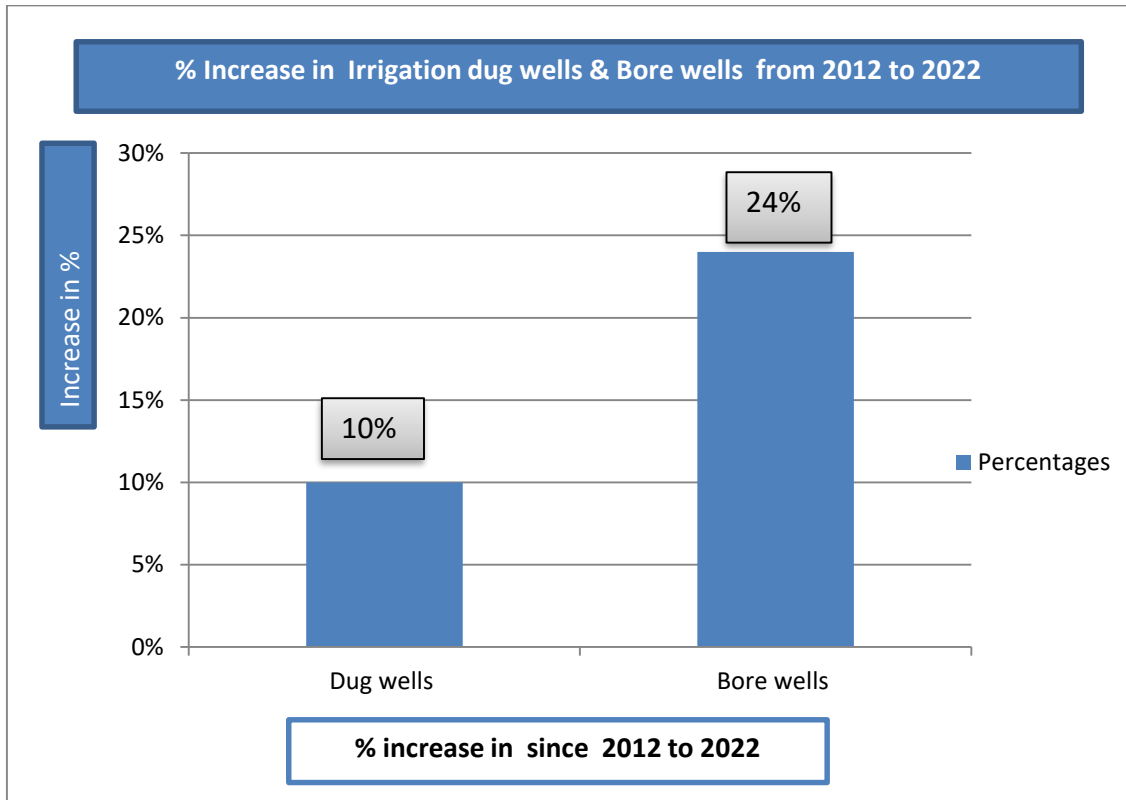
The regulation in above said sections is to be implemented on the basis of notification of areas as per Section 4 after ascertaining views of the users of ground water of the area.

**4. ALARMING FALL OF GROUND WATER LEVEL WHICH HIGHLIGHTS THE NEED OF EFFECTIVE LEGISLATION FOR CONSERVATION OF GROUND WATER:**

GSDA and Central Ground Water Board (CGWB) jointly prepare periodic report on the dynamic ground water resources of Maharashtra. After Comparison of such report for the year of 2012 and 2022 and considering GSDA report, 2022 on probable scarcity of drinking water and ground water, few important observations are as follows:

- 4.1. Number of Dug Wells and Bore Wells are increasing: Dug wells are increased from 19 lakhs to 20.82 lakhs i.e. by 10% and number of bore wells are increased from 2.05 lakhs to 3.56 lakhs i.e. by 24% in last 10 years. This is represented in the table and bar chart as follows:

Details	Dug wells	Bore wells
For the year 2012	19 Lakhs	2.82 Lakhs
For the year 2022	2.05 Lakhs	3.56 Lakhs
% of increase in wells since 2012 to 2022	10%	24%

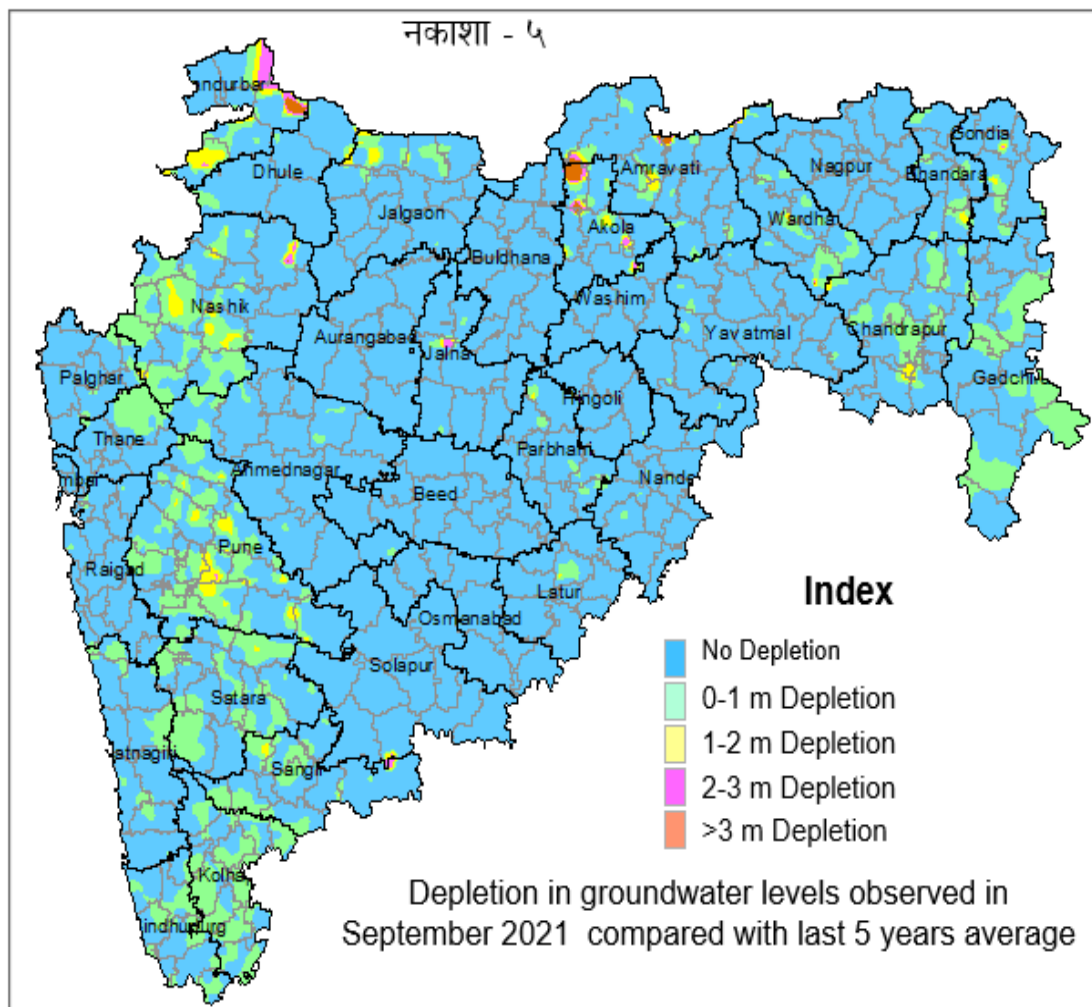


## 5. ALARMING INCREASE IN OVER EXPLOITED, CRITICAL AND SEMI CRITICAL TALUKAS:

GSDA and CGWB prepared report on dynamic ground water resources of Maharashtra for the year 2012 and 2022. In these reports out of 353 Talukas of Maharashtra, number of Over Exploited, Critical and Semi Critical (OCS) Talukas and Safe Talukas for the year 2012 and 2022 are listed in the reports respectively. The Comparison of reports about OCS and Safe Talukas is as listed in table below.

Sr. No.	Category	No. of Talukas for the year 2012	No. of Talukas for the year 2022	Percentage Increase in Talukas
1	Over Exploited	10	11	10%
2	Critical	2	7	250%
3	Semi Critical	16	62	287%
4	Safe	325	272	-16%

Map no. 5 of GSDA report, 2022 on probable scarcity of drinking water and ground water.



## 6. WATER MANAGEMENT PLAN AND TO KNOW ABOUT NUMBER OF WELLS, TO REGULATE NEW WELLS AND EXTRACTION OF GROUND WATER:

Water management plans are to be prepared by all State Ground Water Authorities / Organizations as given in preamble of CGWA Guidelines. MGW Act 2009 provides such management plans, Watershed wise in the form of Ground Water Use Plan (GWUP) and Crop Plans (CP) as per Section 10. Integrated Watershed Development and Management Plan (IWDMP) shall also to be prepared for each district by DWMC as per Section 19 in the participatory manner. These District wise IWDMP will be clubbed together to form IWDMP for the entire state as per Section 15 & 16.

6.1 **REGISTRATION OF WELLS OWNERS:** Under Section 7 registration of all owners of the wells in the state and Under Section 12 registration of drilling rig owners /operators in the state is to be carried out.

Institutional arrangement specified as per act for implementation of above said Water Management Plan is as follows;

**Village level:** Grampanchayat or Panchayat Samiti for non-notified areas and WWRC for notified areas.

**Urban Level:** Urban Local Bodies viz Nagarpalika / Nagar Parishad, Municipal Corporations.

**District Level:** District Authorities constituted as per Section 17 and District Watershed Management Committee (DWMC) constituted as per Section 18.

**State Level:** As per Section 3 of MGW Act 2009, (MWRRA) Maharashtra Water Resources Regulatory Authority, (which is constituted under Section 3 of MWRRA Act 2005) is appointed as State Ground Water Authority.

**Technical advisory Body:** GSDA is supposed to carry out technical functions as per Section 41 to 44 and is supposed to carry out necessary studies and supporting works entrusted by any of the above level authority or agency as per Section 45. GSDA will also provide technical advice required at all above said levels, rather it is mandatory to take such technical advice from GSDA.

**6.2 EXTRACTION OF GROUND WATER FOR COMMERCIAL ACTIVITIES REGULATED UNDER CGWA:** In state of Maharashtra less than 8% ground water is used for commercial activities which are regulated by CGWA guidelines by way of issuing NOC's. CGWA Guidelines exempted agriculture sector from obtaining NOC for ground water extraction. Whereas, MGW Act 2009 regulates agriculture sector which consumes around 92% of ground water.

**6.3 REGISTRATION OF DRILLING RIG OWNERS /OPERATORS:** All the drilling rig owners/operators are to be registered as per section 12 of MGW Act 2009 which is referred and used in Para 1.1 of CGWA Guidelines 2020. As CGWA guidelines 2020 are enforced throughout the state the Registration of Drilling Rigs and their data need to available on priority. As Section 12 of SGW Act 2009 says, Registration need to be carried out by GSDA, on such a term and conditions as prescribed in Rules. In absence of notified ruled registration of drilling rigs is not carried out. Considering the urgency, Basic information about the drilling rigs owners and operator may be registered without fees till the rules are notified. It is the responsibility of the state authority to monitor the registration of drilling rigs.

## **7. CONCLUSIONS AND SUGGESTIONS:**

There is alarming situations about depletion of ground water levels and increase in over exploited, critical and semi critical talukas. Maharashtra Ground Water Act, 2009 is enacted but to enforce them effectively there is a need of Maharashtra Ground Water Rules, 2009 to get notified which is hampering the conservation of ground water through state legislation. Considering lack of effective implementation of state legislations under Supreme Court's directions Central Ground Water Authority, 2020 is constituted. This CGWA is regulating extraction of ground water for commercial activities by issuing NOC's and enforcing stringent penalties and punishments for non-compliance of NOCs. CGWA is regulating commercial activities which are less than 10% of total ground water extraction.

CGWA, 2020 is Central legislation and clearly mentions about the registration of wells and rig owners and operators by the State legislation and State authority. As per above discussion in para 6, under section 7 of MGW Act, 2009, there is provision of registration of all owners of the well and under section 12 of MGW Act, 2009, there is provision of registration of drilling rig owners and operators. MGW Rules, 2009 are not notified therefore, the prescribed procedure for registration of well owners and drilling rig owners and operators is not available. Recently Central Government issued model state ground water legislation. State of Maharashtra is considering the option of changing the state legislation by replacing new piece of state ground water legislation on the basis of suggestions of central government's model state ground water legislation. The process of new legislation is very lengthy process. Until the new piece of state ground water legislation enactment is completed and enforced and the old legislations are repealed there has to be simultaneous working of central and state legislation.

State government may notify at least the relevant rules by way of government resolution relating to the registration of all well owners under section 7 of MGW Act, 2009 and registration of drilling rig owners and operators under section 12 of MGW Act, 2009. The effective implementation of present central and state legislation for conservation of ground water need to starts by knowing about existing number of wells/bore-wells and drilling of new wells/bore-wells by the way of registration of drilling rig owners and operators. This is the urgent need of effective implementation of legislations for managing and regulating ground water for the state of Maharashtra.