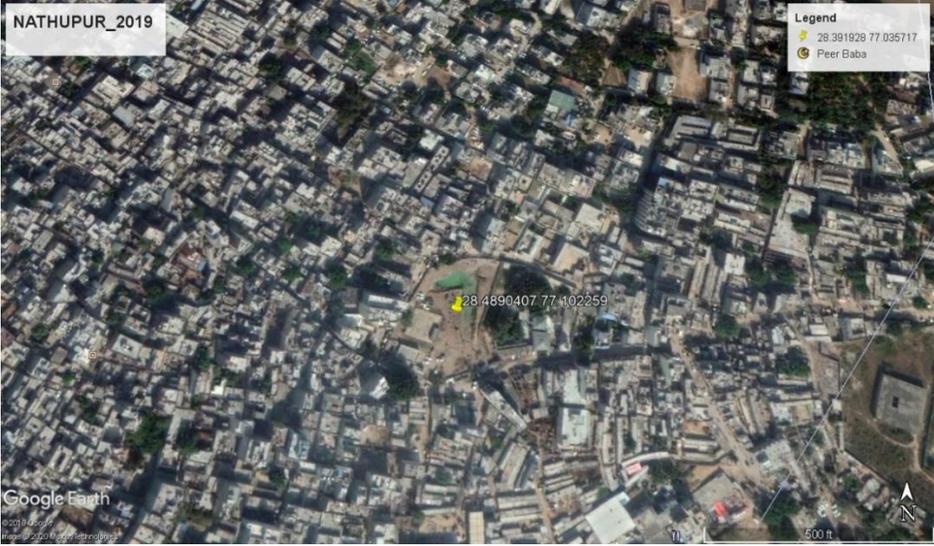


# NATHUPUR POND PROFILING

## PHYSICAL DESCRIPTION

Name of water body	NATHUPUR
Location	Nathupur behind temple, Block – Gurugram
Latitude & longitude	<b>28°48'90.407" N and 77°10'22.59" E.</b> 
Area of water body	3.28 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 **dumping of waste** from the village.

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**.

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

During rainy season there is **no outflow** of the water from the pond which goes into wetland beside it.

Water level Changes (annual) in meters

There is approximately **1 to 1.5** 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> .
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</b> having <b>plain topography</b>
Total Population	4266
Is the water body used by animals for drinking and bathing?	No
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	319
Landscaping around water body	<ul style="list-style-type: none"> <li>Surrounded by roads and residential settlement</li> </ul>
Free space around water body	500sqm
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 residential buildings going on nearby

## FUNCTIONS OF WATER BODY

<p>Is the water body used for :</p> <ul style="list-style-type: none"> <li>Drinking</li> <li>Agriculture</li> <li>Horticulture</li> <li>Fisheries</li> <li>Others</li> </ul>	None
<p>Functions of water body:</p> <ul style="list-style-type: none"> <li>Groundwater recharge</li> <li>Flood mitigation</li> <li>Tourism</li> <li>Support biodiversity</li> </ul>	<p>Currently, water body is used only for collection of waste generated from the village and also act as main source of <b>ground water recharge</b> and <b>flood mitigation</b>. It can also <b>support biodiversity, influence microclimate, socio-cultural and aesthetic.</b></p>

<ul style="list-style-type: none"> <li>Influence on microclimate</li> <li>Socio cultural</li> <li>Aesthetics</li> </ul>	
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## MAJOR PROBLEMS

<p>Major problems:</p> <ul style="list-style-type: none"> <li>Reduction in area</li> <li>Reduction in depth</li> <li>Encroachment</li> <li>Algal bloom</li> <li>Aquatic weeds</li> <li>Decline or loss of fisheries</li> <li>Eutrophication</li> <li>Organic pollution</li> <li>Toxic pollution</li> </ul>	<p>The major problem associated with the water body is <b>reduction in depth of the water, encroachment, reduction in area, organic pollution, eutrophication</b> and direct dumping of waste which cause the decline or <b>loss of aquatic life</b> in the water body.</p>
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## SOURCE OF POLLUTION

<p>Does solid waste dumping takes place near the water body? (Organic/Non-Biodegradable)</p>	<p>Direct dumping of solid waste can be seen near the water body.</p>
<p>Solid waste disposal in water body (religious offering/idol immersion)</p>	<p>Since the pond is located inside the village and has continuous discharge of municipal waste it is <b>not used for any religious purpose.</b></p>
<p>Source of pollution in water pollution</p> <ul style="list-style-type: none"> <li>Municipal waste</li> <li>Industrial effluent</li> <li>Organic waste</li> <li>Non biodegradable waste</li> <li>Solid waste</li> <li>In pond human activity</li> </ul>	<p>organic waste, Non biodegradable waste</p>

<ul style="list-style-type: none"> <li>• Cattle wadding</li> <li>• Agriculture runoff</li> </ul>	
<p>Nutrient level in water body</p> <ul style="list-style-type: none"> <li>• Negligible</li> <li>• Low</li> <li>• High</li> <li>• Very high</li> </ul>	<p>Nutrient level i.e., <b>eutrophication</b> and <b>organic pollution</b> is very high in the water body</p> 

## REMEDIAL MEASURES

<p>Are local communities aware of the problem of water body</p>	<p><b>Yes</b></p>
<p>Are local communities interested in the restoration</p>	<p><b>yes</b></p>
<p>Any measures taken in past to restore the water body</p>	<p><b>No</b></p>
<p>Are there active local conservation group or NGO interested/involved in the water body</p>	<p><b>No</b></p>
<p>Is it possible to source good quantum of rainwater/treated water for maintaining water level throughout the year</p>	<p>Yes, abetting residential society</p>
<p>Restoration activities require:</p> <ul style="list-style-type: none"> <li>• Improvement of water quality by in-situ treatment</li> </ul>	<ul style="list-style-type: none"> <li>• Improvement of water quality by in-situ treatment by diverting the sewage into the STP which can be built near the water body.</li> <li>• Catchment treatment to check erosion</li> <li>• Confinement of pond land</li> </ul>

- Diversion and treatment of sewage waste
- Desiltation for removal of toxic sediments
- Weed removal
- Catchment treatment to check erosion
- Confinement of pond land