7.1.4 Water Conservation Facilities

The water conservation facilities available at Dr. N.G.P. Arts and Science College are listed below:

S. No.	Particulars of Water Conservation Facilities	No. of Facilities	Supporting Documents Pp. No.
1	Rain water harvesting	3	2
2	Borewell /Open well recharge	3	3
3	Construction of tanks	3	4
4	Waste water recycling	1	5
5	Maintenance of water bodies and distribution system	7	6

25/2/22

(Prof. Dr. V. Rajendran)
Principal

1. RAIN WATER HARVESTING

Rain water harvesting is collection and storage of rain water that runs off from roof tops, parks, roads, open grounds, etc. This water runoff can be either stored or recharged into the ground water. Ground water levels are going down due to increased suction by bore wells and due to high consumption for domestic, agriculture and industrial use. Replenishing of ground water and water harvesting are important practices mandated by the government to enable recharging of Ground Water Resources. The Institution has constructed rain water harvesting structures in the campus to ensure the rainwater recharge and to improve the quality and level of ground water. The rain water coming from roof tops and run off within the campus are collected in three harvesting pits.

The Institution through various activities has also undertaken massive plantation drives across the campus, due to which the green area of the campus has increased.

Location of Rain Water Harvesting Pits

a) A1 Block (Arts Institution main Entrance)

b) C1 Block front side

c) B1 Block front side

2. BOREWELL

Bore water or groundwater is the most common source of water, assessed by drilling the ground and pumping water from the aquifers. The Institution campus depends on ground water for all its need. To compensate the daily need we had constructed 3 borewells with different depths as per the sub soil water position. The details of Borewell which are listed below:

S. No.	Location	Depth (in ft.)
1	Two-wheeler parking	500
2	Near the main gate	550
3	Infront of C1 Block	500

3. CONSTRUCTION OF TANKS

As the water crisis continues to become severe, there is a dire need of reform in water management system and revival of traditional systems. As a part of revival to traditional wisdom, in this institute we built two numbers of ground tanks and one recharge pit water tank to collect and store the rainwater for reuse on-site, rather than allowing it as run off. The details of overall collection tanks which are listed below:

S. No.	Location	Capacity (in liters)
1	B1 Block front side	54,824
2	Near vehicle parking	5,29,776
3	Academic Block	2,05,816

4. WASTE WATER RECYCLING

Wastewater recycling is a process used to remove contaminants from wastewater and convert it into an effluent that can be returned to the water cycle. Once returned to the water cycle, the effluent creates an acceptable impact on the environment or is reused for various purposes

In this Institution, separate hostels are constructed for boys and girls. Almost 40,000 approximation liters of water demand is necessary for the smooth functioning. Total water demands are being met from ground water through borewells and these are recharged with ground tanks and harvesting pits.

The waste water after treatment is proposed to be utilized effectively for gardening purpose. This will drastically reduce the usage of fresh water.

- **Liquid Waste Management-** the institution has a Sewage Treatment Plant that has a treatment capacity of around 1,00,000L/ Day including septic tank wastes
- Out of the 1,00,000 liters of waste 30,000 L/ Day is used in watering the greenery of the campus

5. MAINTENANCE OF WATER BODIES AND DISTRIBUTION SYSTEM

Water brought from the outside is stored in this tank and from here it powered to the overhead tanks of all the buildings from where the water is distributed to all the parts of the campus. In house water tank lorries are available through which distribution occurs inside the campus when needed.

- Each building of the institution does have a separate overhead tank that takes care of the water requirements of the institution
- All the laboratories and washrooms of the institution are connected with the overhead water tanks present
- Separate connections are made for water supplying the water doctors used for drinking purposes. The details of overhead water tanks which are listed below

Table showing the location and capacity of water tanks within the campus

S. No.	Location	Capacity (in liters)
1	A1 Block	35,200
2	A1 Block	33,960
3	B1 Block	43,044
4	B1 Block	5,000
5	C1 Block	24,214
6	C1 Block	39,583
7	C1 Block	5,000