SUJAL
ENVIROTECH PVT LTD

An Integrated WATER resource Planning and Design services

HSGF

- HYDROLOGY STUDY
- SURFACEWATER ASSESMENT
- GROUNDWATER STUDY
- FLOOD ANALYSIS

DESIGN BASED ON INFORMATION FROM GEOGRAPHICAL INFORMATION SYSTEM

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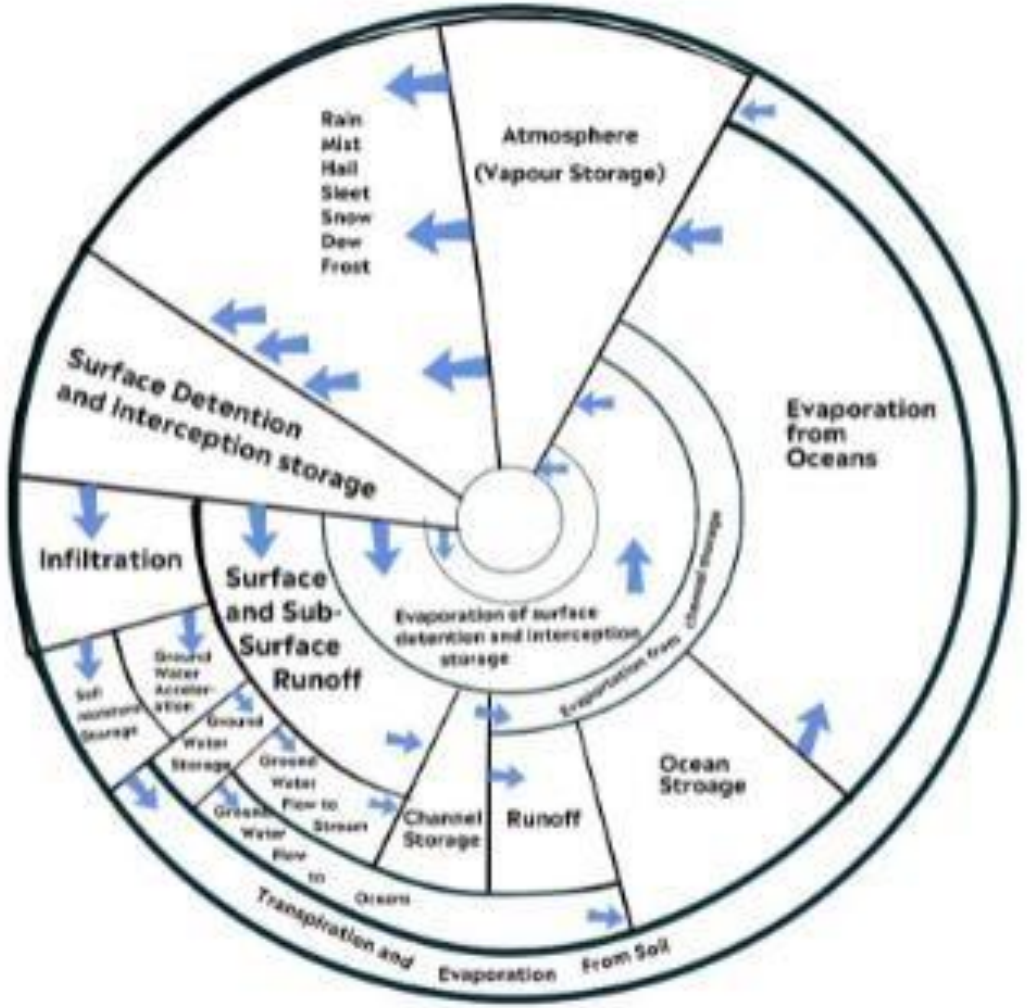
DESIGN PHILOSOPHY

We bring the balance in **WATERELEMENT** on the earth by implementing **HSGF** initiative within the defined **SPACE** by integrating various water verticals through logical and meaningful design approach

Our exclusive **HSGF** initiative deals with the scientific and technical study for an integrated water resource planning and design service, where we study **HYDROLOGY** of the land to assess **SURFACEWATER** for an effective enhancement of **GROUNDWATER** reserves by **FLOOD ANALYSIS** to complete the hydraulic circle with an intention to restore the WATERELEMENT element in Indian ecology



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EXISTING DESIGN APPROACH - UNBALANCED WATER STUDY

HYDROLOGY STUDY	SURFACEWATER ASSESSMENT	GROUNDWATER STUDY	FLOOD ANALYSIS
retain	surface water balancing	rainwater harvesting	peak depth
effective catchment	wastewater treatment	ground water study	water logging
stream mappings	reuse	borewell	peak velocity
site hydrology	repair	recharge	safe development levels
monitoring points	resource	groundwater balancing	high flood levels
stormwater drainage	reduce	recover	
	recycle		
	water metering		

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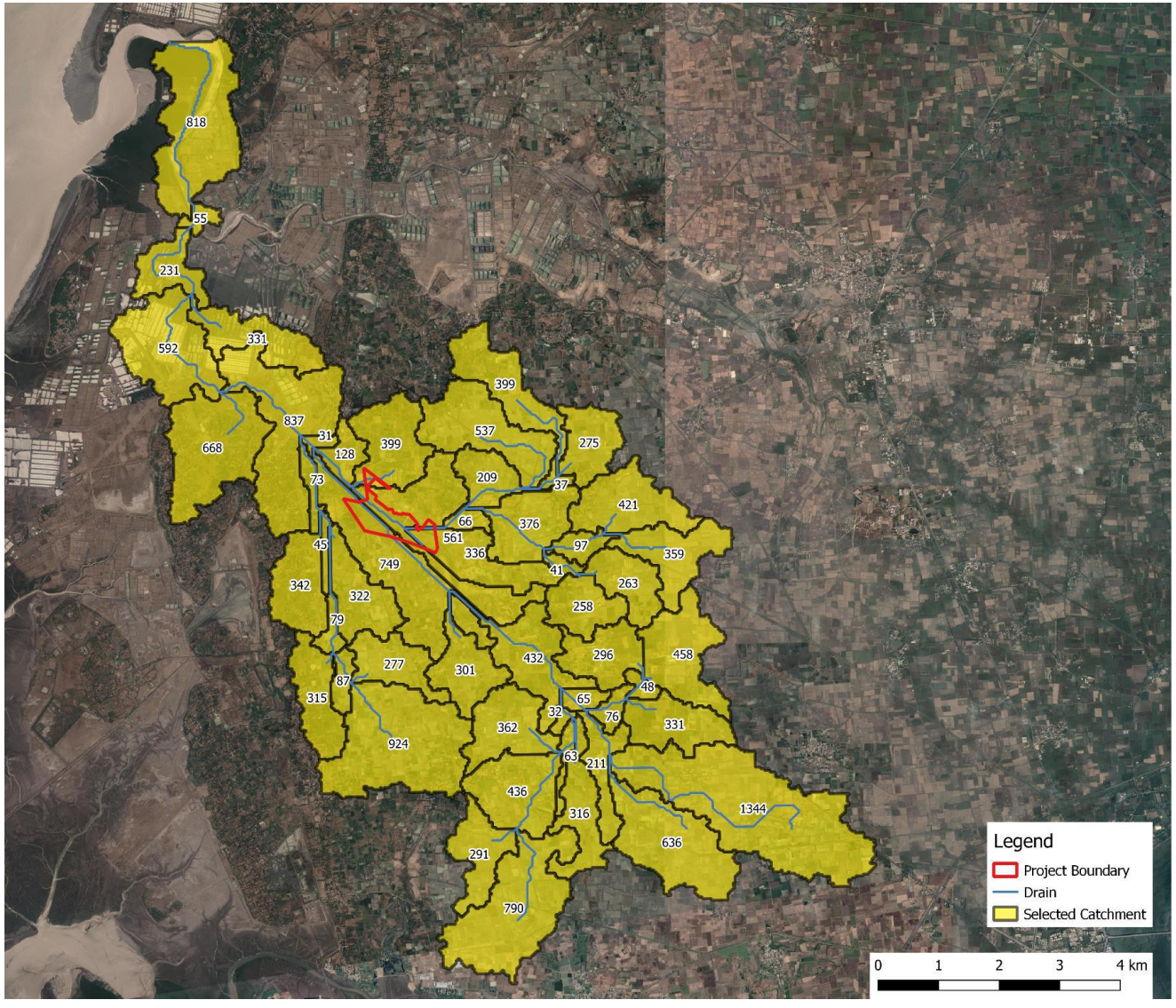
PROPOSED APPROACH –AN INTEGRATED WATER RESOURCE PLANNING AND DESIGN

SITE HYDROLOGY
REUSE
RECHARGE
REDUCE
RETAIN
REFILL
SURFACE WATER BALANCE
BOREWELL
RAINWATER HARVESTING
WASTE-WATER TREATMENT
REGULATE
GROUND WATER STUDY
REPAIR
RESOURCE
STOMWATER DRAINAGE NETWORK
REFORM
RECOVER
WATER AUDIT
GROUND WATER BALANCE
WATER METER
WATER LOGGING
FLOOD STUDY
RECYCLE
REPLENISH
EFFECTIVE CATCHMENT
SAFE DEVELOPMENT LEVEL

HYDROLOGY STUDY

HYDROLOGY STUDY

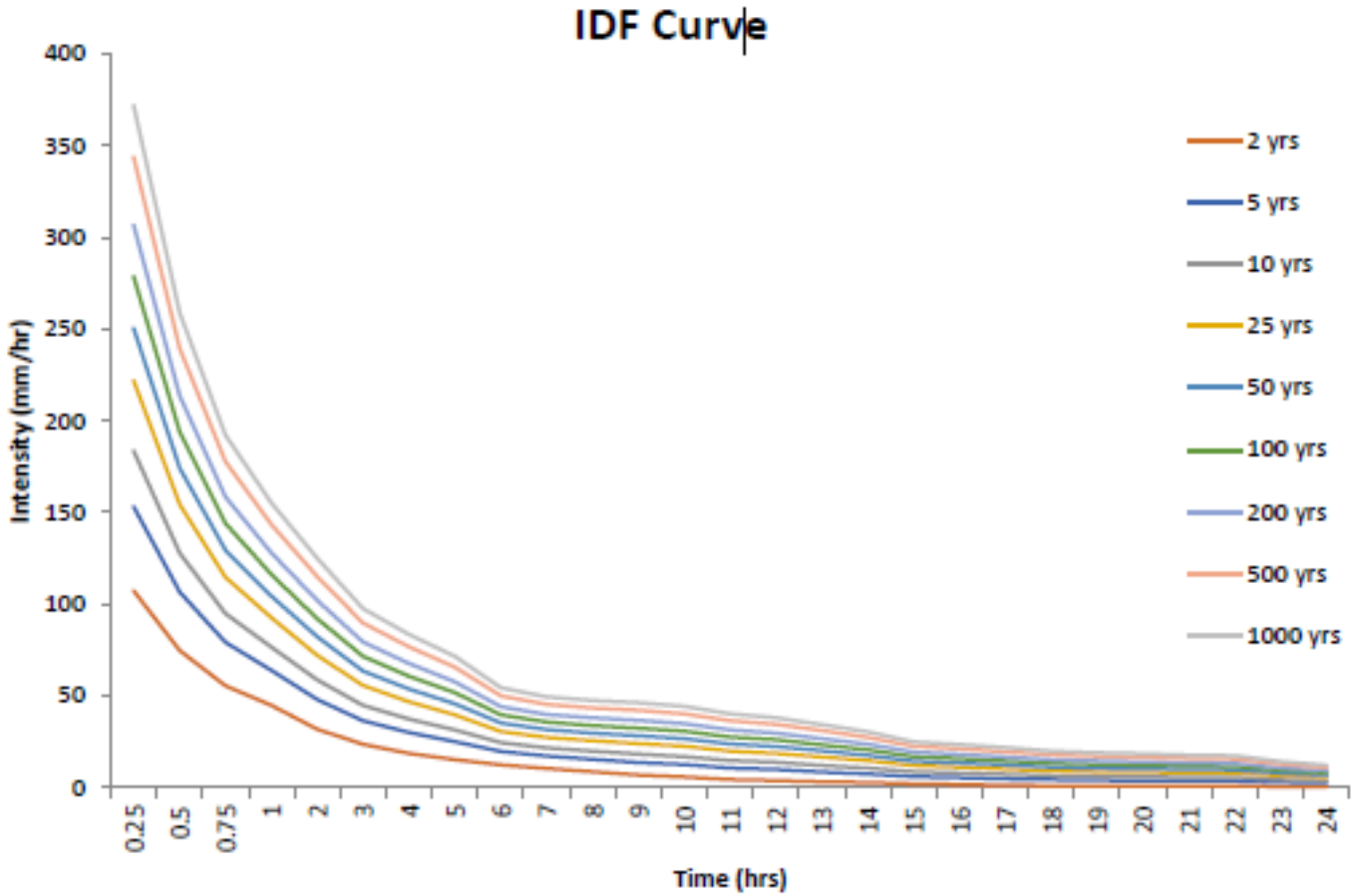
1. Watershed Study
2. Land use and Land cover mapping
3. Catchment Delineation
4. Flow Path Assessment
5. External Water Flow & Volume
6. Rainfall & Runoff Calculation



SURFACE WATER ASSESSMENT

SURFACE WATER ASSESSMENT

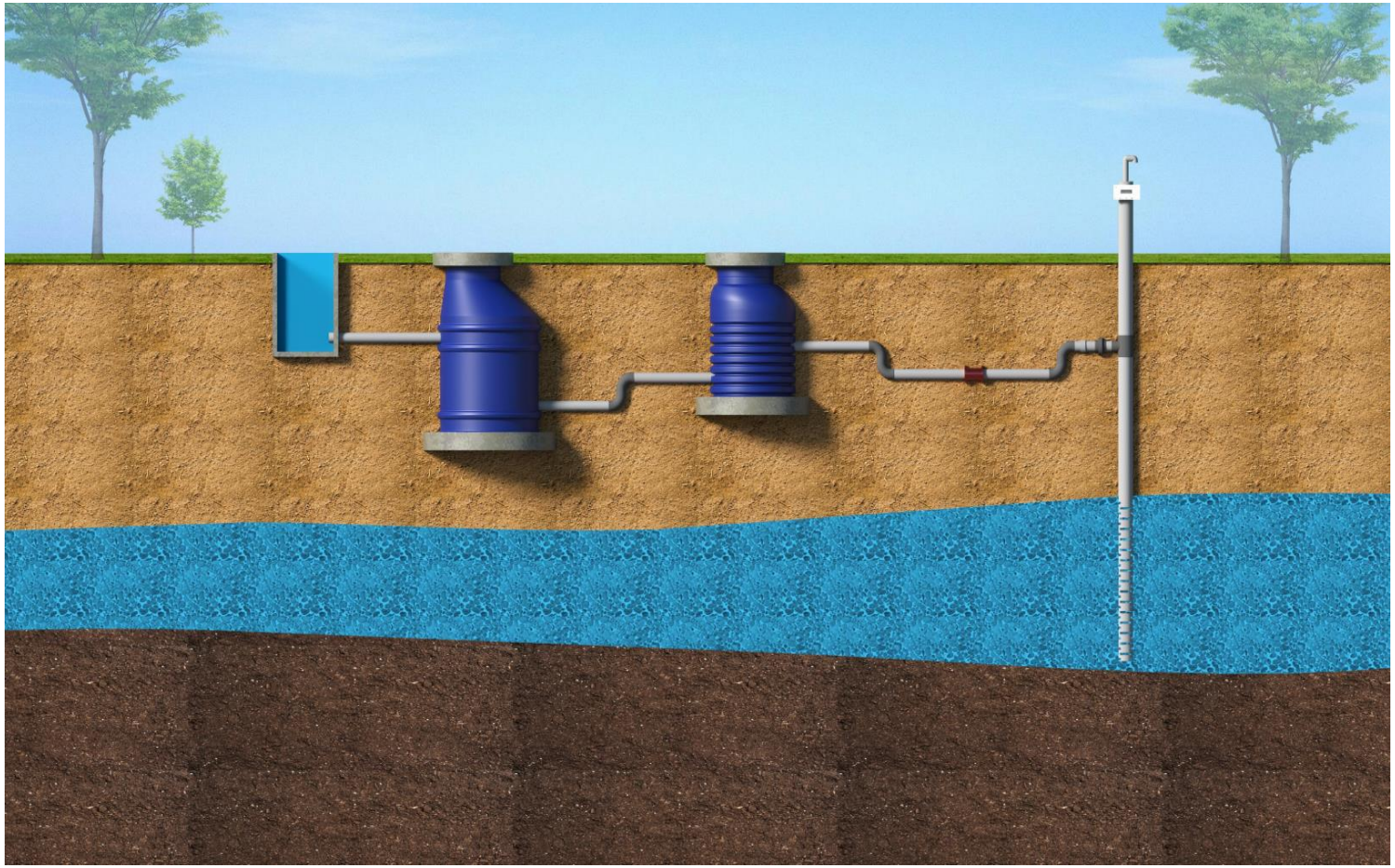
1. Estimation of internal water flow and volume
2. Water demand calculation
3. Evaluation of water system
4. Intensity –Duration –Frequency (IDF) Curve
5. Surface water balance
6. Integrated water resource planning and management recommendations
7. Storm water drainage network design



GROUNDWATER STUDY

GROUNDWATER STUDY

1. Geophysical survey
2. Magnetic survey
3. Hydrogeological study
4. Groundwater modelling
5. Groundwater balance
6. Rainwater harvesting system design



FLOOD ANALYSIS

FLOOD ANALYSIS

1. Pre / Post development model study
2. Development of hydraulic model
3. Flood hazard mapping
4. Define safe development levels
5. Peak-flow depth
6. Peak-flow velocity
7. Water-surface elevation
8. Flood mitigation suggestions