

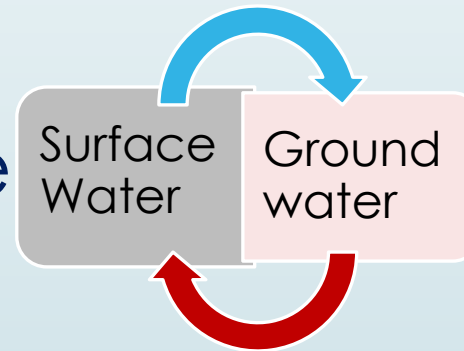
# Regulatory Aspects in urban groundwater: Legislation, Stipulations, & Compliances

Shashank Deshpande



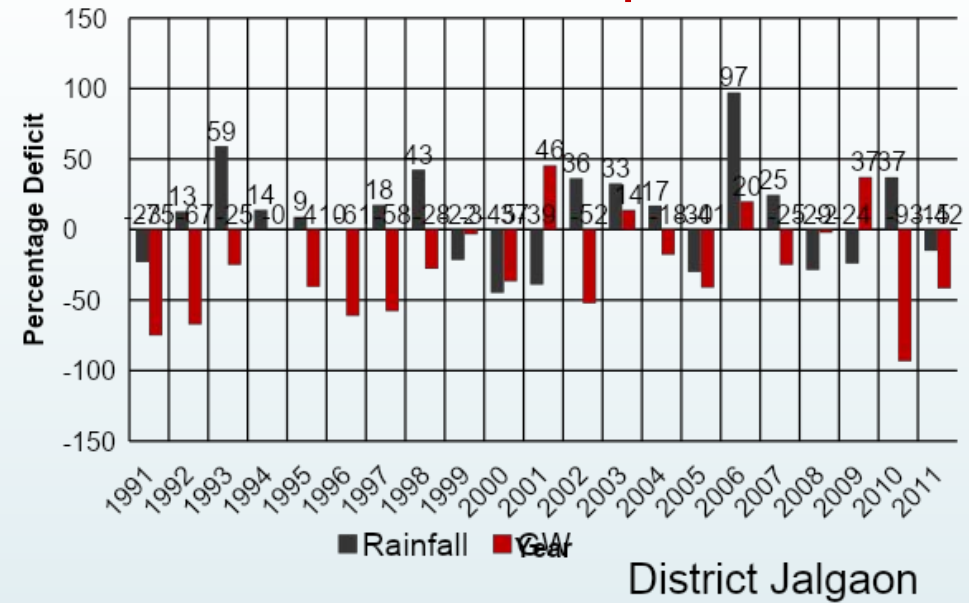
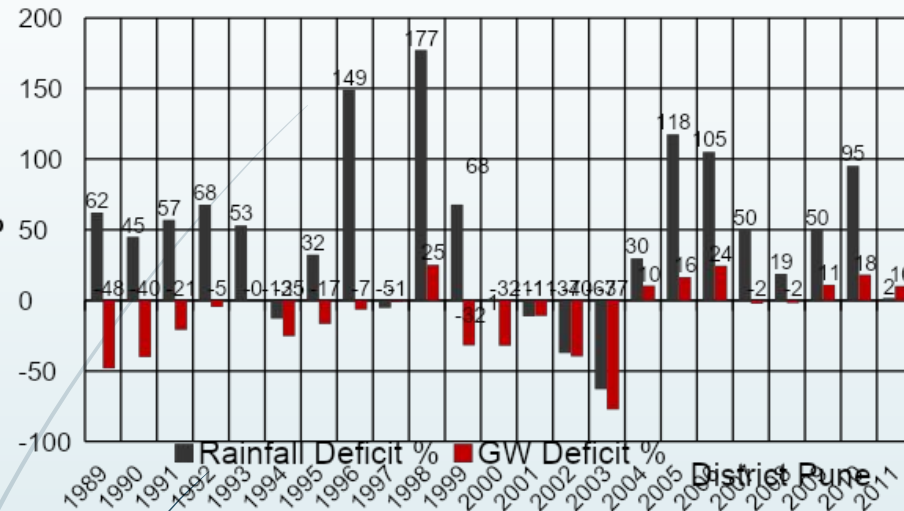
# Rain- Surface & Groundwater – Nature's Gift

- Surface (SW) and Ground Water (GW) - origin in rainfall on earth's surface.
- Interdependent and constitute two faces of the same coin.
- GW is not produced underground, it comes from rainfall & then SW.



- It's Nature's Gift for USE.
- Users of both SW & GW have to respect it and display wisdom in their actions on its usufruct right only.

# Rainfall & Groundwater Relationship



Explaining these factors, Mukherjee said, "Every year, the groundwater of an area is typically recharged by rainfall, particularly during the monsoon."

However, the process of subsurface recharge is very slow.

"Depending on the depth of the wells, these waters could have recharged hundreds and thousands of years ago. Further, the excess water from the rainfall and floods does not get recharged into groundwater because of the geology and physics of the areas," Mukherjee said.

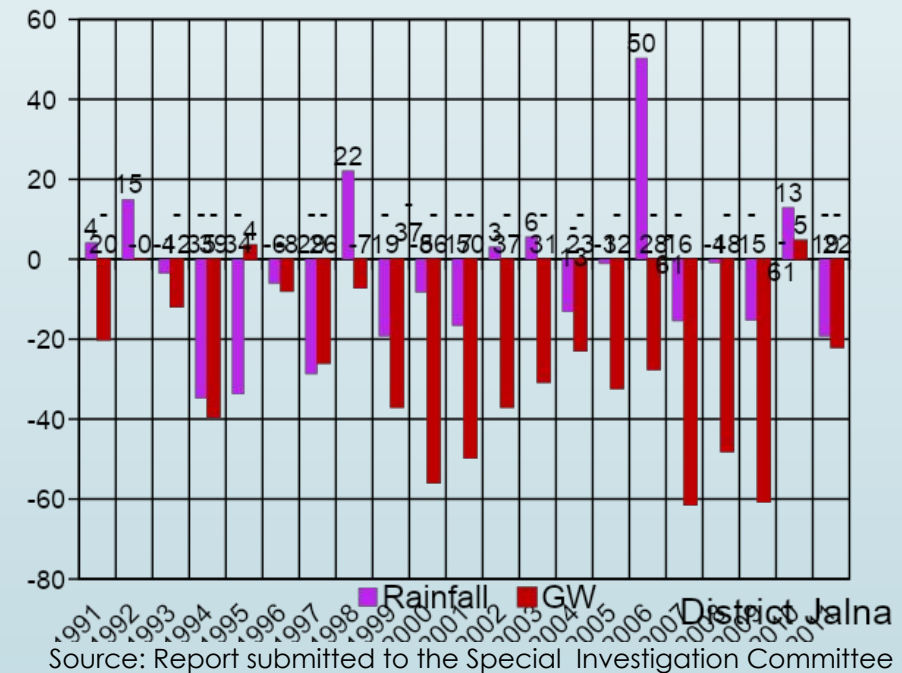
For example, groundwater in Kolkata or Patna gets recharged about a hundred kilometres away. Hence, in a human-time scale the groundwater we extract is theoretically a non-renewable resource, Mukherjee said.

There may be some good news though.

One-size-fits-all method for groundwater r...

Mukherjee attributed this to the implementation of ingenious groundwater management strategies in both public and private sectors.

Read more at: [http://timesofindia.indiatimes.com/articleshow/71094501.cms?utm\\_source=contentofinterest&utm\\_medium=text&utm\\_campaign=cppst](http://timesofindia.indiatimes.com/articleshow/71094501.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst)



Source: Report submitted to the Special Investigation Committee on Irrigation - 2012

# Right to Groundwater

- The right to groundwater in India is, as in many other legal cultures, seen as **following the right to land**.
- The Indian Easement Act, 1882 links **groundwater ownership to land ownership**.
- In the Act 'easement' is defined as *a right which the owner or occupier of certain land possesses, as such, for the beneficial enjoyment of that land to do and continue to do something, or to prevent and continue to prevent something from being done, in or upon or in respect of certain other land not his own.*

Usufructuary  
rights

# Constitutional Provisions

- The 1992 (73rd and 74th) amendments to the Constitution regarding Panchayats and Municipalities introduced the following entries in the schedules listing the subject-areas in which the State governments and legislatures may devolve functions to such bodies, so as to make them evolve as local self-governing institutions:

In the *Eighth Schedule (Part IX)* dealing with *Panchayats*, the subjects, “*Minor irrigation, Water management and Watershed development*”, “*drinking water*” and “*maintenance of community assets*” are listed.

In the *Twelfth Schedule (Part IX)* dealing with municipalities, the subjects “*water supply of domestic, industrial and commercial purposes*” is listed. Here it may be noted that ground water comes under minor irrigation, drinking water and water supply.

# Central Groundwater Authority - CGWA

- Central Ground Water Authority (CGWA) was constituted under sub-section (3) of Section 3 of the Environment (Protection) Act, 1986 for the purposes of regulation and control of ground water development and management in the country.
- The Authority is **engaged in various activities related to regulation of ground water development to ensure its long-term sustainability.**

Central Ground Water Authority was set up on 14th January, 1997 by the Ministry of Environment and Forests, Government of India in pursuance of an order of the Hon'ble Supreme Court of India dated 10th December, 1996 on a PIL

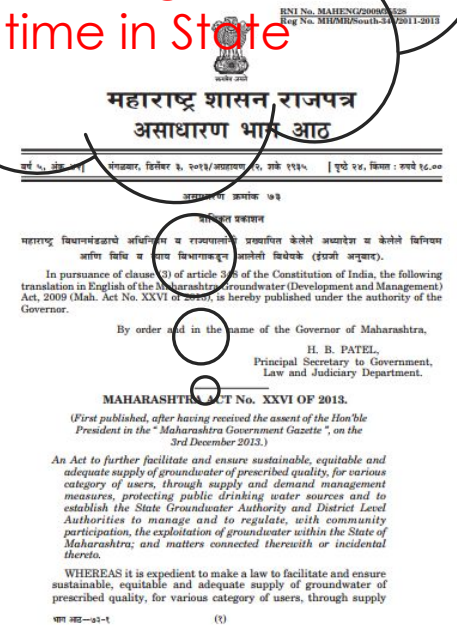
The authority is headed by a Chairman, has eight members and a member secretary  
**> 5 Million Wells**



# State Groundwater Authority - SGWA

- ❑ Maharashtra Groundwater (Development & Management) Act 2009 came into force from 1<sup>st</sup> June 2014
- ❑ Section 9 (7) In urban areas falling in notified areas, the **State Authority shall issue directives** to the concerned authorities or urban local bodies for ensuring construction of **appropriate rain water harvesting structures** in favorable or technically suitable residential, commercial, industrial and other premises having an area of **one hundred square metre or more within** the stipulated period failing which the urban local bodies may get such rain water harvesting structure constructed and recover the cost incurred along with a penalty from the occupants, in the prescribed manner.

We have two  
GW Authorities  
working at a  
time in State



<https://gsda.maharashtra.gov.in/GroundWaterAct.html>

# CGWA – Powers and Functions

- ❑ Exercise of powers under section 5 of the Environment (Protection) Act, 1986 for issuing directions and taking such measures in respect of all the matters referred to in sub-section(2) of section 3 of the said Act.
- ❑ To resort to penal provisions contained in sections 15 to 21 of the said Act.
- ❑ To regulate and control, management and development of ground water in the country and to issue necessary regulatory directions for the purpose.
- ❑ Exercise of powers under section 4 of the Environment (Protection) Act, 1986 for the appointment of officers.



# CGWA – Areas of Activities

- a) Regulation of ground water
  - i. Extraction of ground water development
  - ii. Construction of wells
  - iii. Registration of ground water abstraction structures
  - iv. Performance of business of drilling wells
  - v. Sale of ground water
- b) Conservation of ground Water
- c) Protection of ground water
  - i. Protection of ground water quality deterioration from disposal of urban and industrial wastes.
  - ii. Management of ground water in coastal aquifers.
  - iii. Clearance of solid & liquid waste disposals sites.
  - iv. Clearance for setting up of ground water based industries.
- d) Mass Awareness – Promotion of education & [Mass Awareness Programmes.](http://cgwb.gov.in/INCGW/Kamta%20Prasad%20report.pdf)

**Regulating ground water development and management by way of issuing 'No Objection Certificates' for ground water extraction to industries or infrastructure projects or Mining Projects etc in 22 States and 2 union territories**

# CGWA- NOC for GW Withdrawal

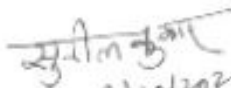
- NOC Required for Groundwater Withdrawal in all areas as per CGWA S.O. No. 3289(E) dated 24<sup>th</sup> Sept 2020 **except;**
  - Individual domestic consumers in both rural and urban areas for drinking water and domestic uses.
  - Rural drinking water supply schemes
  - Armed Forces Establishments and Central Armed Police Forces establishments in both rural and urban areas.
  - Agricultural activities.
  - Micro and small Enterprises drawing ground water less than 10 cum/day.

# CGWA & SGWA - Urban Notifications

- Civic body dealing with water supply shall ensure that there shall be no wastage or misuse of potable water tapped from underground and evolve compliance mechanism with coercive measures for violations.

## DIRECTIONS

1. On and from the date of this direction, 08 October 2020, the concerned Civic Bodies dealing with water supply network in the States/Union Territories, whether called as Jal Board, Jal Nigam, Water Works Department, Municipal Corporation, Municipal Council, Development Authority, Panchayat or by any other name, shall ensure that there shall be no wastage or misuse of potable water tapped from underground and evolve compliance mechanism with coercive measures for violations.
2. No person in the country shall waste or misuse potable water resources tapped from underground.

  
8/10/2020  
Member  
Central Ground Water Authority

उपविभागीय अधिकारी मावळ-मुळशी, उपविभाग पुणे  
पत्रा :- जीवन प्रशासकीय इमारत, २ रा. मजला, विधान भवन समोर, पुणे-०१  
दुरध्वनी क्रमांक :- ०२०- २६१२२२३९ ई-मेल:- sdomaval@gmail.com

बाधले क्र.१.महाराष्ट्र भूजल (विकास व व्यवस्थापन) अधिनियम, २००९  
२.महाराष्ट्र शासन, पाणीपुरवठा व स्वच्छता विभाग यांचेकडील राजपत्र दि.२६/०६/२०१५,  
३.जलदेवता सेवा अभियान, जलबिरादारी, पुणे यांचे निवेदन,  
४.मा.जिल्हाधिकारी सो (रोजगार हमी योजना शाखा) यांचेकडील पत्र क्र.पाणीटंचाई/कावि/१०४६/१९,  
दि.१०/०६/२०१९,  
५.मा.संविध, महाराष्ट्र जलसंपत्ती नियमन प्राधिकरण यांचेकडील पत्र दि.११/०३/२०२०,  
क्र.जीमिन/कावि/०१/२०२१ दि. १५/०१/२०२१

विषय:- पुणे शहराच्या हद्दीत बावधन गावठाणातील जिवंत झरा पिण्याच्या पाण्याचा स्त्रोत घोषित करणेबाबत.

आदेश  
ज्याअर्थी, जलदेवता सेवा अभियान, जलबिरादारी, पुणे यांनी मीजे बावधन गावठाणातील महाराष्ट्र भूजल (विकास व व्यवस्थापन) अधिनियम २००९ चे कलम २० अंतर्गत जिवंत झरा पिण्याच्या पाण्याचे स्त्रोत म्हणून घोषित करून नैसर्गिक झऱ्याचे संरक्षण करणेबाबत निवेदन दिलेले आहे. महाराष्ट्र जलसंपत्ती नियमन प्राधिकरण यांनी झरा पिण्याचा पाण्याचा स्त्रोत म्हणून घोषित करावा व झऱ्याचे संरक्षण करण्यासाठी आवश्यक ती कार्यवाही करणेबाबत कळविले आहे.


ज्याअर्थी, बाधले क्र.२ अन्यदे महाराष्ट्र शासन यांचेकडील राजपत्र क्र.असाधारण क्र.१६० दिनांक २६/६/२०१५ अन्यदे महाराष्ट्र भूजल (विकास व व्यवस्थापन) अधिनियम, २००९ मधील कलम १७ नुसार मावळ मुळशी तालुक्यातील उपविभागीय अधिकारी मावळ मुळशी यांना जिल्हा प्राधिकारी म्हणून नियुक्ती केली आहे.

ज्याअर्थी महाराष्ट्र भूजल (विकास व व्यवस्थापन) अधिनियम २००९ अन्यदे पाण्याचे स्त्रोत यांचे संरक्षण करणेकामी मार्गदर्शक सूचना निर्गमित करणेत आले आहे.

त्याअर्थी, मी उपविभागीय अधिकारी मावळ-मुळशी उपविभाग पुणे मला प्राप्त असलेल्या अधिकारवाचा वापर करून महाराष्ट्र भूजल (विकास व व्यवस्थापन) अधिनियम, २००९ मधील तरतुदीनुसार मीजे बावधन गावठाण येथील जिवंत झरा पिण्याचा पाण्याचा स्त्रोत म्हणून घोषित करित आहे. सदर पाण्याचा स्त्रोत हा पुणे महानगर पालिका यांचे कार्यक्षेत्रात असल्याने त्यांनी सदर पाण्याच्या स्त्रोताचे महाराष्ट्र भूजल (विकास व व्यवस्थापन) अधिनियम, २००९ मधील कलम २० ते २४ मधील तरतुदीनुसार तात्काळ उपाय योजना कराव्यात.

(सईम शिंदे)  
उपविभागीय अधिकारी  
मावळ-मुळशी, उपविभाग पुणे

प्रीति,  
कार्यकारी अभियंता, पाणी पुरवठा विभाग,  
पुणे महानगरपालिका पुणे.  
प्रत:-मा.संविध, महाराष्ट्र जलसंपत्ती नियमन प्राधिकरण पुणे यांकडे माहितीसाठी सादर.  
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प्रत:-जलदेवता सेवा अभियान, जलबिरादारी, पुणे.

  
उपविभागीय अधिकारी  
मावळ-मुळशी, उपविभाग पुणे.

# GW Abstraction / Restoration Charges

All residential apartments/ Group Housing Societies requiring water only for drinking/domestic use requiring No Objection Certificate would pay ground water abstraction charges as per rates

**Table 5.1 Ground Water Abstraction charges for Drinking & Domestic use.**

<b>Quantum of Groundwater withdrawal (m<sup>3</sup>/month)</b>	<b>Rate of ground water abstraction charges (Rs. per m<sup>3</sup>)</b>
0-25	No charge
26-50	1.00
>50	2.00

Government water supply agencies and Government infrastructure projects shall pay Ground water abstraction Charges @ Rs. 0.50 per m<sup>3</sup>.



# Packaged Drinking Water & other Industries & Infrastructure Projects

**Table 5.2 A: Rates of ground water abstraction charges for packaged drinking water units (Rs per m<sup>3</sup>)**

S.No.	Category of area ↓ Ground water use →	Quantum of ground water withdrawal				
		Up to 50m <sup>3</sup> /day	51 to <200 m <sup>3</sup> /day	200 to <1000 m <sup>3</sup> /day	1000 to <5000 m <sup>3</sup> /day	5000 m <sup>3</sup> /day and above
1.	Safe	1.00	3.00	5.00	8.00	10.00
2.	Semi-critical	2.00	5.00	10.00	15.00	20.00
3.	Critical	4.00	10.00	20.00	40.00	60.00

**Table 5.2 B: Rates of ground water restoration charges for packaged drinking water units (Rs per m<sup>3</sup>)**

S.No.	Category of area ↓ Ground water use →	Quantum of ground water withdrawal				
		Up to 50 m <sup>3</sup> /day	51 to <200 m <sup>3</sup> /day	200 to <1000 m <sup>3</sup> /day	1000 to <5000 m <sup>3</sup> /day	5000 m <sup>3</sup> /day and above
1.	Over-exploited (existing industries only)	8.00	20.00	40.00	80.00	120.00

**Table 5.3 A: Rates of Ground Water abstraction charges for other industries & infrastructure projects (Rs per m<sup>3</sup>)**

S.No.	Category of area ↓ Ground water use →	Quantum of ground water withdrawal			
		< 200 m <sup>3</sup> /day	200 to <1000 m <sup>3</sup> /day	1000 to <5000 m <sup>3</sup> /day	5000 m <sup>3</sup> /day and above
1.	Safe	1.00	2.00	3.00	5.00
2.	Semi-critical	2.00	3.00	5.00	8.00
3.	Critical	4.00	6.00	8.00	10.00

**Table 5.3 B: Rates of ground water restoration charges for other industries & infrastructure projects (Rs per m<sup>3</sup>)**

S.No.	Category of area ↓ Ground water use →	Quantum of ground water withdrawal			
		< 200 m <sup>3</sup> /day	200 to <1000 m <sup>3</sup> /day	1000 to <5000 m <sup>3</sup> /day	5000 m <sup>3</sup> /day and above
1.	Over-exploited (existing industries / new Industries as per the present Guidelines)	6.00	10.00	16.00	20.00



# Bulk Water Suppliers (Private Tankers)

All **private tankers** abstracting ground water and use it for supply as bulk water suppliers will now mandatorily seek No Objection Certificate for **ground water abstraction**.

The bulk water suppliers through tankers drawing ground water in safe, semi-critical and critical assessment units shall pay groundwater abstraction charges as per the **Table-6.1 A**.

The bulk water suppliers drawing ground water in overexploited assessment units shall pay the groundwater restoration charges as per the **Table-6.1 B**.

Table-6.1A: Groundwater abstraction charges for Bulk/Tanker water supplies	
Category	Rate per m <sup>3</sup> (in Rs.)
Safe	10
Semi Critical	20
Critical	25

Table-6.1B: Groundwater abstraction charges for Bulk/Tanker water supplies	
Category	Rate per m <sup>3</sup> (in Rs.)
Over Exploited	35

**All tankers will have to install GPS based system for their monitoring of movement/area of operation.**

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Table-6.1B: Groundwater abstraction charges for Bulk/Tanker water supplies	
Category	Rate per m <sup>3</sup> (in Rs.)
Over Exploited	35

**All tankers will have to install GPS based system for their monitoring of movement/area of operation.**

# Monitoring of Compliance of NOC conditions

- Suitable MIS will be developed for compliance monitoring.
- District Collectors/**Deputy Commissioners (DCs)** /District Magistrates (DMs) are authorized to take enforcement measures like sealing of unauthorized ground water abstraction structures, disconnection of electricity, launching of prosecution against those violating the No Objection Certificate conditions and taking action for **imposition of Environmental Compensation**.
- Technical officers of CGWB/ CGWA and **State groundwater organizations are authorized** to take actions with respect to monitoring and periodic inspections with the approval of competent authority.
- In case of violation of any of the No Objection Certificate conditions, the proponents shall be liable to pay the penalties as per **Section 16**.

# Penalty for non-compliance

S. No.	Items	Charges in Rs.
1	Non installation/faulty Digital water Flow meter with telemetry system.	200000
2	Non disclosure/ construction of additional groundwater abstraction structures a) Non-functional Structures. b) Defunct/Abandoned Note: Given rates are for unit non-functional/defunct/abandoned structures. This shall be multiplied with total such structures to arrive at consolidated penalty.	200000 100000
3	Reporting of fresh water zones as Brackish / Saline zones in application.	200000
4	Non Installation of Piezometer.	200000
5	Non Installation/faulty DWLR/Telemetry system	100000
6	Non Construction/Inadequate capacity of Recharge / Water conservation structures.	500000
7	Non maintenance of Recharge structures.	200000
8	Injection of treated/untreated water into the aquifer system. Note: In addition to penalty, the proponent shall bear the cost of aquifer remediation as per the provisions of Environment (Protection) Act, 1986.	1000000
9	Non Submission of Water level/Water quality Data.	50000
10	Non-maintenance of log book of daily withdrawal/non submission of Groundwater abstraction data.	50000
11	Non submission of photograph of recharge structure(s).	50000
12	Non Submission of Self Compliance report.	100000
13	Construction of groundwater abstraction structures by un authorized/unregistered Drilling Rigs (per structures).	100000
14	Non registration of water supply tankers.	500000
15	Submission of false information/ undertaking.	100000

# CGWA- Guidelines

- ❑ Water management plans shall be prepared by all the State Ground Water Authorities/ Organizations,
- ❑ For all Over-exploited, Critical and Semi-critical assessment units starting with Over-exploited units,
- ❑ Water management plans shall be reviewed and updated periodically.
- ❑ Water management plans, data on water availability and scarcity and policy framed in this regard shall be placed on the websites of Central Ground Water Authority/ State Ground Water Authority.



I have a habit of  
Saving do you??...

Recharging your  
mobile is easy,  
but  
Recharging your  
Life(Water)is ???



Thank you

desaprat2010@gmail.co  
m