


# SARAI ALAWARDI POND PROFILING

## PHYSICAL DESCRIPTION

Name of water body	SARAI ALAWADI
Location	Sarai alawardi village near STP, Block – Gurugram
Latitude & longitude	<b>28°50'02.14"N and 76°01'6.07"E.</b> 
Area of water body	3.91 Acre

Site view of the water body



Maximum depth

Mean depth

Type of water body

Natural

Current status

- Dry
- Encroached
- Polluted

Currently, the pond is **polluted** due to continuous **discharge of municipal waste and effluents from the factories.**

Source of water inflow

- Rainfall
- Runoff
- River
- Drain(covered)
- Open drains
- Waste water drain
- Treated waste water from STP
- Others (specify)

Source of water/ inflow in the pond is **rainwater runoff, municipal waste and industrial effluents.**

Is there any outflow from the water body. If any, describe

There is **connection of pond to main sewer line** in case water body overflows during monsoon.

Water level Changes (annual) in meters	There is approximately <b>1 to 1.5</b> meters of the fluctuation in pond water level during the summer and the winter seasons.
Are there any river/canal/major open drain passes within a radius of 5-10 km of the water body? If so, outline the nature of their flow and distance from the water body.	There is <b>no major drain</b> running by.
Groundwater level (Pre-monsoon and Post-monsoon)-	
Does the water dry out completely? <ul style="list-style-type: none"> <li>• Every year</li> <li>• During summer</li> <li>• Rarely</li> </ul>	During the summer season and when the rainfall is lower than the expected, pond <b>does not</b> gets dry out completely.
Catchment area of the water body in sq.km	
Land use of the catchment area <ul style="list-style-type: none"> <li>• Urban</li> <li>• Agriculture</li> <li>• Forest</li> <li>• Mining</li> </ul>	Catchment area of the water body is <b>urban village plain topography</b>
Total Population	774
Is the water body used by animals for drinking and bathing?	Yes
Type of flora fauna found around the water body	There is presence of mostly <b>kikar and neem</b> in surrounding areas.

Geo tagged image of water body



Ownership of land	MCG
Khasra number	36
Landscaping around water body	
Free space around water body	5500sqm
Can the water body be used as active urban/public space	Yes, the water body can be used as urban/public space.
Are there any construction activities going on near the water body	There's construction of STP going on near the water body

## FUNCTIONS OF WATER BODY

Is the water body used for : <ul style="list-style-type: none"> <li>• Drinking</li> <li>• Agriculture</li> <li>• Horticulture</li> <li>• Fisheries</li> <li>• Others</li> </ul>	None
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Functions of water body:

- Groundwater recharge
- Flood mitigation
- Tourism
- Support biodiversity
- Influence on microclimate
- Socio cultural
- Aesthetics

Currently, water body is used only for collection of waste generated from the village and also act as main source of **ground water recharge** and **flood mitigation**. It can also **support biodiversity, influence microclimate, socio-cultural** and **aesthetic**.

## MAJOR PROBLEMS

Major problems:

- Reduction in area
- Reduction in depth
- Encroachment
- Algal bloom
- Aquatic weeds
- Decline or loss of fisheries
- Eutrophication
- Organic pollution
- Toxic pollution

The major problem associated with the water body is **reduction in depth of the water, encroachment, reduction in area, organic pollution, eutrophication** and industrial effluent which cause the decline or **loss of aquatic life** in the water body.

## SOURCE OF POLLUTION

Does solid waste dumping takes place near the water body? (Organic/Non-Biodegradable)

Direct dumping of solid waste can be seen near the water body.

Solid waste disposal in water body (religious offering/idol immersion)

Since the pond is located inside the village and has continuous discharge of municipal waste it is **not used for any religious purpose**.

Source of pollution in water pollution

- Municipal waste
- Industrial effluent

Municipal waste, organic waste, Industrial effluent



- Organic waste
- Non biodegradable waste
- Solid waste
- In pond human activity
- Cattle wadding
- Agriculture runoff

Nutrient level in water body

- Negligible
- Low
- High
- Very high

Due to continuous discharge of the **municipal waste**, nutrient level i.e., **organic pollution** is very high in the water body



## REMEDIAL MEASURES

Are local communities aware of the problem of water body	<b>Yes</b>
Are local communities interested in the restoration	<b>yes</b>
Any measures taken in past to restore the water body	<b>No</b>
Are there active local conservation group or NGO interested/involvement in the water body	<b>No</b>

<p>Is it possible to source good quantum of rainwater/treated water for maintaining water level throughout the year</p>	<p>Not required</p>
<p>Restoration activities require:</p> <ul style="list-style-type: none"> <li>• Improvement of water quality by in-situ treatment</li> <li>• Diversion and treatment of sewage waste</li> <li>• Desiltation for removal of toxic sediments</li> <li>• Weed removal</li> <li>• Catchment treatment to check erosion</li> <li>• Confinement of pond land</li> </ul>	<ul style="list-style-type: none"> <li>• Improvement of water quality by in-situ treatment by diverting the sewage into the STP/ETP which can be built near the water body.</li> <li>• Catchment treatment to check erosion</li> <li>• Confinement of pond land</li> <li>• Desiltation for removal of toxic sediments</li> </ul>