



Citizens Initiative for saving water bodies in Hyderabad

VANISHING COMMONS

A STORY OF WATER BODIES OF HYDERABAD

Water Bodies of Hyderabad: Key Issues

Background

Hyderabad, once known as a City of lakes, may soon be water stressed. Water bodies of the city are shrinking in their size, degrading, and many-a-times “disappearing” entirely. While the official estimate of lakes in the City was more than 1000 - a recent estimate puts this number around 500. However reliable estimate of how many of the 500 lakes still exist is not available. As a result, negative consequences are evident in the continuing intensity of water crisis experienced by the citizens, which is only going to aggravate in the coming years. Below key issues that confront the city of lakes are noted.

Encroachment

Due to weak regulations, monitoring, enforcement of laws, water bodies are available for encroachment by the elite and powerful. This often has support of governance agencies. For example, several orders were passed legalizing conversion of a water body for construction. Land “generated”-- a decline in the number of lakes has added for other uses. The land “generated” by the vanishing lakes has been put to multiple uses, including, building real estate, recreational spaces such as parks, burial ground and so on. This process of “landisation” very often enjoys official sanction.

Pollution

Domestic sewerage, Industrial pollutants, and unregulated growth is causing pollution of both surface and groundwater. The outburst of urbanisation without commensurate development of drainage/sewerage on the one hand, and drinking water supplies on the other are compounding the problem. While the demand for water consumption shortfall is filled by tapping groundwater. The waste water that is generated finds its way in to the surface water bodies – rivers, nallas, and lakes. Most lakes have been converted into cesspools that contain not only pathogens of domestic sewerage, but also deadly cocktail of carcinogen elements carried through industrial effluents. STPs, and CETP handle negligible amount of liquid waste and that too ineffectively. Untreated wastewater (UWW) is extensively used for agriculture around the Musi river. This practice allows the pollutants to enter the food chain.

Integration of Fresh and Polluted Waters

Fresh, clean and pure rainwater combines with the polluted surface water bodies to increase the quantity of polluted water. This accentuates the quantity of polluted water that requires treatment. This inability to separate the storm water and the drainage water reduces the availability of fresh water on the one hand. At the same time it increases the quantity of polluted water with consequent requirements for additional treatment.

Catchment's Disruption

Water bodies in the city were scattered in the landscape in order to receive the storm water drainage from surrounding areas. Growing urbanization has led to obstructions in the path of water trying to reach the lowest point, i.e. the water body. This mechanism of annual rejuvenation of the water body has been disrupted and is partly responsible for drying of the lakes.

Urban Floods

The water bodies scattered across the city acted as natural bowls for holding water in case of excessive rainfall. Shrinkage of the water holding capacity due to "landisation" (noted above) has led to increased incidence of urban floods that are caused even during a short heavy downpour. Additionally, while urban floods were formerly around the banks of the rivers, destruction of the water bodies has led to disbursed urban floods in most low lying areas of the city. Incidence of urban flooding has become frequent and localized.

Droughts

A critical function of a water body during hot weather conditions is to recharge the groundwater, lower surrounding temperatures, and provide buffer of stock of water. Destruction of water bodies has intensified water scarcity. The situation is further aggravated by the pollution of the groundwater when polluted surface water seeps or permeates below thereby reducing availability of freshwater.

Legal Peculiarities

There is no legal recognition of the water surface in the laws of the state. What counts as legally valid in the court of law is the land underlying the water surface, which creates problems for legally safeguarding spread of water surface.

Institutional Fragmentation

Multiple government departments impinge on different aspects of the lake. For example, the embankment, the water surface, the maintenance is handled by separate different departments. Legal control is exercised by a separate agency -- the revenue department. This presents challenges for coordinated monitoring, regulating, maintenance, and accountability for the water body.

Piecemeal Approach to Hydrological Cycles

The planning of water sanitation of the city is entirely disconnected from the problematic of urban water bodies. Such a conceptualization abstracts from the natural hydrological cycles that emphasizes inherent connectivity between natural water availability and its

utilization by the urban community. Planning, policy, and projects for urban water sanitation are executed independent of strategic approach to protection of water bodies.

Violation of Knowledge Commons

Wisdom accumulated by experiential learning on the water commons is being lost. The system of interconnected water bodies in the city was established with a conscious objective of arresting water at a local level, and to allow surplus water to drain in to the subsequent water body and so on -- ultimately reaching the river. Such an arrangement not only prevented floods at the local level, but also allowed water bodies to be recharged to their full capacity. The latter ensured water security during dry months. This was a novel mechanism to provide an insurance against both droughts and floods. The social wisdom that was manifested in these time tested measures is on its way to destruction.

Inequity and Privatization

The destruction of water bodies is accompanied by private appropriation of the public commons thereby excluding access to these public resources by the ordinary citizens. Secondly, the excluded are more vulnerable to risks of water scarcity and urban floods.

Accountability and Apathy

Of the governance structure remains appalling. Violation of laws for protection of water bodies is seldom punished. Very often such violation aided, abetted, and condoned by the governing agencies. Finally, the governance agencies very often directly contribute to destruction of the water bodies.

Private Citizen Fallibility

Absence of a regulatory mechanism for protection of water bodies encourages / allows abuse a water body with impunity. Habituated individuals modes of public behavior are a serious impediment are major cause for damaging water bodies.

Lake Protection Committee (LPC) 2010

LPC is the most recent initiative at an institutional level established in 2010 under pressure from the judiciary. It had so far held three meetings with little consequence for ground level action.

By

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For

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HYDERABAD: A CITY OF LAKES

Hyderabad once famous for over 900 lakes is losing substantial number of water bodies every year due to pollution of lake waters and excessive real estate in lake beds. There are now only six major lakes that are spread over 25 ha. Rest of the lakes are shrinking and fast becoming ponds or extinct. Below we note a few cases that highlight the process by which the lakes are being destroyed.

The city of Hyderabad is home to three interlinked lakes, namely, *Jamali Kunta*, *Shah Hatem Talab*, and *Langar House Talab*, and they all predate the nearby Medieval Golconda Fort. These lakes abut moat surrounding *Naya Quila* and are slowly vanishing. These lakes are part of an intricately built irrigation system with various connecting tunnels, water hauzes, and so on. Over time however these lakes are getting obliterated. Further, livelihoods of many are affected negatively with the destruction of the lakes. See sketch on the back page. Below we summarize some of the key issues at each of the lakes.

Jamali Kunta: In recent decades this lake has been shrunk to a pond and rendered dysfunctional. What surprises many is that Greater Hyderabad Municipal Corporation (GHMC) – an urban local body that is responsible for City’s administration and management was dumping wastes prior to 2000. As a result recharge of groundwater in that area, flood protection capacity of the water body, and long-term water security for the local inhabitants have been severely compromised. The High Court of Andhra Pradesh state had ordered stay in activities in and around Naya Quila, reversing some of damages caused by the Hyderabad Golf Association (HGA) to the moat and its surroundings. However, violations of the High Court orders are frequently occurring.

Jamali Kunta was leased to Hyderabad Golf Association (HGA) for its “reclamation” and development as a golf course in the year 2002. HGA presently manages this “lake,” which is reduced to a few puddles of water and a golf course. Water draining outlets have been constructed to prevent flooding of the Golf course at the expense of water conservation.

One consequence of this process has been that publicly accessible spaces have become “privately controlled lands.” HGA allows entry to “*Jamali Kunta*” only to members of the association. Currently the cost of HGA membership fee is more than rupees seven lakhs. However, only a little over rupees fifteen thousand is paid by bureaucrats seeking membership of HGA. Fee structure of HGA is beyond the means of most citizenry of the City. We next detail the status of *Shah Hatem Talab*.

Shah Hatem Talab: Unlike *Jamali Kunta*, this is an active lake with an islet. As per the latest revenue records it is spread over 76 acres, which had an initial spread of more than 100 acres. The lake has shrunk in its spread primarily due to encroachments by individuals and organizations, who have been abetted by negligent government authorities. Here we note three instances that point to gross negligence and complicity of local government authorities. In 2009 a spillway to remove excess water to prevent flooding was initiated, although only a year earlier ASI had installed two 1200mm diameter pipes to address potential flooding. Further, work on the spillway is not based on a scientific study, and also violates the ASI Act 1954. Although the project has been

discontinued under severe pressure from civil society organizations, it is yet to be abandoned officially. Notwithstanding these violations, the moat is being filled up by dumping waste materials and thereby destroying this system of flood protection. Similarly, the island in the lake has been leased to HGA for development of tourism and culture, although credentials of HGA in this regard are ambiguous. HGA in contravention of the ASI Act, constructed a wall enclosing the lake, located its offices, and allows parking of heavy machinery by a private company on the island. All of the above noted violations at *Shah Hatem Talab* seem premeditated -- possibly to create land for connecting the golf course from *Jamali Kunta*.

Langar House Talab: This third lake is part of the larger irrigation system and is located within the perimeter of the fort. This lake is also part of a natural system that purifies flowing water whose effectiveness is threatened if this lake is connected to the adjacent golf course grounds. *Langar House Talab* is not entirely degraded at this time and urgent measures to protect the lake are required. Once the lake is appropriated by HGA the fate of the lake may resemble that of *Jamali Kunta* lake. Further, vulnerability of people that depend on this lake for their agriculture and fishing activities can be minimized. A prolonged neglect of this lake may destroy it, and perhaps create conditions for promoting other uses of the land.

The above experience highlights the danger to a critical public commons such as the water bodies. This presents serious danger to the survival of the City.

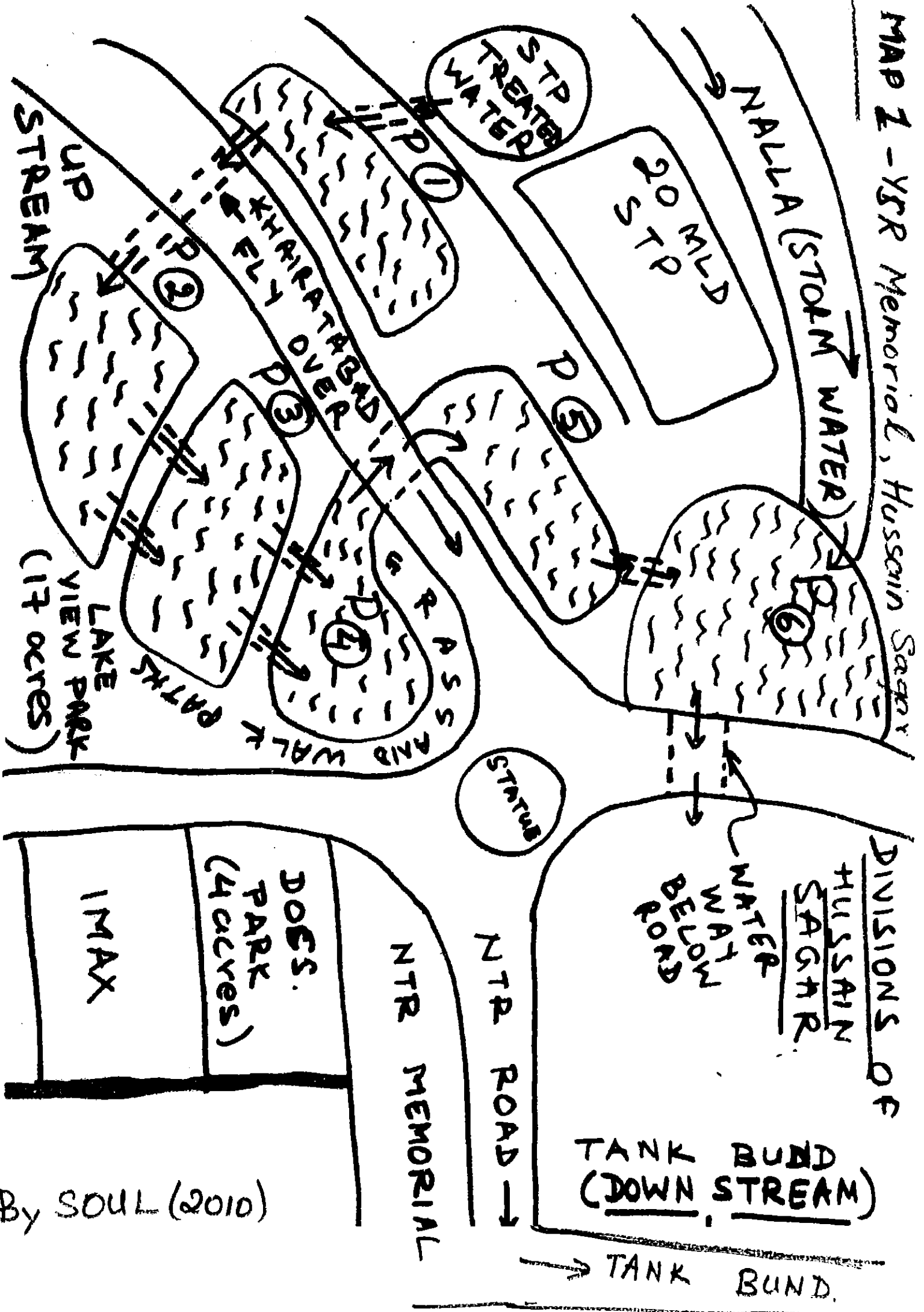
Hussain Sagar

Hussain Sagar is one of the prominent human made lakes situated in the city of Hyderabad. The lake was constructed in 1562 on a tributary of Musi River that predates founding of Hyderabad city in 1591. The bund of this lake connects two cities – Hyderabad and Secunderabad. In 1891 a slow sand filter was setup in Narayanaguda and the lake was used to provide drinking water. Perhaps the first source of water supply to Hyderabad was Hussain Sagar Lake. The first piped protected water supply to the City was also started from this lake and the old pipelines are still functional. The lake is an ecological asset because it charges groundwater in areas surrounding it. Until about 1930 the lake met drinking water needs of Hyderabad. Water from this lake was used for irrigation as well as for drinking purposes for over 350 years.

During the past five decades or so a continuous inflow of untreated domestic sewerage and effluents from nearby industrial zone has polluted and severely degraded the lake. Encroachments by public and private agencies along the embankment of the lake to promote commercial centers, and ecotourism activities have shrunk this lake. Presently the size of this lake is reduced to about one-fourth of its original water spread of over 1660 ha. The rate of decline of this lake has perhaps altered in recent years, primarily due to initiatives of concerned citizenry. For instance, several individuals and NGOs have filed Public Interest Litigation (PIL) cases seeking implementation of measures to protect the lake.

*By SOUL, Jan. 2011 for
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MAP 1 - YSR Memorial, Hussain Sagar



By SOUL (2010)

MINISTER'S ROAD
HUSSAIN SAGGAR, HYD.

STP
NEW

FILING

TEMPLE

DOC PARK

STP

INDIRA
Statue

NECKLACE ROAD

FOOD COURT

STP CONSTRUCTION INSIDE LAKE

SALUB

HUSSAIN
SAGGAR

LUMBINI
PARK

DOC
PARK

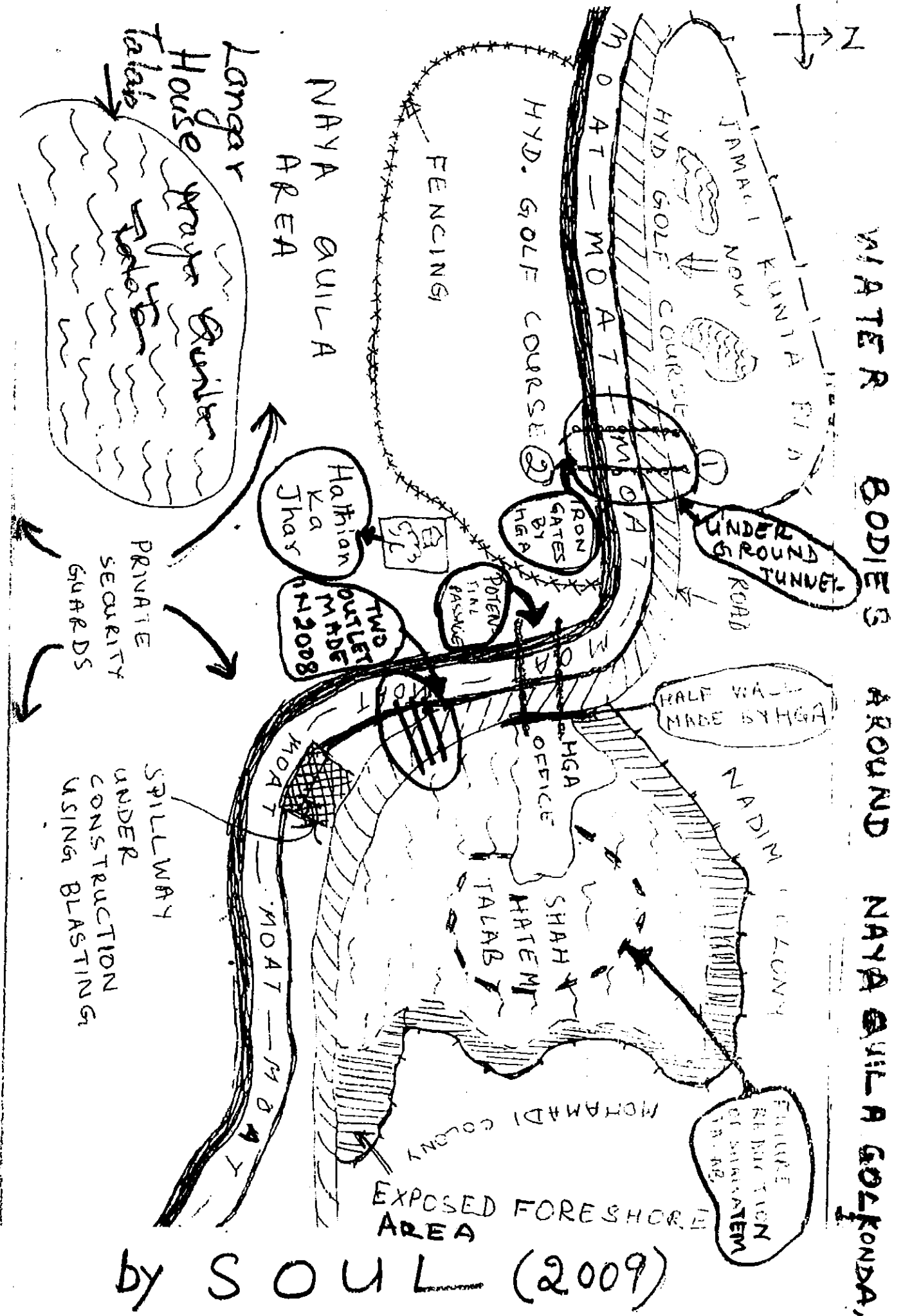
NTR
PARK

SECRETARIA
RIAT.



B1
Soul
(2011)

MAP 2



by SOUL (2009)

WATER BODIES AROUND NAYA QUILA GOLKONDA,

