

Action Plan for Son Beel- Priority V

1 BASIC INFORMATION ABOUT THE STRETCH

Son Beel also called as Shon Bill is one of the largest lakes of Southern Assam's Karimganj district. The most amazing thing about Son Beel is that it becomes a farm land for rice cultivation during winter till March and then the land fills with water and becomes a lake. The less depth of the lake makes it overflow during rainy season and the water meets Kushira River through Kakra River and flows to Bangladesh. The inlet and outlets of Son Beel is River Shingla that originates in Manipur. Son Beel can be easily reached from Karimganj which is just 43 km away.

The co-ordinates (in Latitude and Longitude) of the site are 24°41'15"N 92°26'35"E.

1.1 Basic river stretch/ length:

The Beel is having a length of 12.5Km and width of 3.9KM.

1.2 Major towns located on the bank between the stretches including population, water consumption details:

Swastipur, Dargarbond, Mahamadpur, Ghilatikar, Anandapur, Nayagram, Khagail Part – I, II & III, Singua, Eraligol, Deodhar, Maizbazargool, Sontoshpur, Sonbil Part – III, Saraspur T.E, Bairabnagar, Rakeshnagar, Konabagargool, Adarkona Part - I, II, III & IV, Singla reserve forest. Population : 1 Lakh to 2 Lakh.

1.3 Identified industrial estates/ areas.

There are no Industrial Estate within 500 metres from the beel.

1.4 Stretch of river perennial or non perennial/ flow available/ water uses in the stretch

Perennial. The water of the Bheel resides during winter months. The land is then used for agricultural activity. Water usage mainly includes fishing activities, Washing, household activities, river bed agriculture, irrigation, etc

2 WATER QUALITY OF RIVER STRETCH/ DRAINS CONTRIBUTING POLLUTION/ GROUND WATER

2.1 Drains contributing to pollution

No waste water generating drains fall into the Son Beel.

2.2 Latest water quality and current as per assessment targeted

Surface as well as ground water test has been carried out at Son Beel at different locations during January, February, March, April 2019. Five samples for surface water and three samples for ground water has been collected and tested for various

parameters like pH, BOD, COD, Total Coliform and Fecal Coliform etc., These tests has been carried out for selection of process for sewage treatment. The Summary of Test results are as follows:

Sl. No.	Parameter	Location	SON BEEL WATER AT KARIMGANJ			
		Latitude	24.690584			
		Longitude	92.427554			
		Sample Code	3804			
		Date of Sampling	24-01-2019	25-02-2019	26-03-2019	24-04-2019
		Unit	Results	Results	Results	Results
1	pH		7.3	7.3	6.8	7.4
2	BOD	mg/l	4	3.2	3.4	4
3	COD	mg/l	11.2	16.4	9.6	9.6
4	Fecal Coliform	MPN/ 100ml	360	360	730	360
5	Total Coliform	MPN/ 100ml	910	910	1500	910

2.3 Characteristics of the river and the major drains

The beel is perennial in nature with sufficient water all through the year.

2.4 Flow details of the polluted river stretch

Discharge has been measured at the inlet at culvert location and outlet at lock gate of the Beel and it is around 0.60 m³/sec and 0.45 m³/sec respectively.

2.5 Characteristics of the major drains contributing to pollution

No waste water generating major drains fall into the Son Beel.

2.6 Ground water quality in the polluted river stretch

The ground water is slightly acidic in nature. The soil being clayey in nature. The presence of high amount of dissolved solids are found in the bheel water.

2.7 Health status of the public in the catchment of polluted river stretch

As per discussions with the Health Department, no major water borne diseases were found in the population along the polluted river water stretch.

3 INVENTORY OF SOURCES OF POLLUTION AND GAPS IDENTIFICATON

3.1 Municipal Sources/ Sewage Management

3.1.1 Sewage generation from the village located on the banks of the polluted Beel

There is no dedicated sewerage network for collection of sewage generated from every household.

3.1.2 No. of sewage treatment plants present and treatment capacity, actual sewage treatment and the gaps in treatment

Null

3.1.3 No. of STPs proposed and capacities

Not Applicable.

3.1.4 Interception and diversion of drains/ in situ treatment given

No waste water generating drains fall into the Son Beel.

3.2 Drainage System/ sewerage network present/ proposed

Presently in karimganj district, there is no separate sewerage network.

3.3 Industrial Pollution control

3.3.1 No. of industries-category RED or water polluting/ small scale

No major red or water polluting industries are present in the vicinity of Sonbeel.

3.3.2 Industries without consents/ authorization

Nil

3.3.3 No of directions issued to industries

Not Applicable

3.3.4 Total water consumption and waste water generation by the industries

Not Applicable

3.3.5 No of industries having captive ETPs and the treatment capacities

Not Applicable

3.3.6 No of industries are members of the CETPs

Not Applicable

3.3.7 No of CETPs existing in the catchment of the polluted river stretch and the treatment capacities

Not Applicable

3.3.8 OCEMS installation status by industries

Not Applicable

3.3.9 Gaps in treatment of industrial effluent

Nil

3.3.10 Present/ proposed CETP capacity/ member units

Not Applicable

4. Identification of major sources required to be controlled based on pollution load

4.1 Waste management status

4.1.1 Industrial waste management

Nil

4.1.2 Bio-medical waste management

No Health Care Facilities exists near the stretches . BMW generated from clinical laboratories are located far away from the banks of the beel. Bio- Medical Waste generated by these clinical laboratories are managed through individual handling & management practices as per the provision of BMW Management rules, 2016.

4.1.3 Solid waste management

Garbage generated from individual household are handled as per the guidelines of Swachh Bharat Mission & SWM Rules,2016.

4.1.4 Gaps identified in waste management

- Lack of community awareness
- Proper segregation of waste at source
- Insufficient no of secondary collection system
- Lack of scientific sanitary landfill.

4.1.5 Proposed actions for solid waste, industrial waste and bio-medical waste management

There should be proper segregation & collection of solid wastes at sources. Action to be initiated so that the industrial & BMW are not mixed together with any other solid wastes.

5 Any other Information

5.1 Remedial plans for control of ground water contamination

Proposal to remove silt and sludge from the bed of the Beel and replacing with natural soil will reduce the contamination to the ground water.

5.2 Remedial plans for health impacts in the catchment of polluted river stretch

Proposal to remove silt and sludge from the bed of the Beel will improve the water quality as a result the problems of foul smell will be mitigated in the surrounding area of the Beel.

5.3 Identified organizations responsible for preparation and execution of the action plans

Local body (Municipal body) will be responsible for the preparation and execution of the action plan.

5.4 Monitoring mechanism proposed for implementation of action plans

Local body will be the parent body for implementation of the following action plans through its various agencies as mentioned below,

Type	Action Plan	Responsible Authority
Beel Conservation/ Sewage Management	Cleaning of Beel	Karimganj Municipal Body
Solid Waste Management	City wide proper management of solid waste along scientific disposal landfill site	Karimganj Municipal Body

5.5 Public mass awareness etc.

Public awareness campaign for proper solid waste management shall be undertaken by local body. Public shall be sensitized on good solid waste management practice through social media, print media, electronic media etc.

6 Time Targeted Management Plan

The plan for polluted Son Beel may be implemented in a time bound manner by fragmenting activities as:

- a. Cleaning of Son Beel (Period of implementation - 12 months)
- b. Assessment of water quality of the Beel (monthly basis).
- c. Management of solid waste (to be done by local body continuously)

The action plan shall be implemented within a time frame of two years with an estimated budget of Rs. 80 Lakhs.


Members of River Rejuvenation Committee (RRC)



Secretary to the Govt of Assam
Environment & Forest Department



Secretary to the Govt of Assam
Urban Development Department



Commissioner
Industries and Commerce Assam



Member Secretary
Pollution Control Board Assam