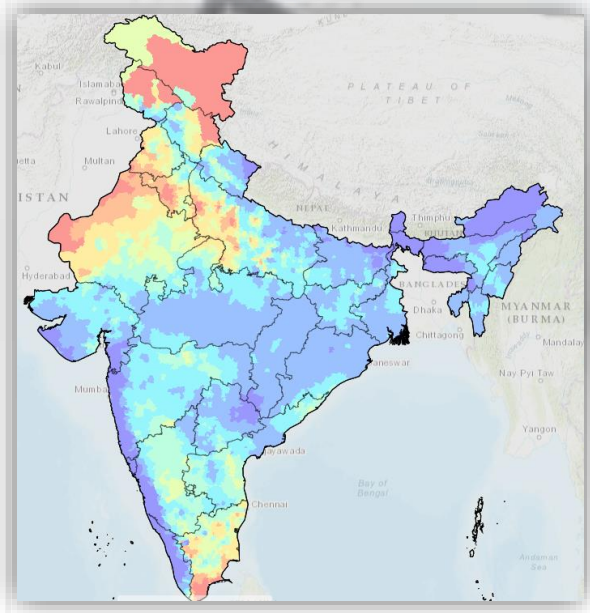




सत्यमेव जयते



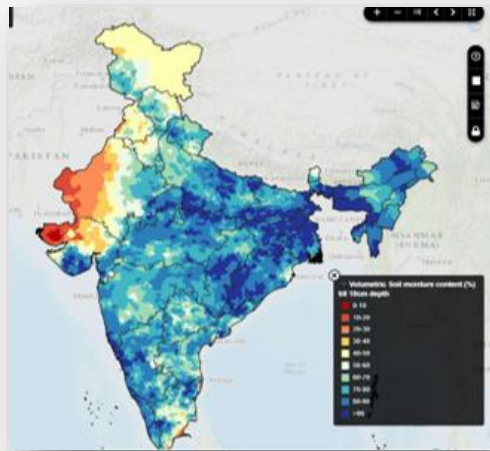
India – WRIS
India
Water
Resources
Information
System



CONCEPTUALIZATION



A *'Single Window Solution'* for comprehensive, authoritative and consistent data & information of India's *water resources* in a standardized national GIS framework for planning, development and management of water resources in the country.



Empowering citizens with **accurate, adequate and contemporary information** on the state of water resources of the country and enlightened public involvement in **water management decisions**.



OBJECTIVE



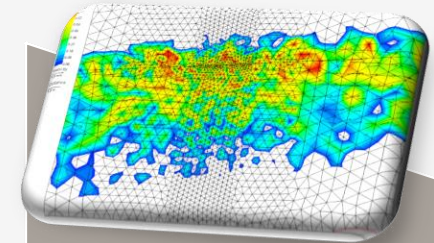
To collect available data from varied sources, generate new database, organize in standardized GIS format and provide scalable web-enabled information system.



To provide tools to create value added maps by way of multi-layer stacking of GIS database so as to provide integrated view to the water resources scenarios.



To provide easier, faster access, sharing of nationally consistent and authentic water resources data through a centralized database and application server to all water resources departments / organizations.



To provide foundation for advanced modeling and Spatial Decision Support Systems (SDSS) including automated data collection system.





SYSTEM OVERVIEW

India-WRIS

Water Data

Dynamic Real time
Semi-Dynamic
Static data

WRIS Tools

Input Data Builders

Utilities

Value Added Products

WIMS

Surface Water and
Ground water Data



Manual / Telemetry data management



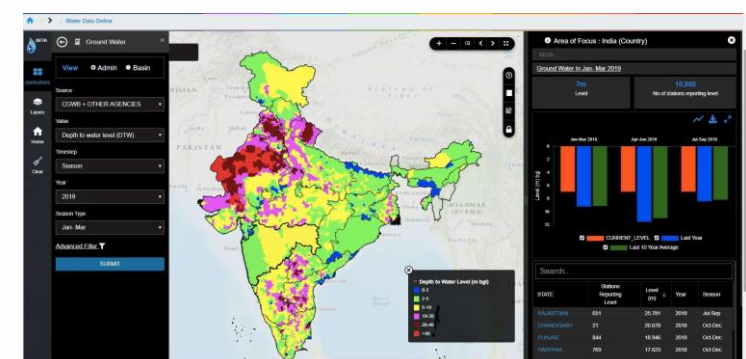
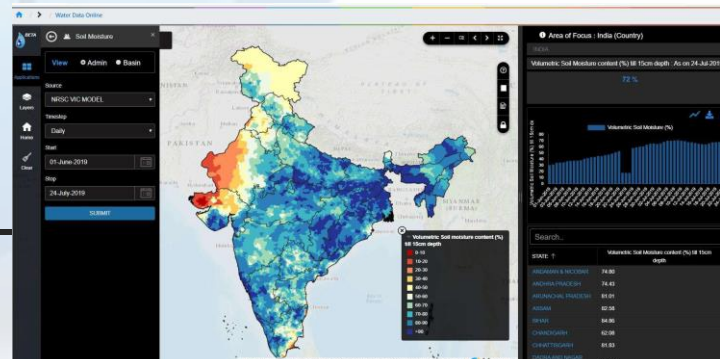
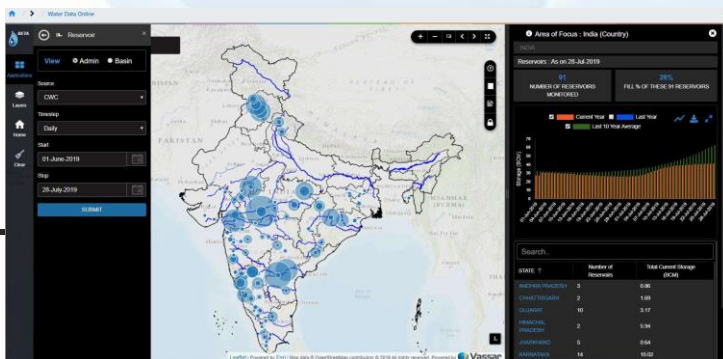
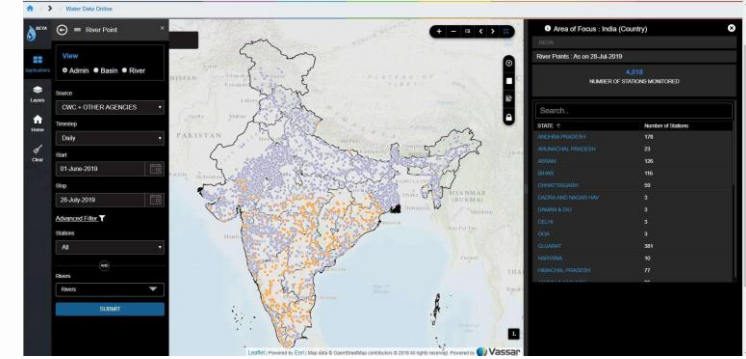
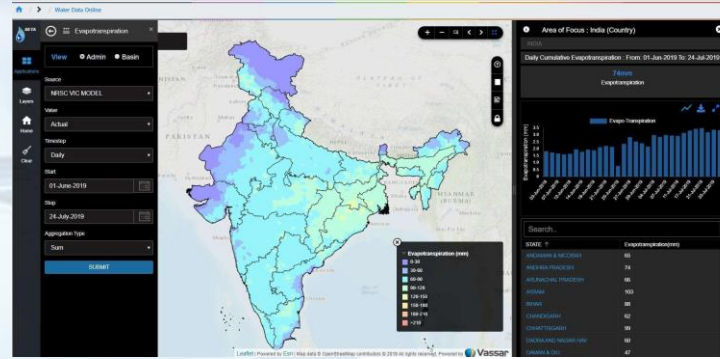
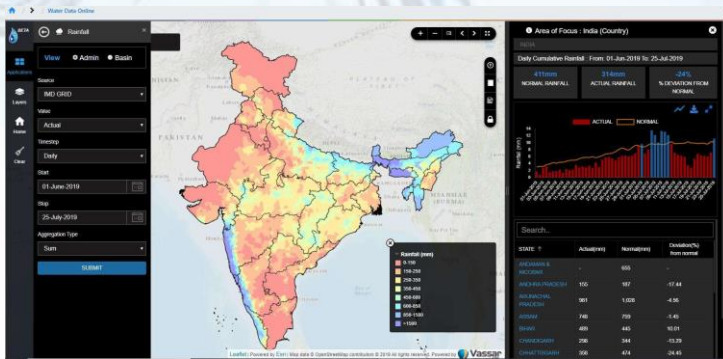
India – Water Resources Information System

India-WRIS



Water Data – Dynamic Data Modules

- Historical and real-time data of **Rainfall, Reservoir, River Point, Evapo-transpiration, Soil Moisture, surface water quality, Ground water and Groundwater quality.**
- Powerful visualizations like heat maps, tables, charts to view and analyze the data at different administrative and hydrological hierarchies





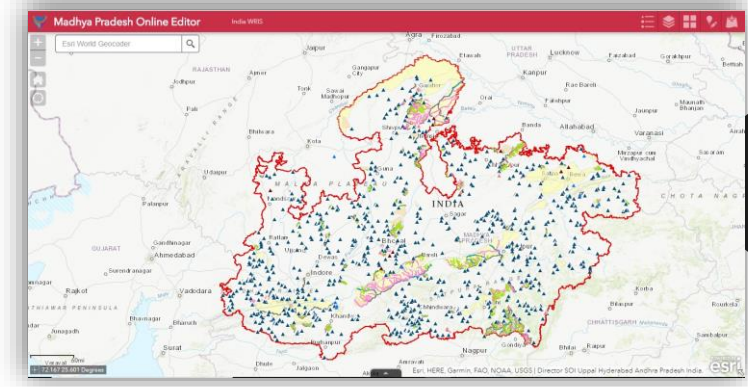
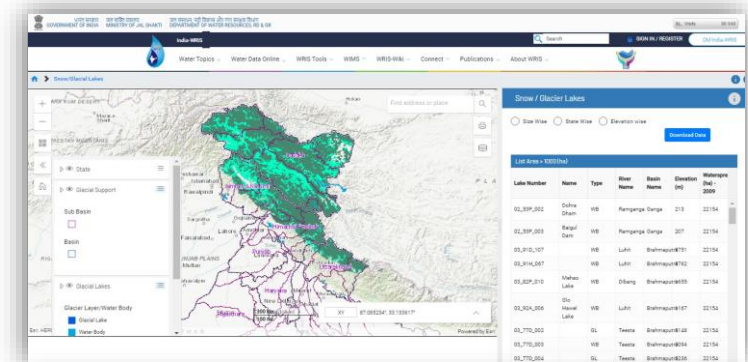
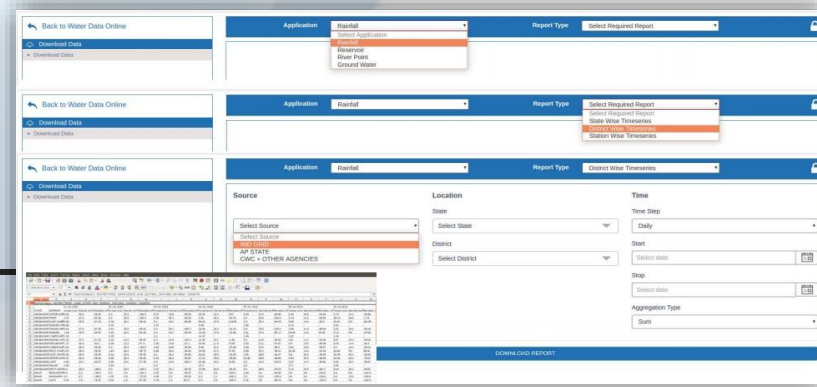
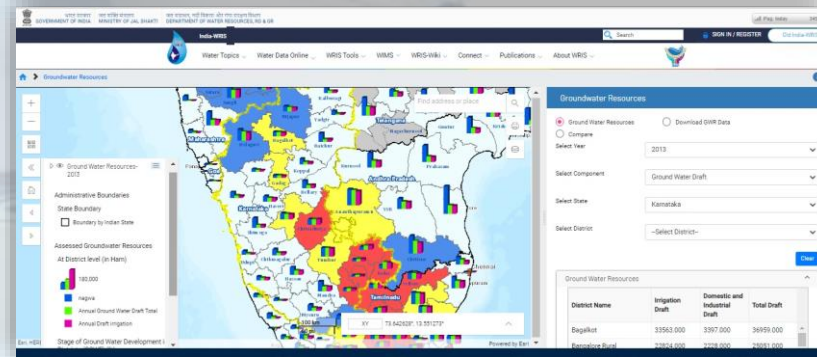
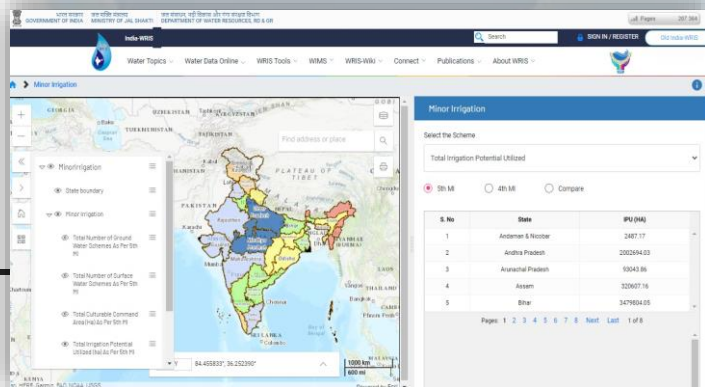
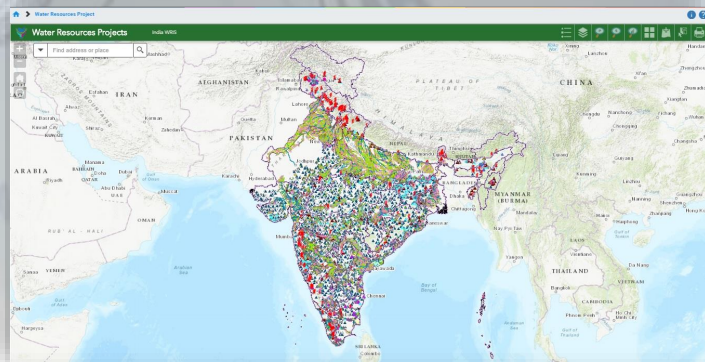
India – Water Resources Information System

India-WRIS

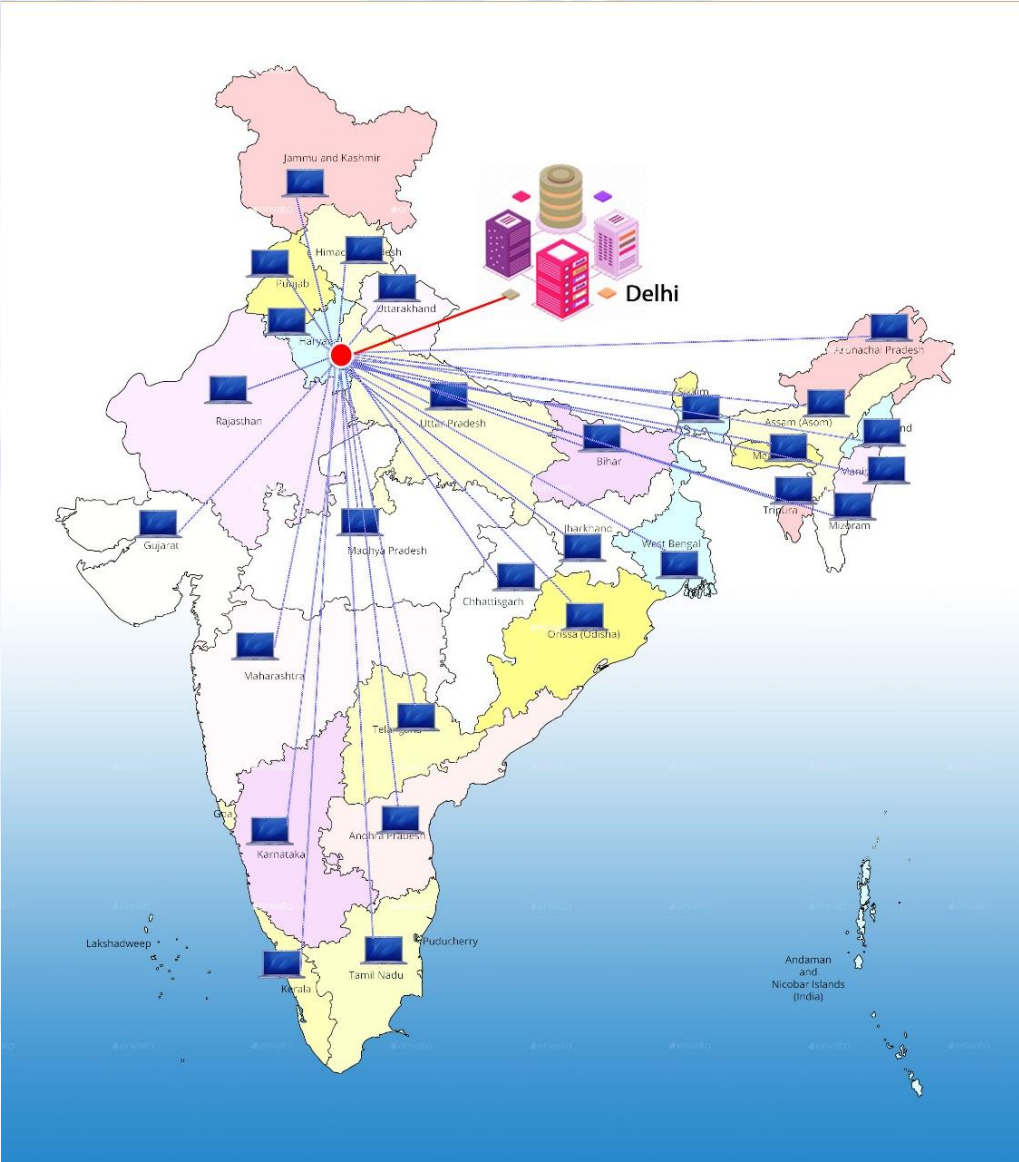


Water Data – Semidynamic & Static Modules

- Semi-dynamic / static data of Ground Water Resources, MI Census, Litholog, Snow-Glacial lakes, Water Resources Projects etc.



DATA AGENCIES



Data Available in WRIS



Central Ground Water Board

- Ground water observation well location and GW level
- Ground water quality sites and data
- Litholog well location and survey data
- Ground water resource estimation
- Aquifer systems



Central Water Commission

- Hydrological Observation Stations
- Surface Water Quality Stations
- Reservoir level and storage
- Glacial Lake and Water Body
- Rainfall
- WRP projects
- Reservoir sedimentation studies
- Shape files AIBP Canal, Command Area, Hydro Structure
- PMP atlas-major basins



National Remote Sensing Centre

- ET and Soil moisture
- Flood inundation maps
- LULC, Wasteland, Land degradation, wetland cover
- Waterlogged Area and Saline areas
- Rainfall gridded data
- Ground water prospects maps
- Forest Cover – Classes
- Water Body Information System : Bhuvan – APIs and waterbody layer



Survey of India

Survey of India

- Shape files of International Boundary
- State Boundary
- District Boundary
- Village Boundary
- Infrastructure Layers
- WFS for many thematic layers
- DEM

Data Available in WRIS



National Water Development Authority

- Shape files
- IBTL Component
- Structure on Links (Dams, Barrages, Weirs, Anicuts)
- Detailed Links (canal, Tunnel, etc.)



Indian Meteorological Department

- Gridded Rainfall Data 0.25*0.25
- Seismic zones
- Extreme Temp and RF
- District-wise Rainfall Monitoring Station Location (DRMS)
- Earthquake events



Inland Waterways
Authority of India

Inland Waterways Authority of India

- Reports on
 - Beacon
 - Harbour Limit
 - Navigation Canal
 - Rail Road Bridge
- River(Inland Navigation)
- Settlement Location
- Waterways



Other agencies

- NHP implementing state and central agencies data (RF, water quality, Reservoir level, Groundwater level, River discharge and level, etc)
- MI Census Data
- Minor irrigation tank storage and capacity data
- 2011 census data (upto village level)
- Parliament and assembly constituency boundary
- Soil data (NBSS-LUP)
- DPAP and DDP (MoRD)
- Reports related to WR collected from State WRD and local state agencies



<https://indiawris.gov.in/wris/#/>



भारत सरकार
GOVERNMENT OF INDIA

जल शक्ति मंत्रालय
MINISTRY OF JAL SHAKTI

जल संसाधन, नदी विकास और गंगा संरक्षण विभाग
DEPARTMENT OF WATER RESOURCES, RD & GR

राष्ट्रीय जल सूचना-विज्ञान केंद्र
NATIONAL WATER INFORMATICS CENTRE



India Water Resources Information System



FEED
BACK



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Water Data +

WRIS Tools +

Utilities +

Publications +

Contact Us +



Artificial Recharge Structure

The term Artificial Recharge refers to the process of human intervention through which ground water recharge is augmented at the rate much higher than those under natural conditions. The Artificial Recharge Structure (ARS) module in India-WRIS developed under National Water Informatics Centre (NWIC), MoJS has been built for the management of centralized artificial recharge structure database. The module facilitates user agencies/ Nodal departments (Central/ State/ UT's/ Other) to populate the information pertaining to all the artificial recharge structures constructed under various schemes through authorized user login and the information collected is disseminated to public through India-WRIS web portal.

[View More](#)

**INDIA-WRIS MODULES : A WALK THROUGH
34 MODULES, TOOLS (2) & UTILITIES (8)**



Home About WRIS **Water Data** - WRIS Tools + Utilities + Publications + Contact Us +

Surface Water - Storage - MI Tanks

Ground Water + River + Reservoir

Land Resources + Snow-Glacial Lake Reservoir Sediment Studies

Hydro-meteorological + Surface Water Quality Surface Water Bodies

Allied Themes + Wetlands

Projects +

Ground Water Quality
Explore water quality for ground water

[View More](#)

Home About WRIS **Water Data** - WRIS Tools + Utilities + Publications + Contact Us +

Surface Water - Storage +

Ground Water + **River** - **River Information**

Land Resources + Snow-Glacial Lake River Monitoring

Hydro-meteorological + Surface Water Quality

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Projects +

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Map Sat Hy

WRIS Wiki
India WRIS Wiki gives an overview of water resources.

Ground Water - **GW Exploration** - **Aquifer-2D (2013)**

Land Resources + Water Level Behaviour + Exploration details/Litholog

Hydro-meteorological + Ground Water Resource Estimation

Allied Themes + Ground Water Prospects Study (2011)

Projects + Artificial Recharge Structure - Viewer

Ground Water Quality

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Explore water quality for ground water

[View More](#)

Home About WRIS **Water Data** - WRIS Tools + Utilities + Publications + Contact Us +

Ground Water - **GW Exploration** +

Land Resources + **Water Level Behaviour** - **Ground Water Level**

Hydro-meteorological + Ground Water Resource Estimation

Allied Themes + Ground Water Prospects Study (2011)

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Explore water quality for ground water

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Water Resources Projects
The total irrigation potential for major comprehensive database of India's water project entities.

Land Resources - **Land Degradation (2005-06)**

Hydro-meteorological + Land Use - Land Cover

Allied Themes + Soil Type

Projects + Water Logging/Soil Salinity (2003-05)

Wasteland Study (2005-2006)

Water Resources Projects
This module comprises a comprehensive database of India's water project entities.

[View More](#)

Home About WRIS **Water Data** - WRIS Tools + Utilities + Publications + Contact Us +

Groundwater
The water flowing beneath the earth's surface is subject to temporal variation caused by seasonal changes in water availability.

Hydro-meteorological - **Rainfall**

Allied Themes + Evapo-transpiration

Projects + Soil Moisture

Agro-Climatic Ecological Region

Groundwater
The water flowing beneath the earth's surface is subject to temporal variation caused by seasonal changes in water availability.

[View More](#)

Home About WRIS **Water Data** - WRIS Tools + Utilities + Publications + Contact Us +

Surface Water Quality
Explore water quality for surface water

Allied Themes - **Inland Navigation Waterways**

Projects + Storm Surge Study (2011)

Socio-Economic Census (2011)

Flood Inundation (2008-2010)

Drought Affected Areas (2002)

Reported Extreme Temperature, Rainfall & Earthquake Events

Surface Water Quality
Explore water quality for surface water

[View More](#)

Home About WRIS **Water Data** - WRIS Tools + Utilities + Publications + Contact Us +

Live Telemetry
The stations established by the Central Water Resources Board and the State agencies throughout the country measure important hydrological and meteorological data on a real time basis for immediate action and planning.

Projects - **Water Resources Projects**

Inter-Basin Transfer Links

Minor Irrigation Census

Live Telemetry
The stations established by the Central Water Resources Board and the State agencies throughout the country measure important hydrological and meteorological data on a real time basis for immediate action and planning.

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[WRIS Tools -](#)
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[Online Web Editor](#)
[Artificial Recharge Structure Data Entry](#)

Reservoir Information

Currently more than ninety major reservoirs which account for 75% of the total storage capacity are monitored by the Central Water Commission. Knowing the existing water level and the stored volume is important for reservoir operation and achieving optimum flood protection and irrigation benefits.

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[Data Availability](#)
[Data/Report Download](#)
[District MA Glance](#)
[Geo Viewer](#)
[Meta Data](#)
[PMP Atlas](#)
[Surface Water Audit](#)
[WRIS Wiki](#)

Artificial Recharge Structure

The term Artificial Recharge refers to the process of human intervention through which the water table is recharged at a rate much higher than those under natural conditions. The Artificial Recharge Structure Information System (ARIS) has been built for the management of central water resources. It facilitates user agencies/ Nodal departments (Central/ State/ UT's/ Other) to register and monitor the structures constructed under various schemes through authorized user login on the India-WRIS web portal.

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[Atlas](#)
[Basin Reports](#)
[Compendium](#)
[Groundwater Year Book](#)
[Pre-generated Maps](#)
[Project Documents](#)
[Wasteland Distribution Atlas](#)
[Waterlogging and Salinity Assessment](#)

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[Contact Us -](#)

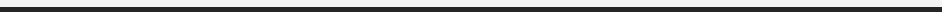
[Contact Details](#)
[External Links](#)

Groundwater

The water flowing beneath the earth surface is an important part of the hydrology in a catchment area. The level of groundwater is subject to temporal variation caused by seasonal rainfall and abstraction. This fluctuation is an important information for a holistic understanding of water availability.

[View More](#)

CLASSIFICATION OF MODULES



CLASSIFICATION OF MODULES

Dynamic Modules

- Rainfall (mm)
- Reservoir (Level)
- River Monitoring (Level & Discharge)
- Ground Water Level (BGL Meter)
- Water Quality – Groundwater
- Water Quality – Surface water
- Evapotranspiration (mm)
- Soil Moisture (%)
- Minor Irrigation Tanks

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Semi Dynamic Modules

- Groundwater Resources
- Snow-Glacial Lake
- Reservoir- Sedimentation studies
- Water Resources Project
- Minor Irrigation Census
- LULC
- Wasteland
- Land Degradation
- Extreme Events – Flood Inundation/Drought Prone Area Program/Earthquake-Rainfall-Temperature
- Artificial Recharge Structure Viewer

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Static Modules

- Litholog
- Aquifer
- Surface Water Bodies
- River Information
- Socio Economic Census
- Groundwater Prospects
- Region-Agro-Climatic / Agro Ecological
- Soil
- Water Logging & Soil Salinity
- Wet Land
- Inland Navigation Waterways
- Inter-Basin Transfer Links
- Storm Surge Study

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- Storm Surge Study

Tools + Utilities

- Online Web Editor
- Artificial Recharge Structure Data Entry
- Data / Report Download Tabular)
- Data Availability
- Geo Viewer
- WRIS WIKI
- Metadata
- District at a glance
- Probable Maximum Precipitation Atlas
- Surface Water Audit

1. Dynamic Modules

Applications

Surface water

- Rainfall
- Reservoirs
- River Points
- Evapotranspiration
- Soil Moisture
- Water Quality
- Minor Irrigation Tanks

Ground water

- Water Audit
- Content Management

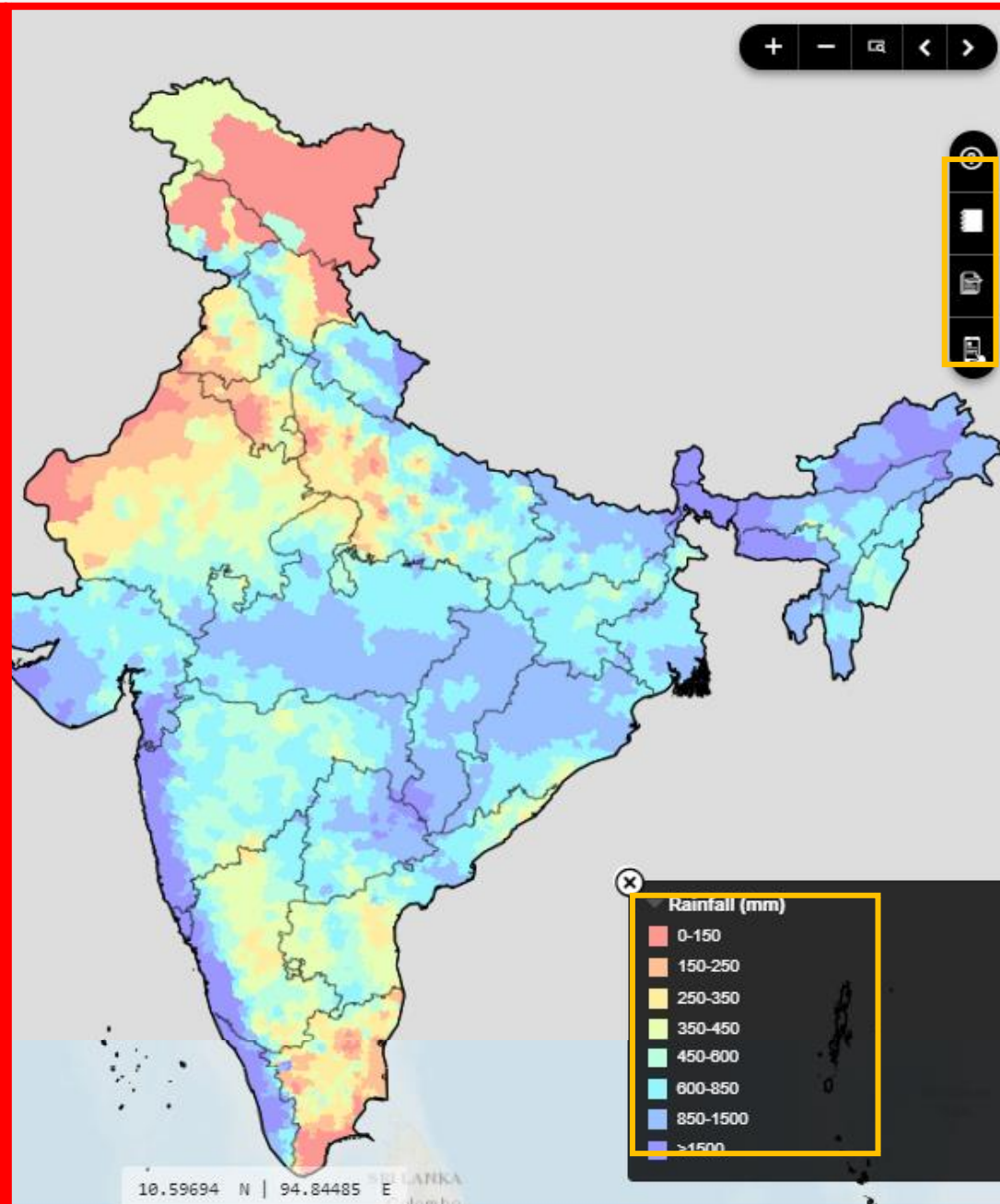
Applications

Layers

Full Extent

Clear

Map Compare



Area of Focus : India (Country)

INDIA

Daily Cumulative Rainfall information from 01-Jun-2020 to 17-Sep-2020 using IMD GRID data

850mm	749mm	-12%
NORMAL RAINFALL	ACTUAL RAINFALL	% DEVIATION FROM NORMAL

Legend:

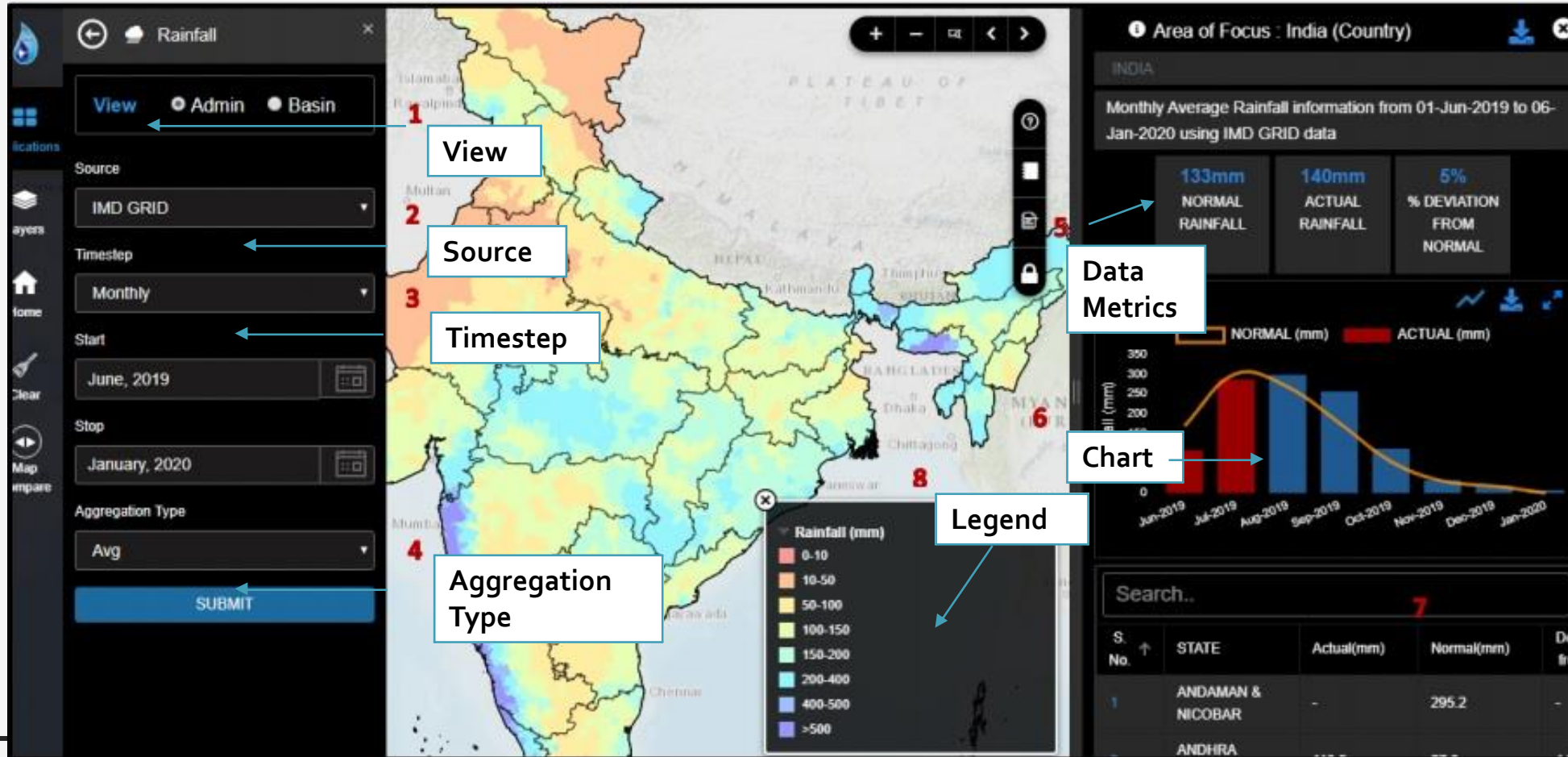
- NORMAL (mm)
- ACTUAL(< NORMAL) (mm)
- ACTUAL(> NORMAL) (mm)

Search..

S. No.	STATE	Actual(mm)	Normal(mm)	Deviation(from norm)
7	ANDAMAN & NICOBAR	-	1,261.8	-
8	ANDHRA	520.5	415.0	27.51

1.1 Rainfall

- Normal, Actual rainfall and subsequent deviation of rainfall for different parts in India with different permutations and combinations of source, view, frequency and aggregation types.

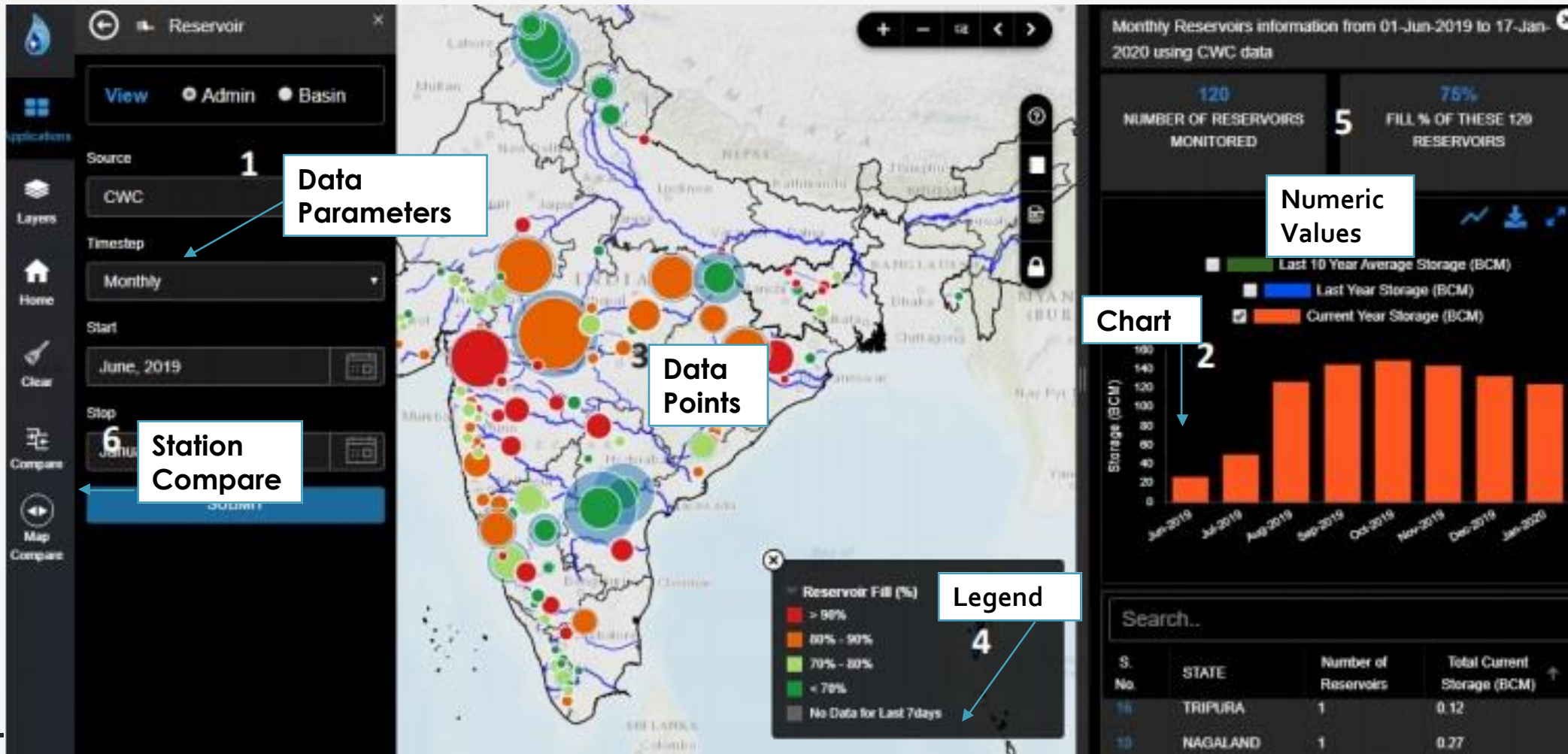


IMD Gridded/Central and State Agency Data

Data Visualization – Heat maps/Charts/Stats/Admin view/Basin view

1.2 Reservoir

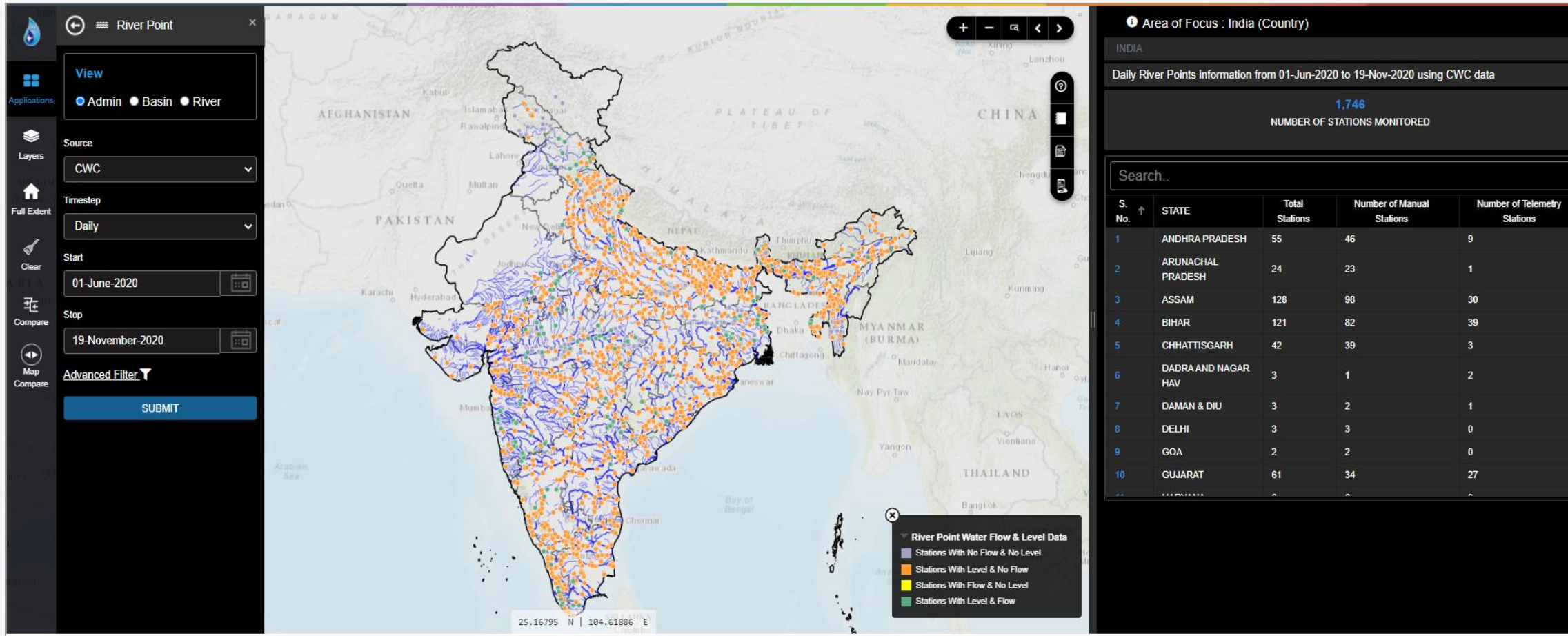
- Volume of water (in billion cubic meters) stored in reservoirs across the country.



Monitoring Reservoirs recent water level and storage data

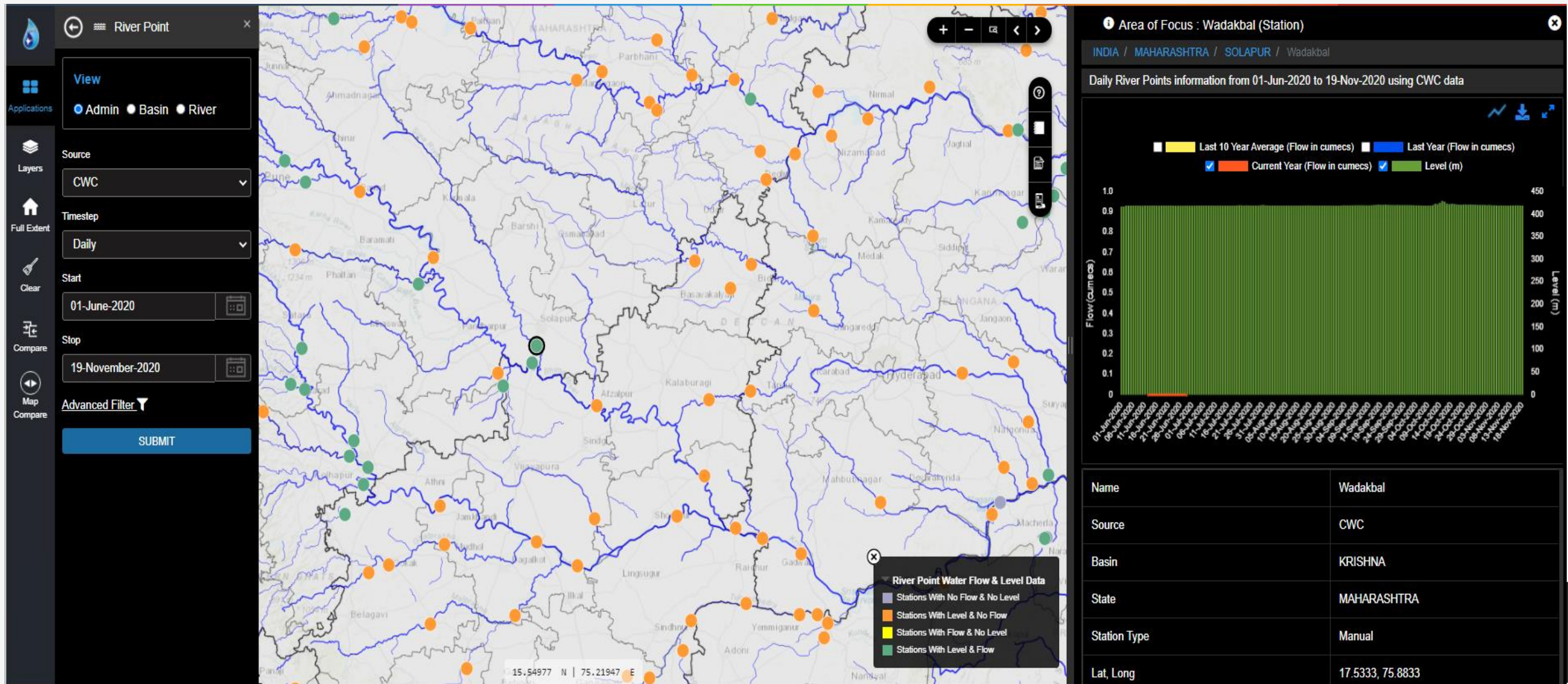
1.3 River Monitoring

- Station wise flow and level data of each river points monitored on each river.



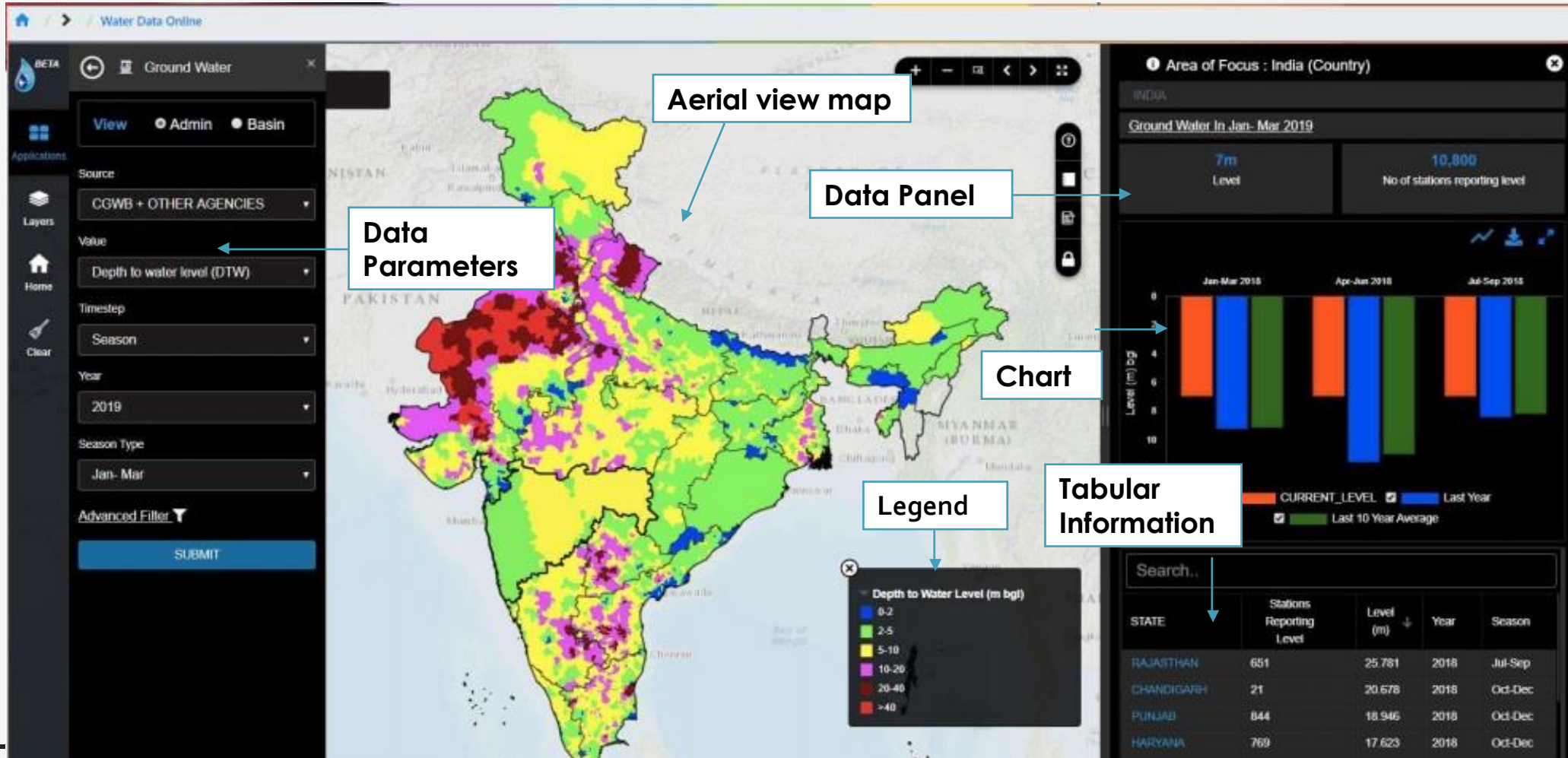
Agency wise – Stations with water level and flow data Within range most recent data color code depiction

River Points – Stations data view – Level and Discharge



1.4 Groundwater Level

- Station wise depth to water level of monitoring wells for a given time period or season
- visualization of depth to water level contour maps

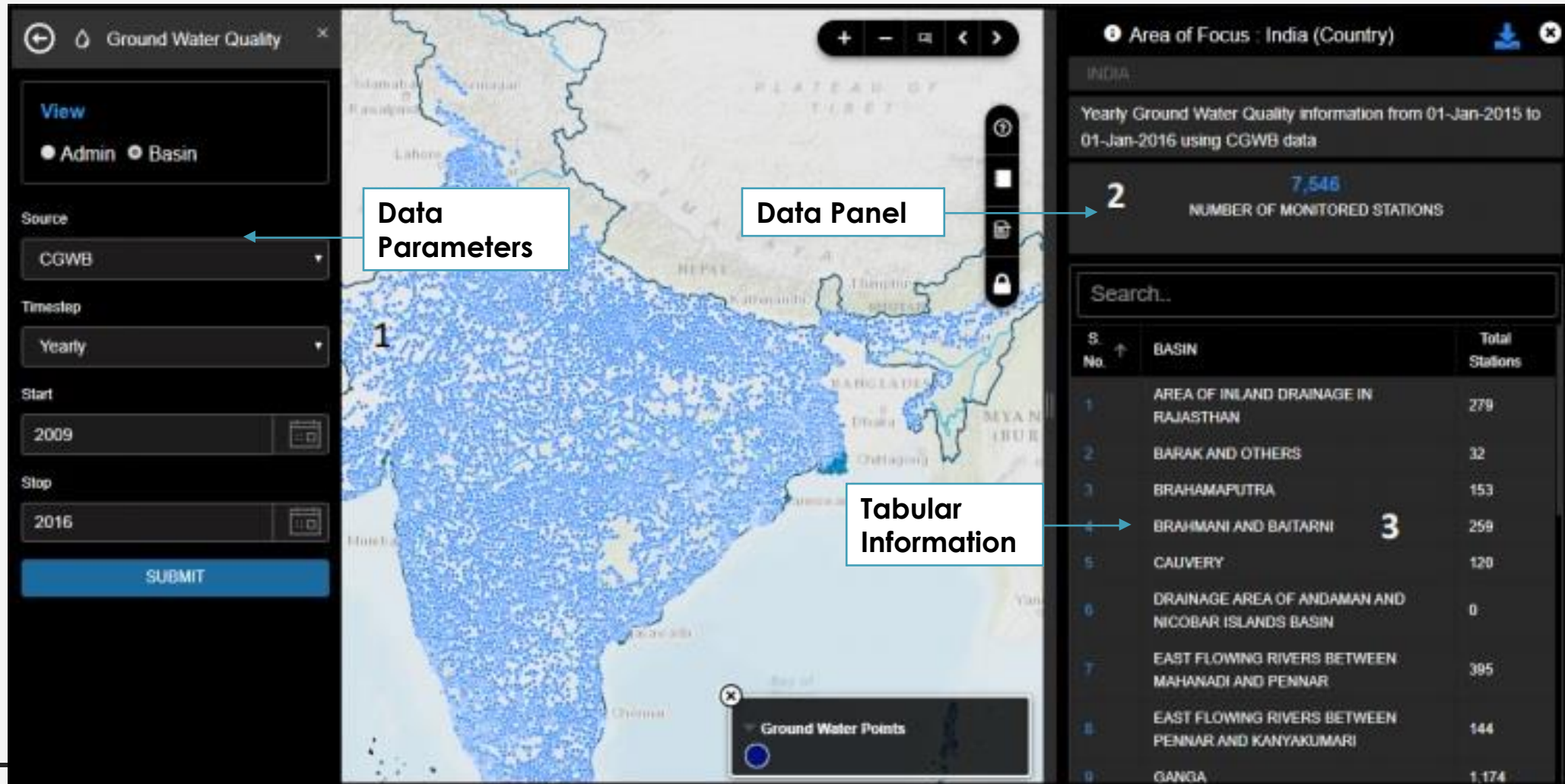


CGWB and State data

Data Visualization –
Heatmaps/Charts/Stats/
Admin view/Basin view

1.5 Water Quality – Groundwater

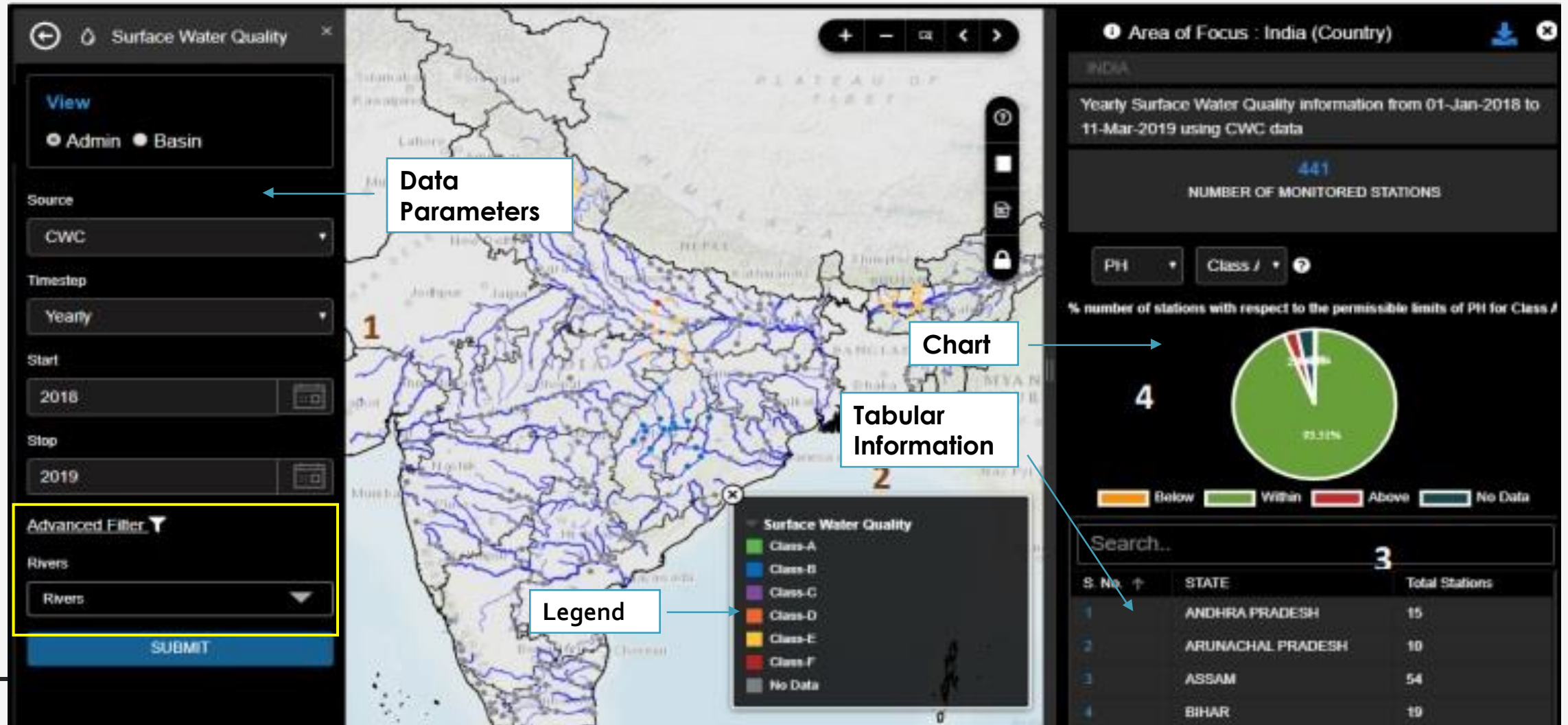
- Station wise ground water quality information for a given time period



1.6 Water Quality – Surface Water

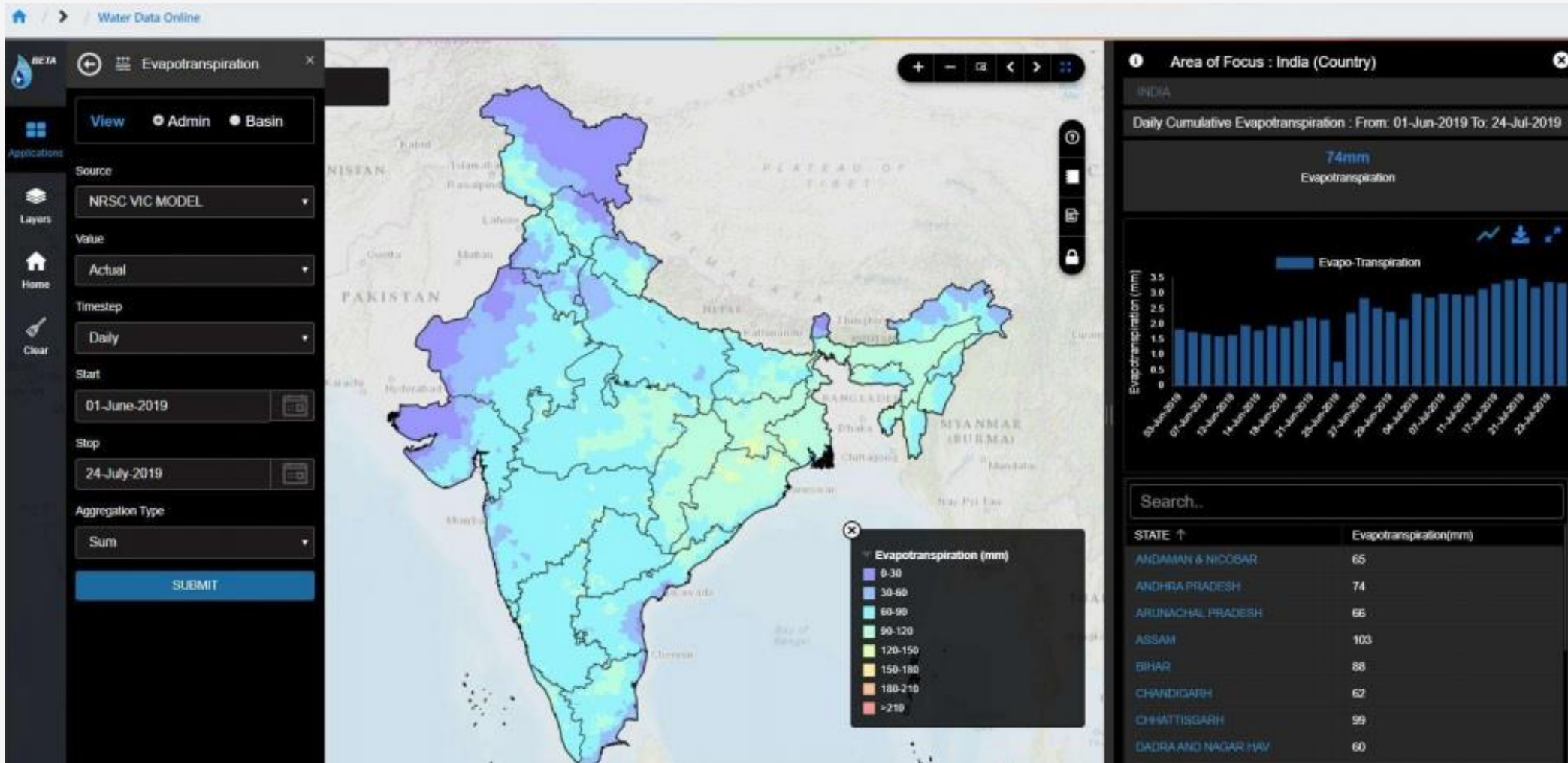
-Station wise surface (river) water quality information

-percentage of water stations falling within or above permissible limits for each class



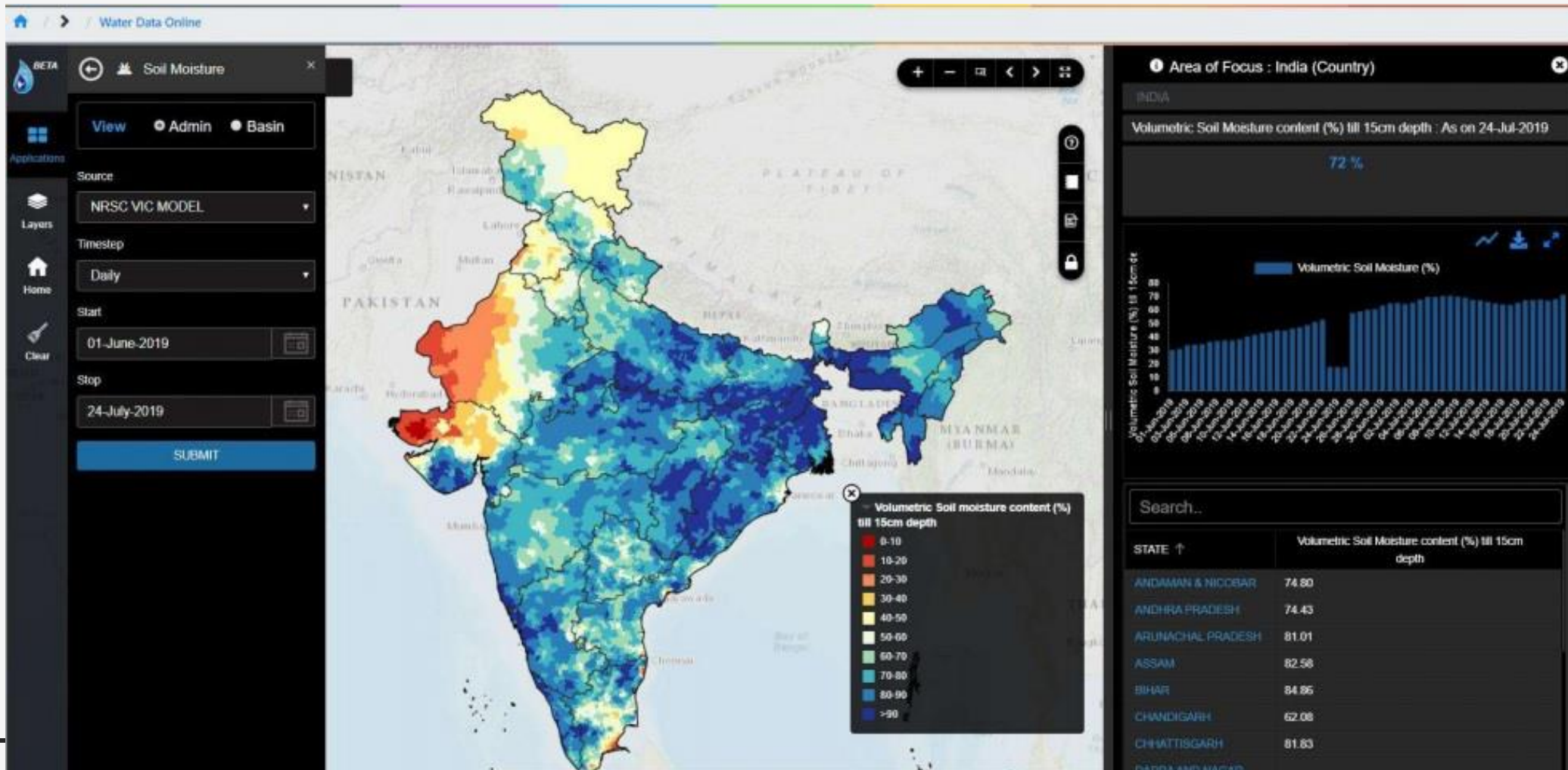
1.7 Evapotranspiration

- VIC model based evapo-transpiration data for different states and basin (grid wise)



1.8 Soil Moisture

- Volume of soil moisture content in terms of percentage (up to 15 cm depth)



NRSC VIC Model Gridded data

Data Visualization – Heatmaps/Charts/Stats/ Admin view/Basin view

1.9 Minor Irrigation Tanks

- Minor or small reservoir (irrigation tanks) water capacity.

Minor Irrigation Tanks

View Admin Basin

Source: APWRIMS

Timestep: Yearly

Start: 2018

Stop: 2020

SUBMIT

15.56120 N | 92.95822 E

Area of Focus : Andhra pradesh (State)

INDIA / ANDHRA PRADESH

Yearly Minor Irrigation Tanks information from 01-Jan-2018 to 31-Jul-2020 using data

37,974 NUMBER OF MITANKS MONITORED

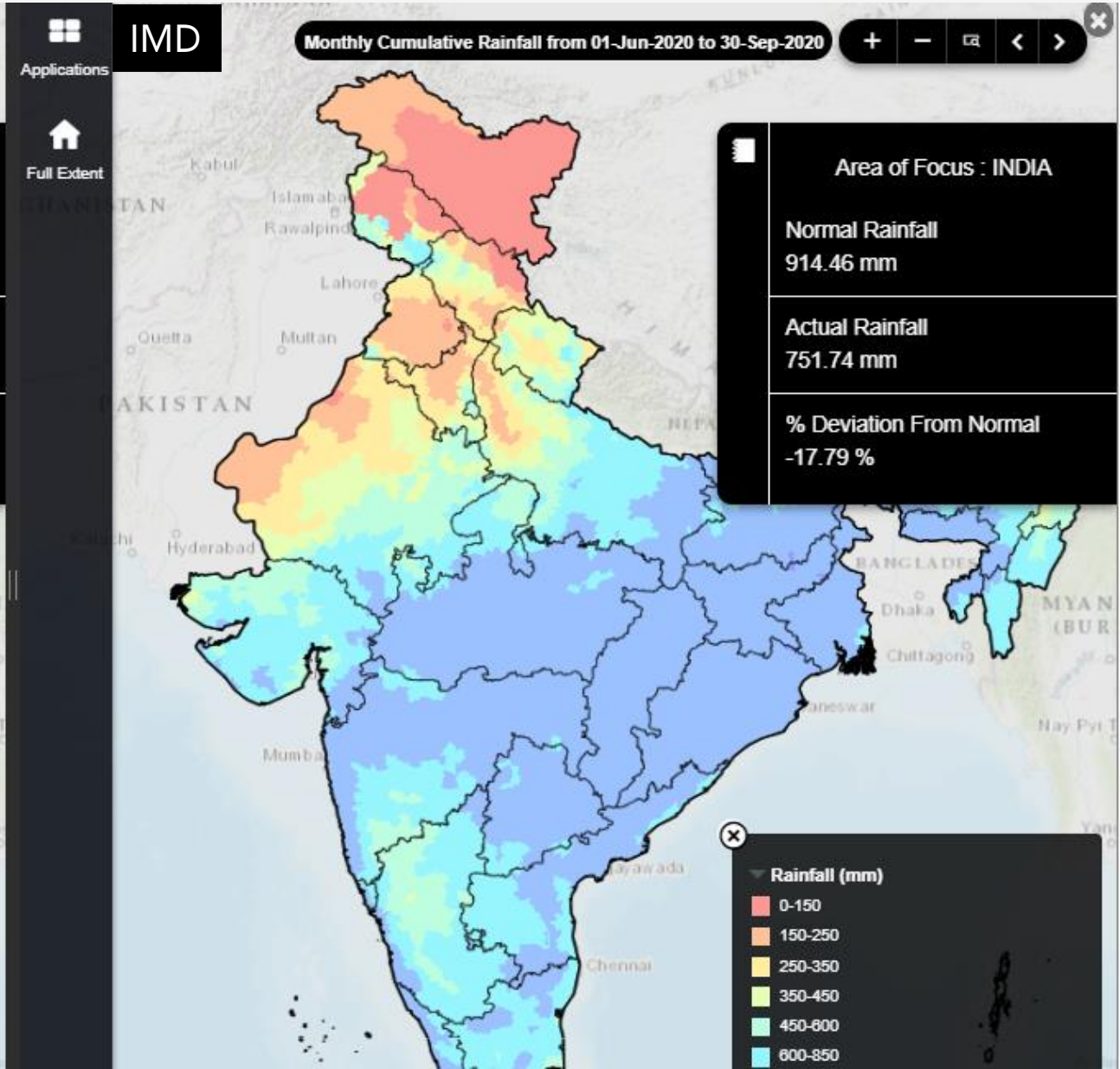
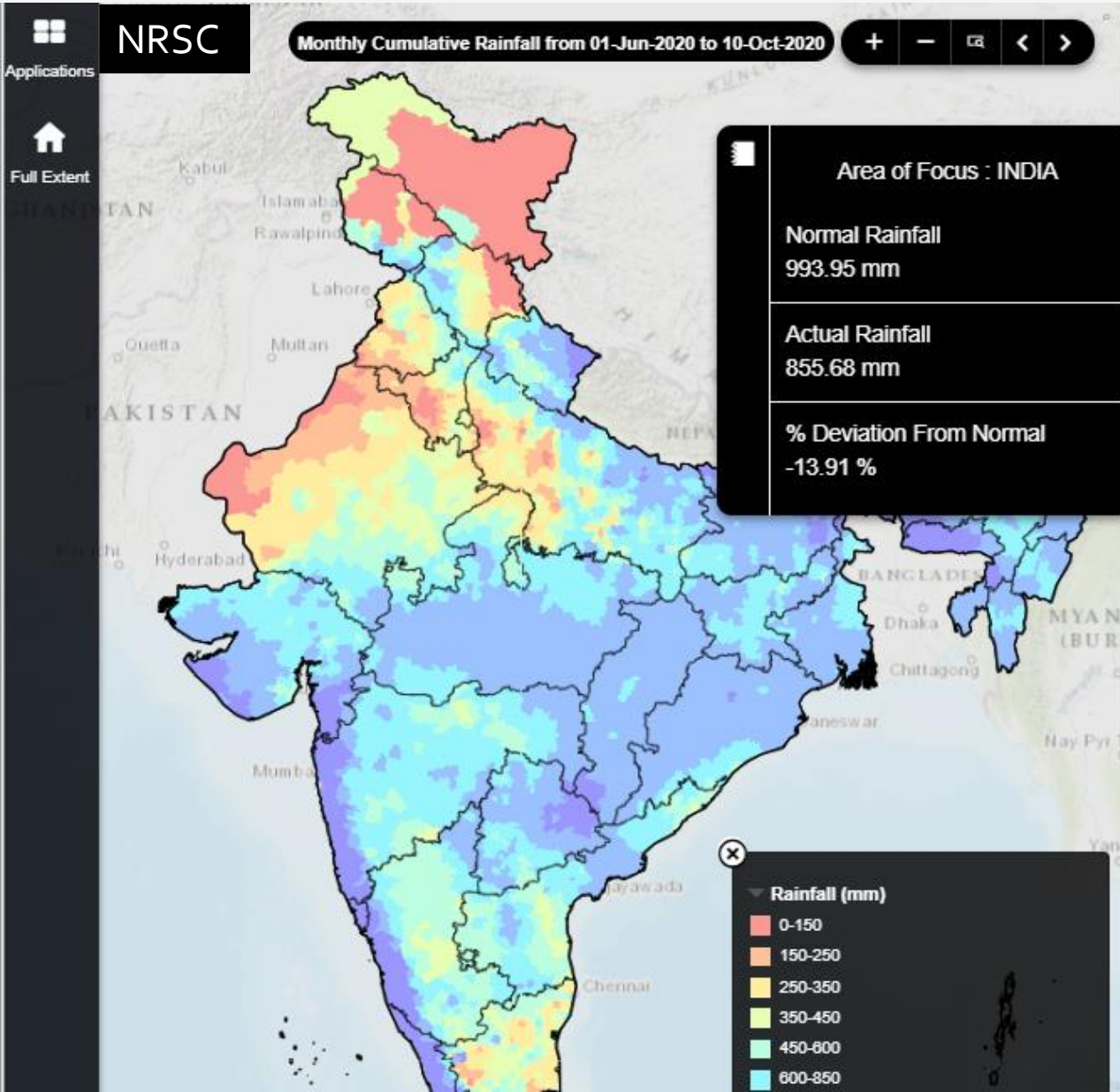
34% FILL % OF THESE 37,974 MITANKS

Legend: Current Year Storage (BCM), Last Year Storage (BCM), Last 10 Year Average Storage (BCM)

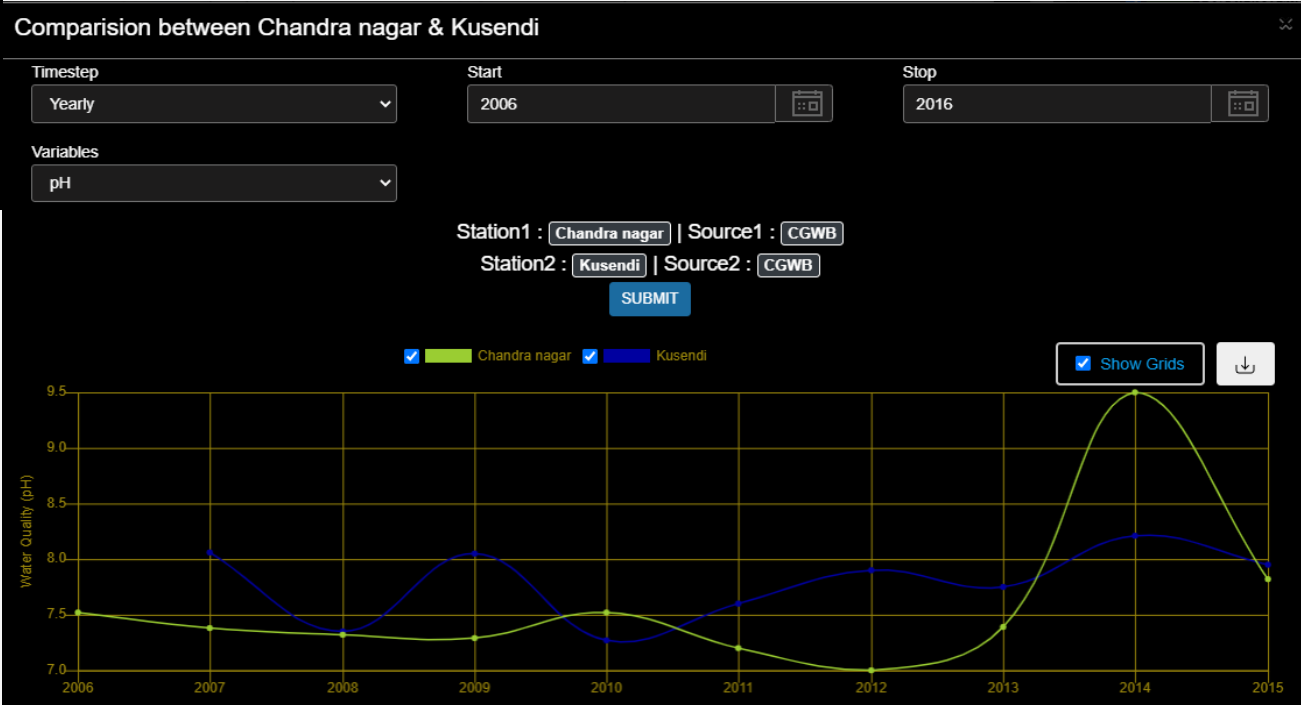
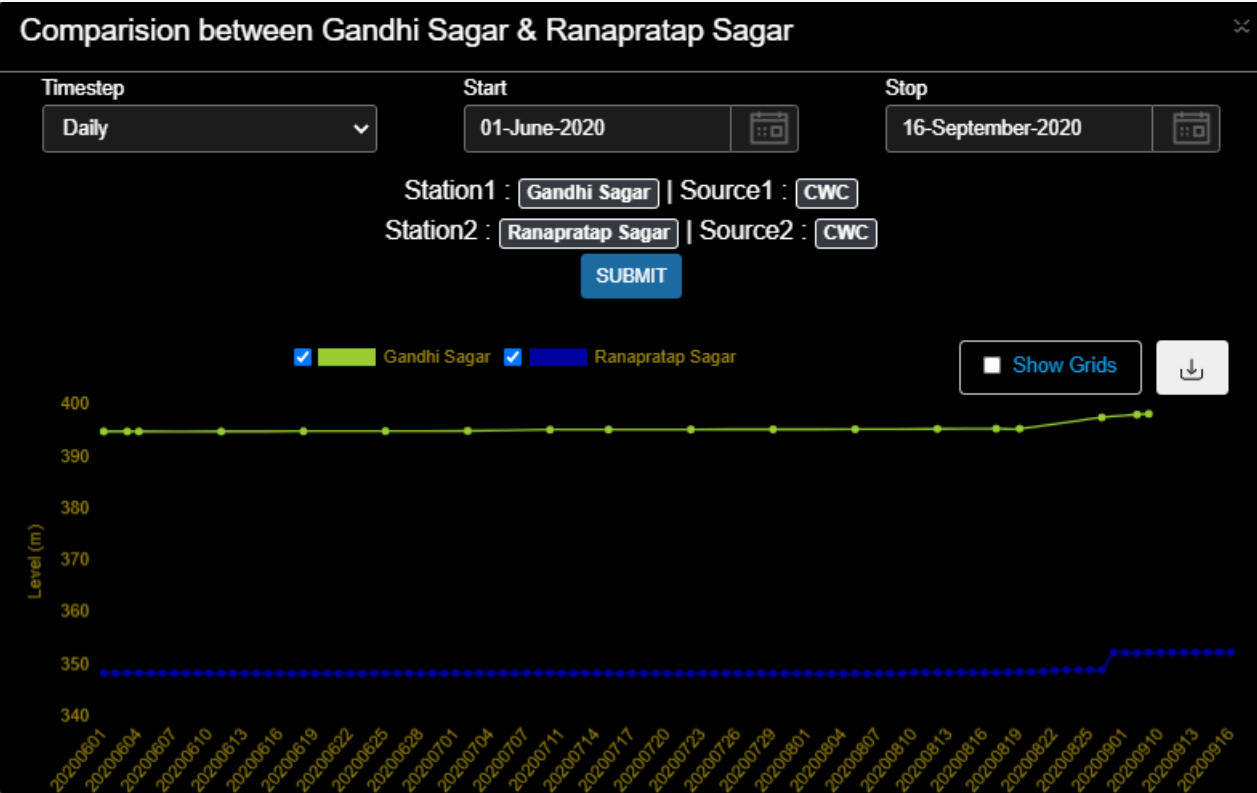
Search..

S. No.	DISTRICT	Number of MITanks	Total Capacity (BCM)	Total Storage (BCM)	Fill (%)
1	ANANTAPUR	1,426	0.67	0.15	21.77
2	CHITTOOR	7,613	0.90	0.25	27.47
3	EAST GODAVARI	1,683	0.35	0.11	32.22

Map Compare Tool



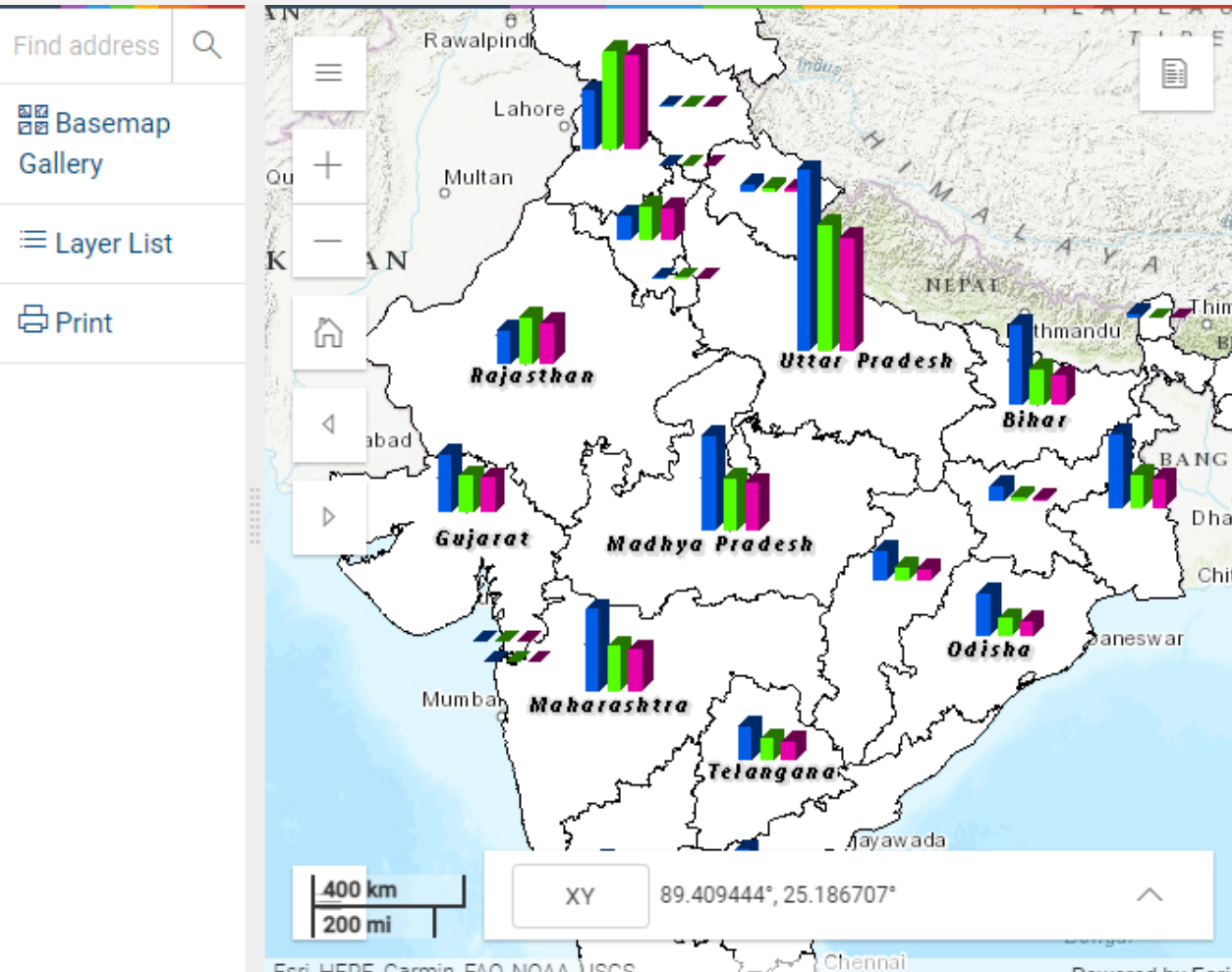
Data Comparison Tool



2. Semi Dynamic Modules

2.1 Groundwater Resources Estimation

- Ground water resources assessment carried out jointly by Central Ground Water Board and State Ground Water Departments for year 2009, 2011 and 2013.
- The GWRE 2017 is under process.



Ground Water Resource Estimation

Ground Water Resources
 Download GWR Data Compare

Select Year:

Select Component:

Select State:

Ground Water Resources			
State Name	Irrigation Draft	Domestic and Industrial Draft	Total Draft
Andaman & Nicobar	0.000	0.010	0.010

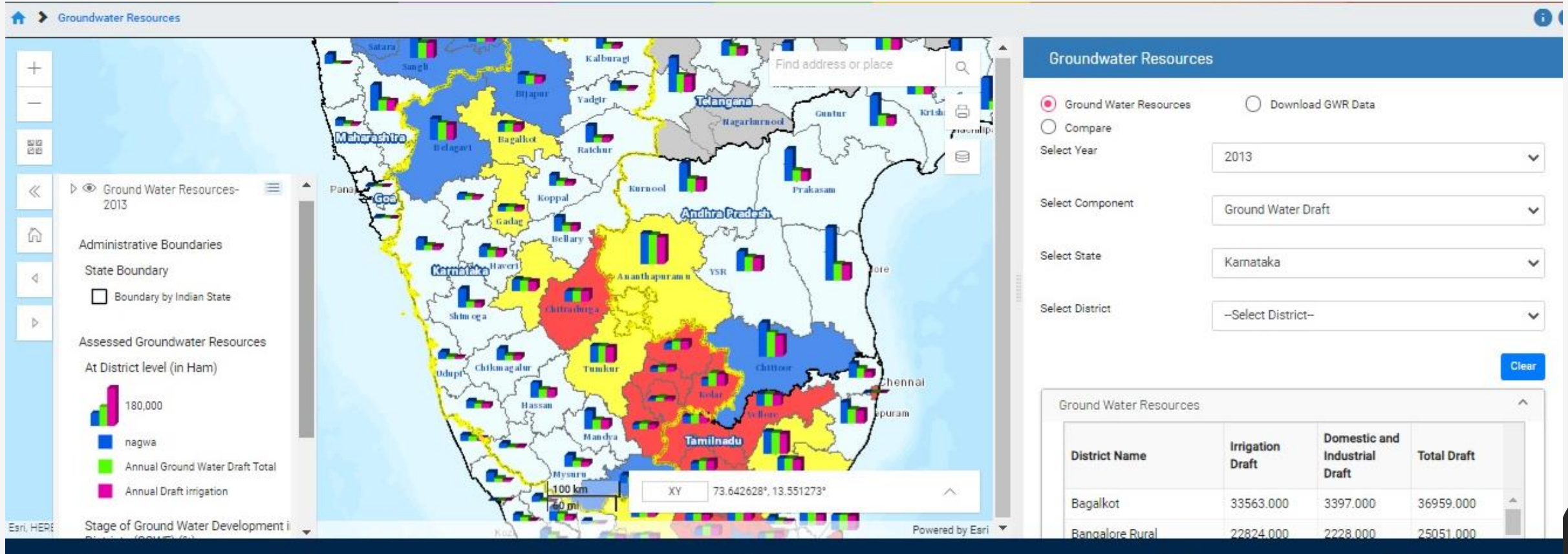
User Guide – Ground Water Resource Estimation

This document is intended to provide all the necessary information about the module, describing all the functions and tools available as well as to provide users with easy navigation guidance through which user may easily explore module and download information.

The following steps may be followed to get access to the tools and their functionalities:

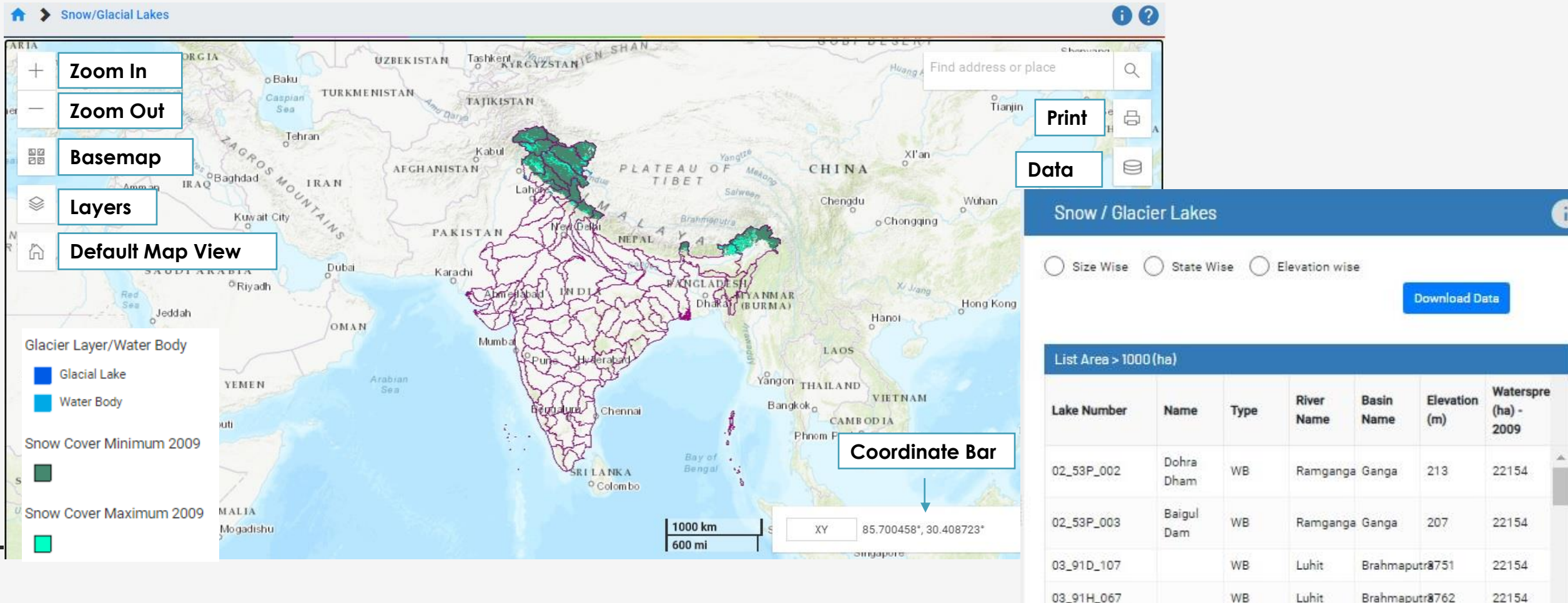
1. The main or home page of the

Information in terms of groundwater drafts, net ground water availability and stage of groundwater development



2.2 Snow-Glacial Lake

-Snow cover extent, glacial lakes & water bodies of the Indian Himalayan regions - satellite derived product
- available for the years 2011-2020 covering the major river basins namely, Indus, Ganga and Brahmaputra.



2.3 Reservoir Sedimentation studies

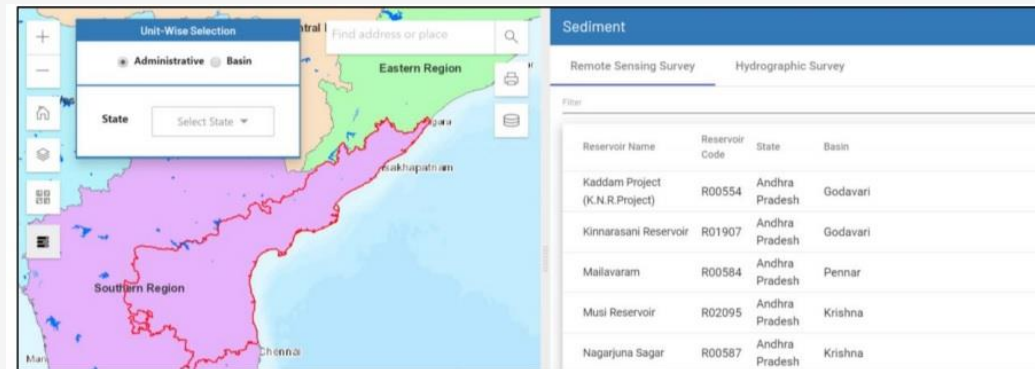
- displays the result of sediment study done using remote sensing method and hydrographic survey in different reservoirs spread across India.



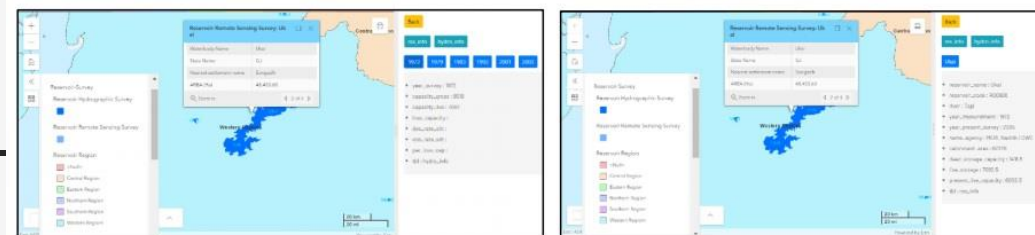
The screenshot displays a web application interface. On the left, a map of India is shown with color-coded regions: Northern Region (blue), Central Region (orange), Eastern Region (green), Western Region (purple), and Southern Region (pink). On the right, a table titled 'Sediment' lists reservoir data. The table has columns for Reservoir Name, Reservoir Code, State, and Basin. The data is as follows:

Reservoir Name	Reservoir Code	State	Basin
Kaddam Project (K.N.R.Project)	R00554	Andhra Pradesh	Godavari
Kinnarasani Reservoir	R01907	Andhra Pradesh	Godavari
Mallavaram	R00584	Andhra Pradesh	Pennar
Musi Reservoir	R02095	Andhra Pradesh	Krishna
Nagarjuna Sagar	R00587	Andhra Pradesh	Krishna

Reservoir Sediment Study



This screenshot shows a zoomed-in view of the Eastern and Southern regions of India. The map highlights the Eastern Region in green and the Southern Region in pink. The 'Sediment' table on the right remains the same as in the previous screenshot.



Two screenshots showing the 'Unit-wise filter and information view'. The left screenshot shows a 'Unit-Wise Selection' panel with 'Administrative' selected and 'Basin' unselected. The right screenshot shows a 'Reservoir Information' dialog box with details for the Kaddam Project (K.N.R.Project), including its Reservoir Code (R00554), State (Andhra Pradesh), and Basin (Godavari).

Unit wise filter and information view

2.4 Water Resources Projects

-Information on irrigation, hydro-power and multi-purpose projects

- It provides a spatial inventory of:

-connected water resources structures,

-mapping the location of dams, barrages, weirs, anicuts, reservoirs, canals, command areas, hydropower plants and pumping stations.

Water Resources Project

Find address or place

Zoom In

Zoom Out

Default Extent

My Location

Global Search

Add Data

Selection

Legend

Layer List

Multi-Attribute Query Projects

Basemap

Chart Tool

Print

Multi-Attribute Query Projects

Tasks	Results
Irrigation Projects_Query result	
Number of features found: 1	
MMIRR: Agra Canal Major Irrigation Project_Uttar Pradesh	
Irrigation Project Name	Agra Canal Major Irrigation Project_Uttar Pradesh
Project Code	J103261
Type	Major
River	Yamuna
Status	Completed
Inter-Basin	No
Inter-Country	None
Project Sharing	Interstate
Year of Start of work	
Work started in 5yr Plan	Pre-Plan
Year of Completion Of Year	1873
Completed in 5yr Plan	Pre-Plan
Year Of Approval by Planning Comission	
Approved Cost (Rs Crore)	
Actual Cost(Rs Crore)	1.33
Culturable Command Area (Th Ha)	327.00
Ultimate	47.00

2.5 Minor Irrigation Census

- 4th & 5th Minor irrigation census.

- Six layers at district level :

1. ground water schemes

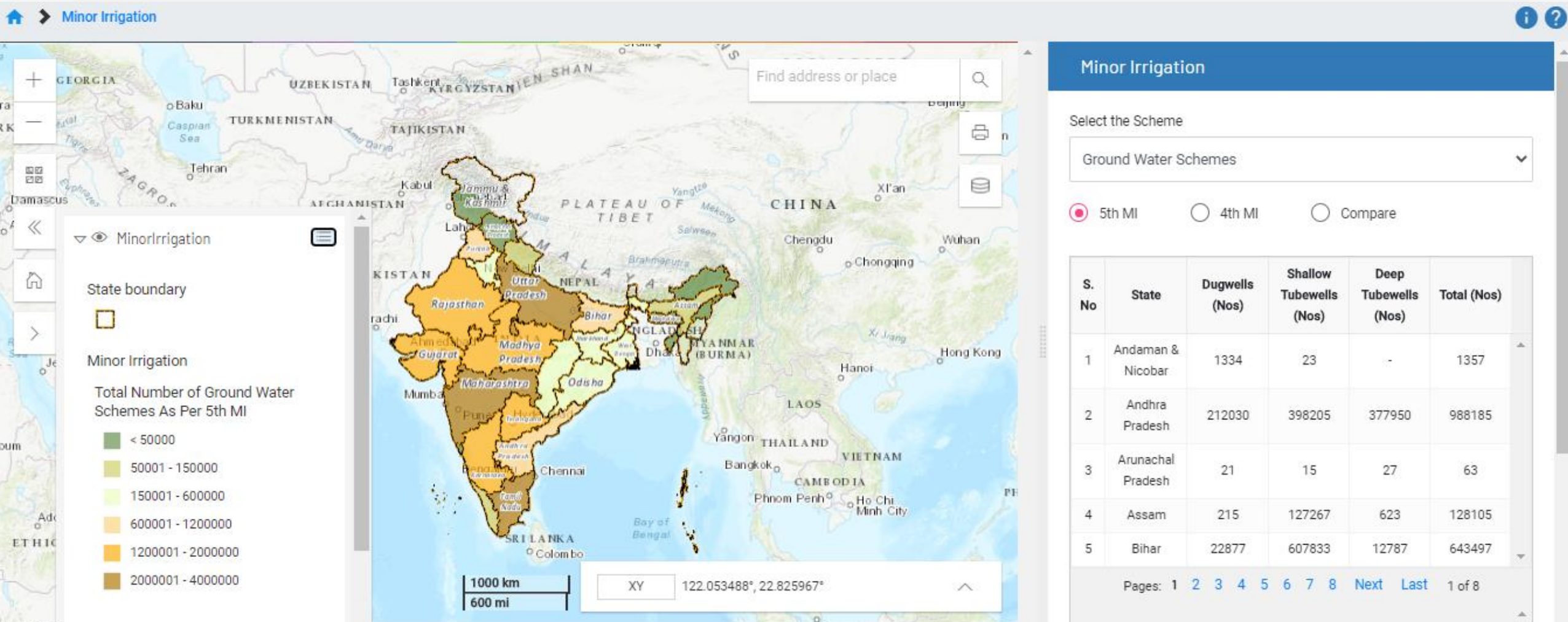
3. Water Distribution devices

5. Total Irrigation potential utilized

2. surface water schemes

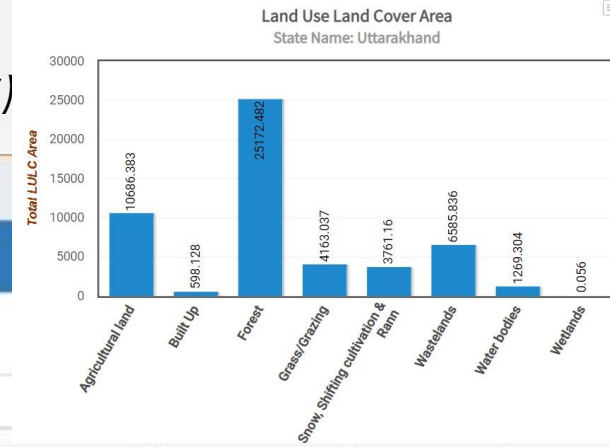
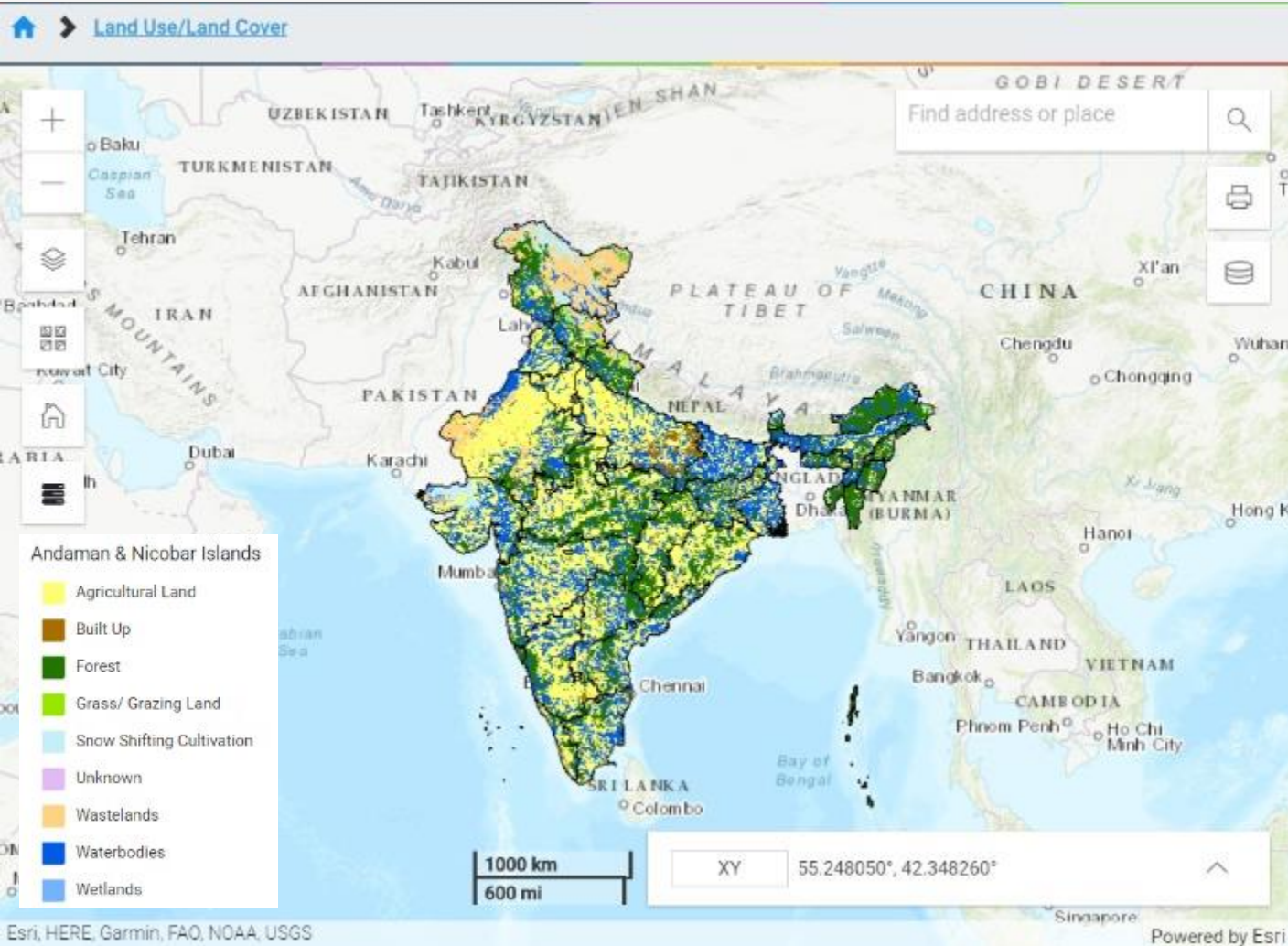
4. Total Irrigation potential created

6. Culturable command area



2.6 LULC

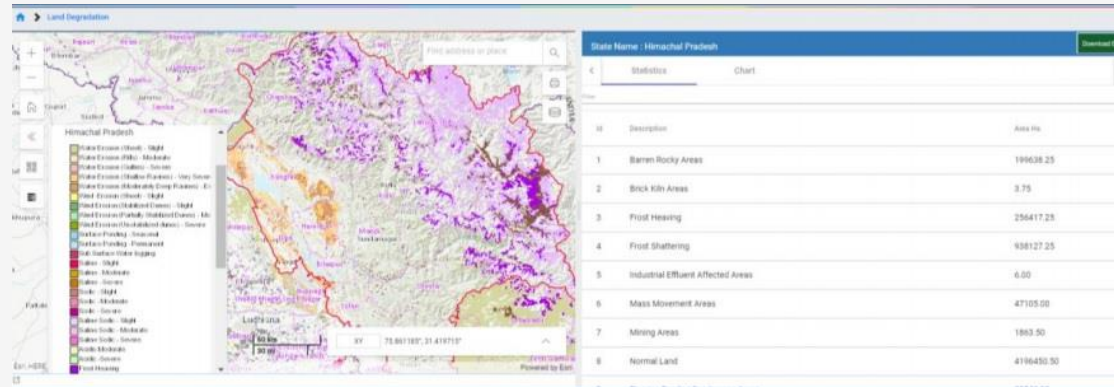
Land use/land cover maps (1:250,000 scale) by National Remote Sensing Centre (NRSC)



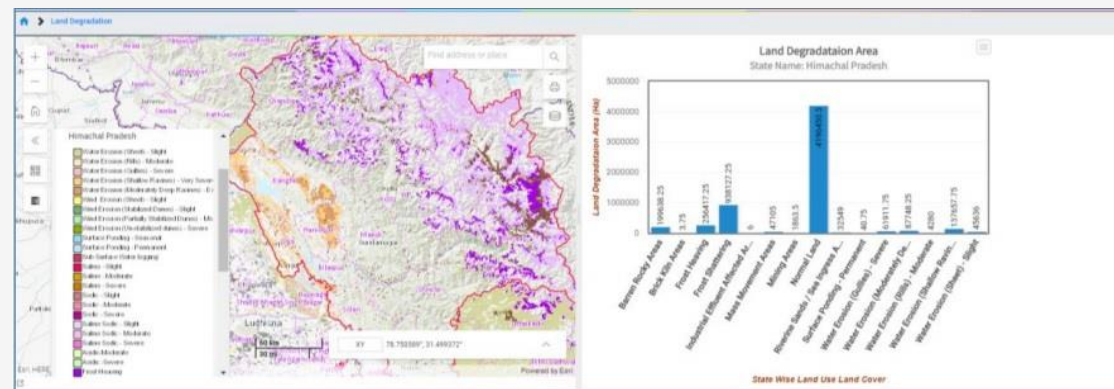
Id	State	Land Use Level Three	Land Use Main Class	Land Use Level Two	Area Sqkm
1	Andaman & Nicobar	Agricultural Plantation	Agricultural Plantation	Agricultural Land	57.40
2	Andaman & Nicobar	Lagoon, creeks, mud flats etc.	Coastal	Wetlands	91.15
3	Andaman & Nicobar	Salt pans	Coastal	Wetlands	0.91
4	Andaman & Nicobar	Cropped in 2 seasons	Cropland	Agricultural Land	2.73
5	Andaman & Nicobar	Cropped in more than 2 seasons	Cropland	Agricultural Land	0.06
6	Andaman & Nicobar	Kharif	Cropland	Agricultural Land	216.62
7	Andaman & Nicobar	Rabi	Cropland	Agricultural Land	70.16

2.8 Land Degradation

- Spatial distribution, extent and the area under land degradation (available for 8 states only)
- It represents areas under various forms of land degradation processes, its type and severity level.



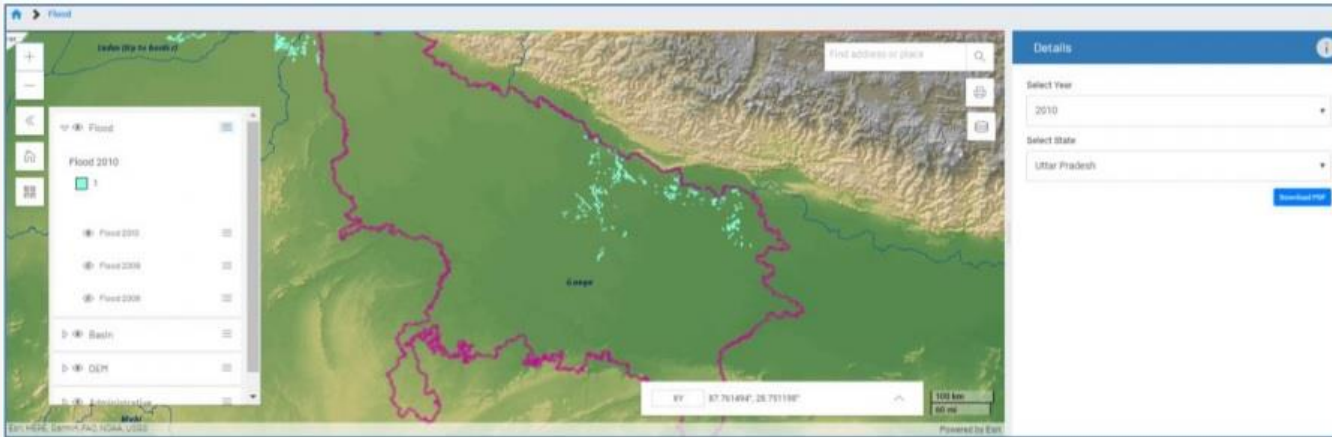
State Selection and Statistics



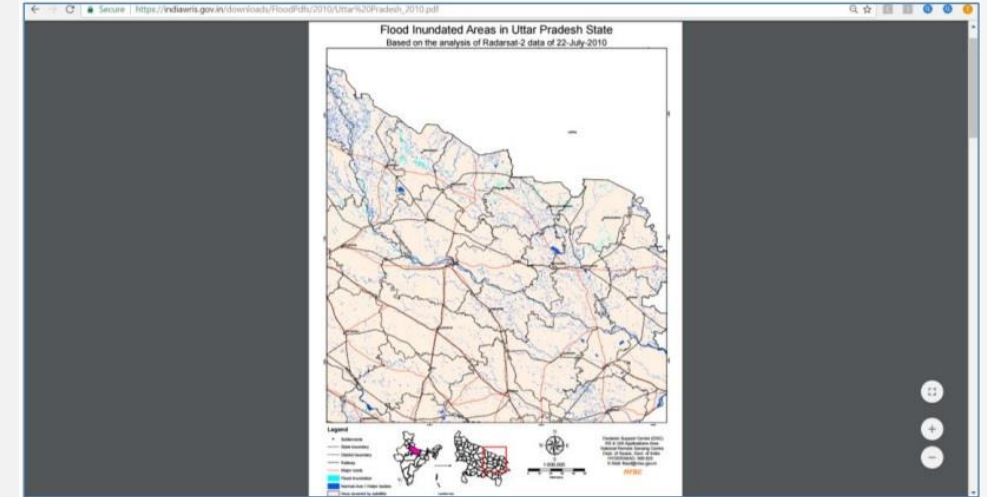
State selection and Chart

2.9 Hydro-met Extremes

- Flood inundated area based on satellite derived images for three years viz., 2008, 2009 and 2010

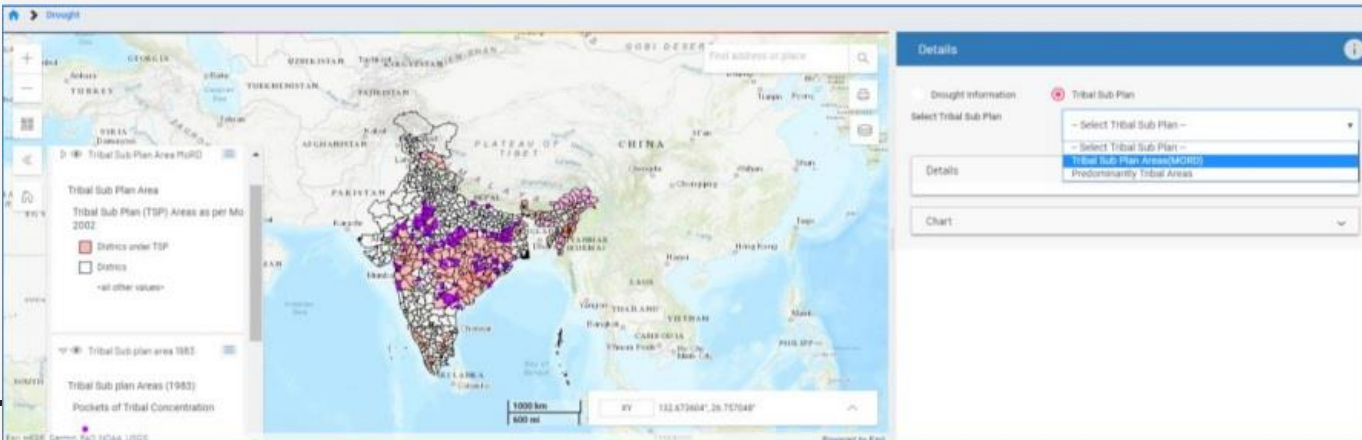


Flood - State selection and pdf downloads

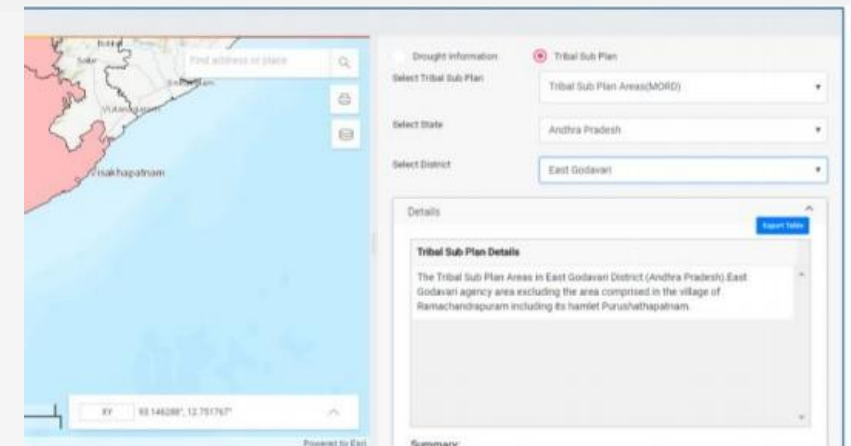


Flood pdfs

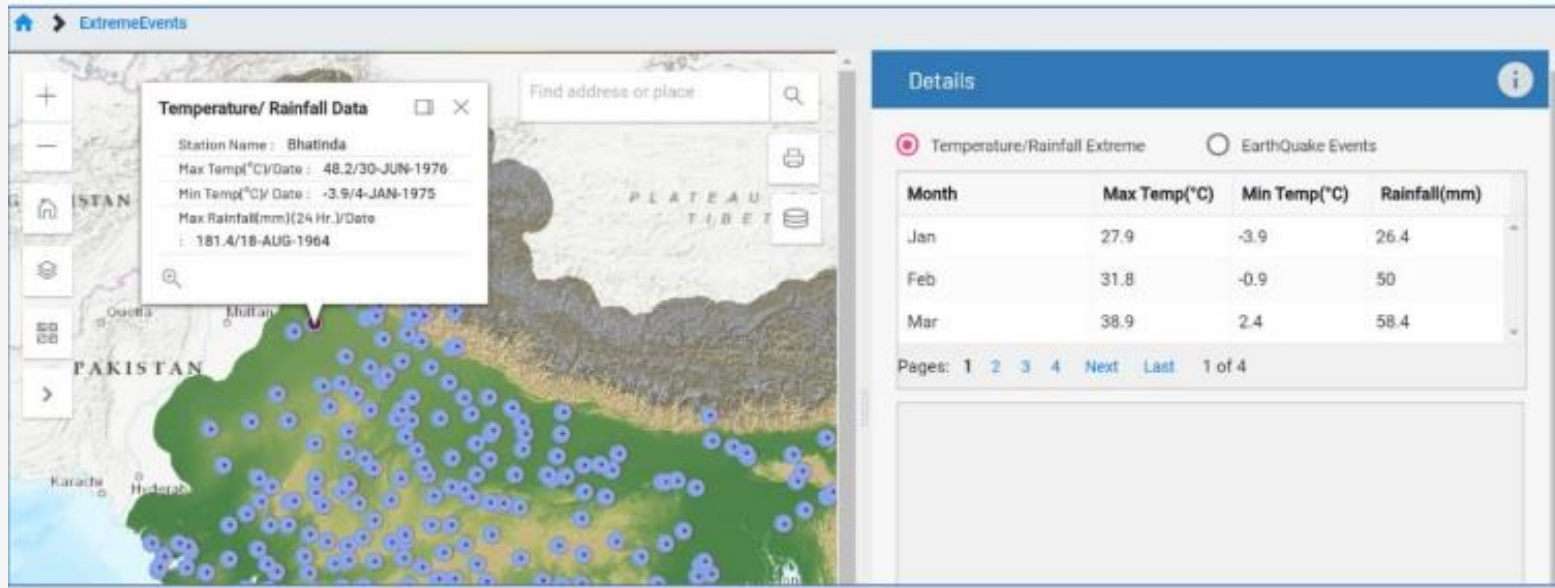
- Drought Prone Area based on the information generated under two main themes i.e. Areas under Drought Prone Development and Desertification Development & Tribal Sub-Plan Areas in the Country



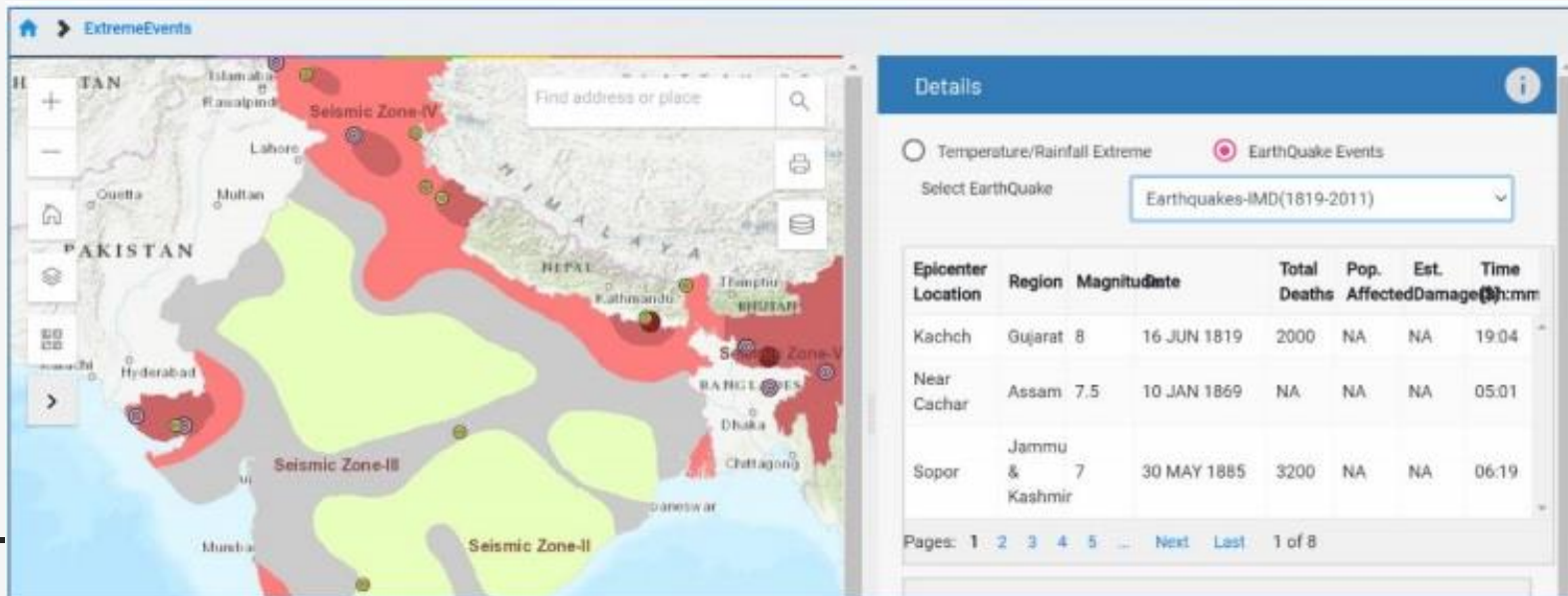
Drought – Tribal sub plan



Drought – District selection and statistics



Temperature / Rainfall Extremes



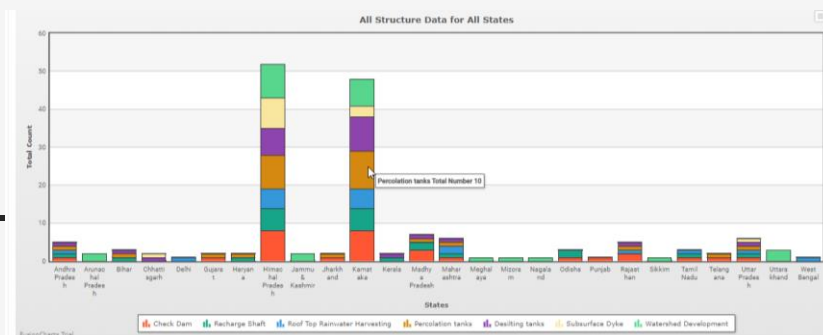
Earthquake

2.10 Artificial Recharge Structure - Viewer

- Provides holistic picture of the existing artificial recharge structures in a structured manner.
- User can view/download the data through map or in the form of tables.
- Pre-generated Reports are available for easy and quick access of the information
- 9 types of reports

The screenshot shows the 'Artificial Recharge Structure - Viewer' interface. On the left, there are navigation controls: Zoom in (+), Zoom out (-), Default Extent (house icon), Basemap Gallery (grid icon), and Layers (stack icon). A Global Search bar is at the top center. The map displays India with various recharge structures marked by colored dots (red, green, blue, yellow, orange). A coordinate bar at the bottom shows 'XY 40.168721°, 5.541259°'. On the right, there are filters for Boundary Wise Selection (Administrative Boundary), Type of Structure (All Structure Types), and Sub Type of Structure. Below these are dropdowns for State (All States), District (- Select District -), and Block (- Select Block -). A 'Download Data' button and a 'Clear' button are also present. A 'Summary' table is displayed below the filters.

Sr No	State Name	Count	Storage Capacity (Cub. Meter)	Total Expenditure (Rupees)
1	Andhra Pradesh	5	18,360	12,60,000
2	Arunachal Pradesh	2	3,700	4,70,000
3	Bihar	3	12,670	8,50,000
4	Chhattisgarh	2	2,383	5,80,000
5	Delhi	1	1,088	2,10,000
6	Gujarat	2	3,748	5,20,000
7	Haryana	2	14,600	5,60,000
8	Himachal Pradesh	52	1,46,512	81,20,000



The screenshot shows the 'Report Download' section. A dropdown menu is open, listing the following options: Administrative Unit Wise, Hydrological Basin Wise, Year Of Completion, Agency Wise, Artificial Recharge Structure Type, Complete Basin Report, Complete State Report, and Urban / Rural.

3. Static Modules

3.1 Exploration details/Litholog

- Provides the litholog of boreholes
- Information provided in terms of major lithology & aquifer zones (encountered / tapped)
- Individual bore logs with static parameters have been represented graphically.

Home About WRIS Water Data + WRIS Tools + Utilities + Publications + Contact Us +

Find address

Basemap Gallery

Layer List

Print

Litholog Well Locations

Well type

- Exploratory Well
- Observation Well
- Piezometer Well
- Others

User Guide – Exploration Details/Litholog

This document is intended to provide all the necessary information about the module, describing all the functions and tools available as well as to provide users with easy navigation guidance through which user may easily explore module and download information.

The following steps may be followed to get access to the tools and their functionalities:

1. The main or home page of the module consists of different

Individual Bore details

Well Location : Kotar
Well ID: L00667
State: Madhya Pradesh
District: Satna

Depth (m)

Litholog

Aquifer Material

- Non-Aquifer (Alluvium, Sirbu Shale, Bhandar limestone & Ganurgarh Shale)

Year of observation: 2002
Distance of Observation Well: 1.94715774
Year of Drilling: 2006-07
Depth Drilled (m): 142.90000305
Depth of Construction (m): -

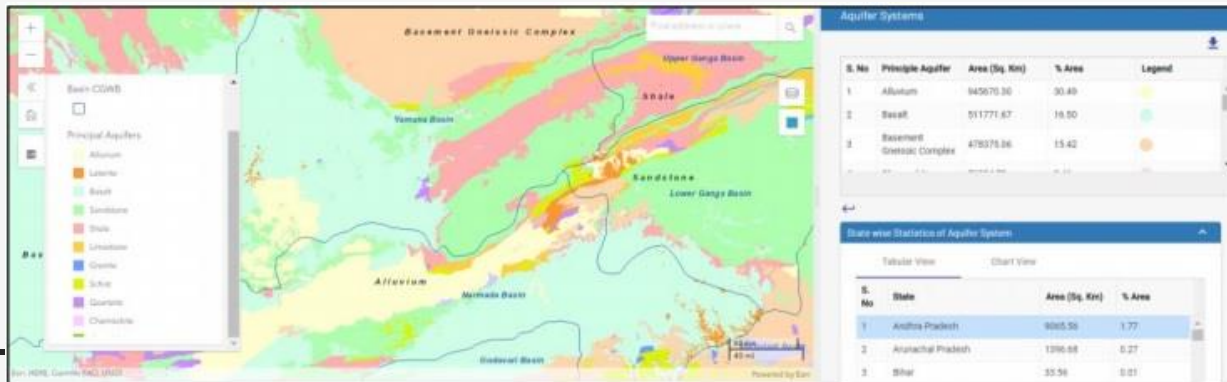
Year of observation: 2002
Distance of Observation Well: 1.94715774
Year of Drilling: 2006-07
Depth Drilled (m): 142.90000305
Depth of Construction (m): -

3.2 Aquifer-2D

- 14 Principal Aquifer Systems &
- 42 Major Aquifers.
- In addition, Aquifer thickness, depth of first aquifer and aquifer material
- Map is available for view for the states having lithology data.



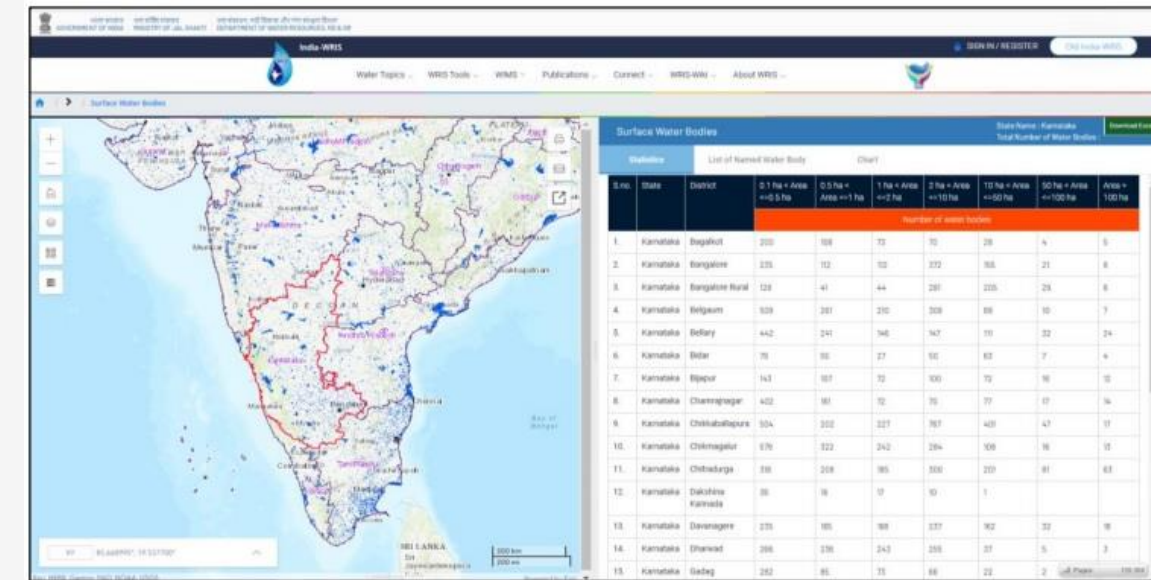
Aquifer Systems



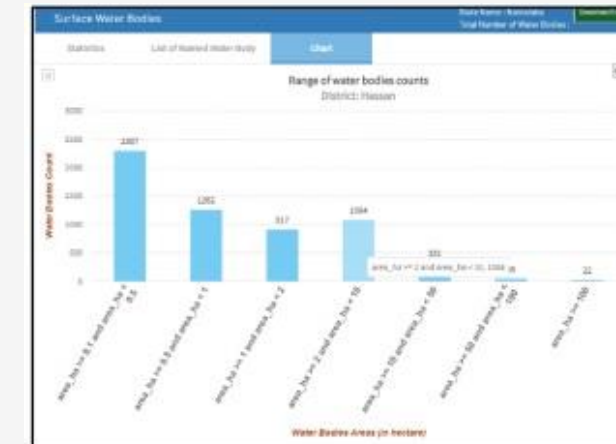
Aquifers statistics state level

3.3 Surface Water Bodies

- Spatial distribution, extent and no. of surface Water Bodies mapped across nation.
- waterbodies under different area classes.



Surface Water Bodies – Unit Selection - Statistics



Drill down charts

3.4 River Information

- Provides various hydrological boundaries (basin, sub-basin and water shed along with river layer) by different agencies



Global search

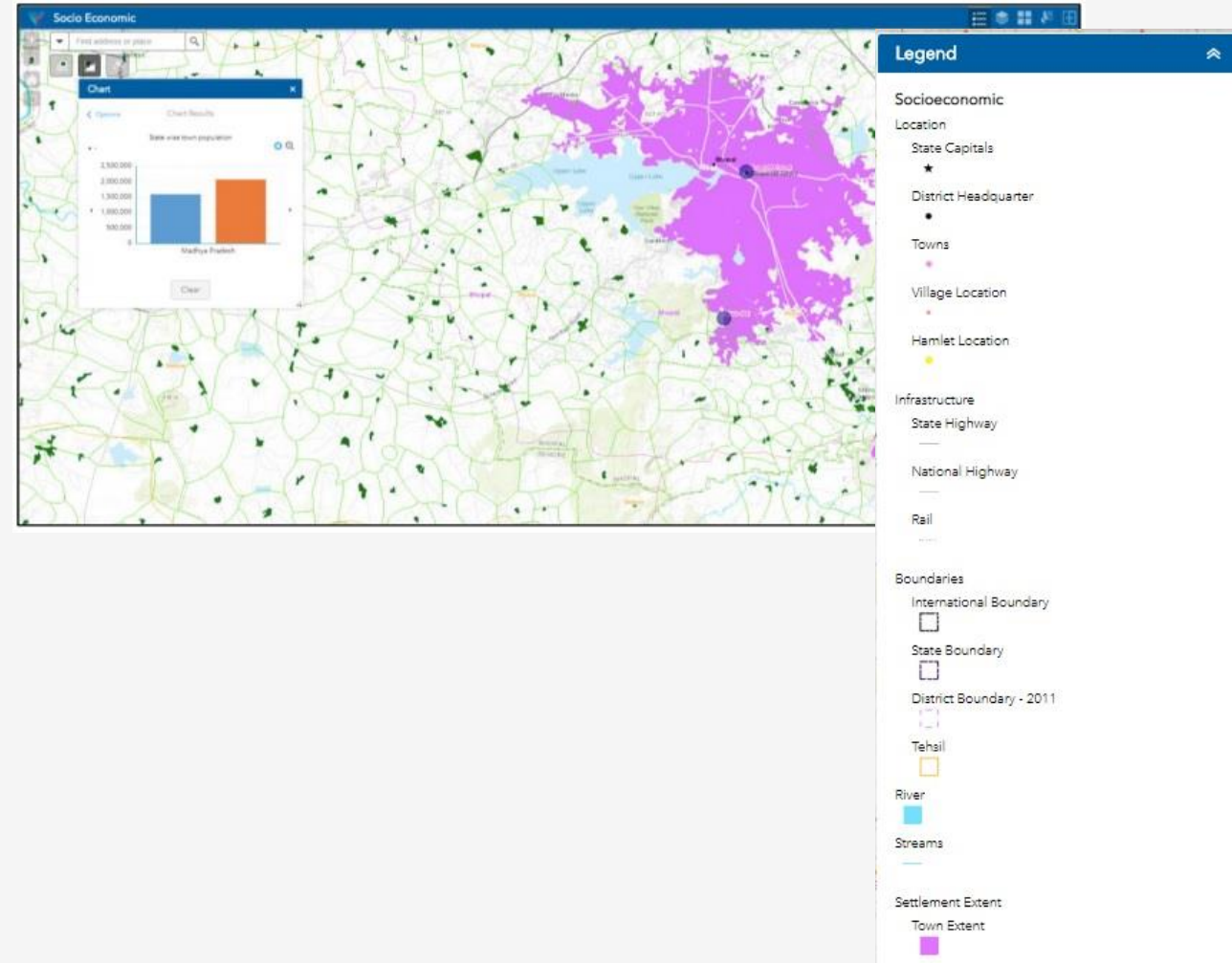


Zoom to feature

3.5 Socio Economic Census

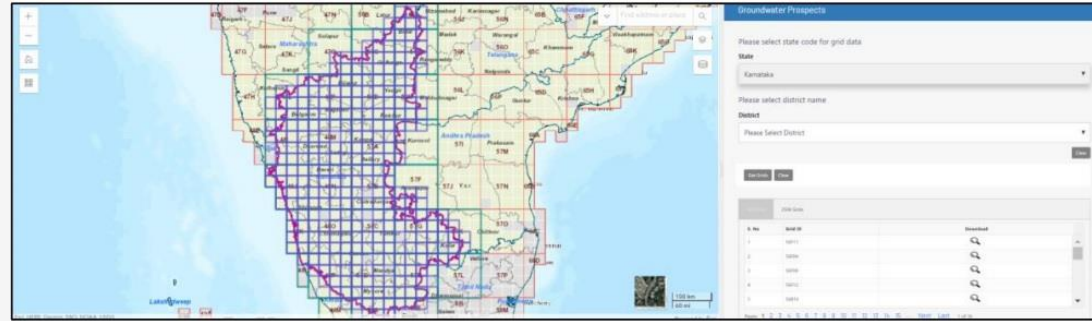
- Information regarding hierarchy of Administrative boundaries, settlement information for urban and rural sets

- Village boundary layer (declared by SOI) also provided

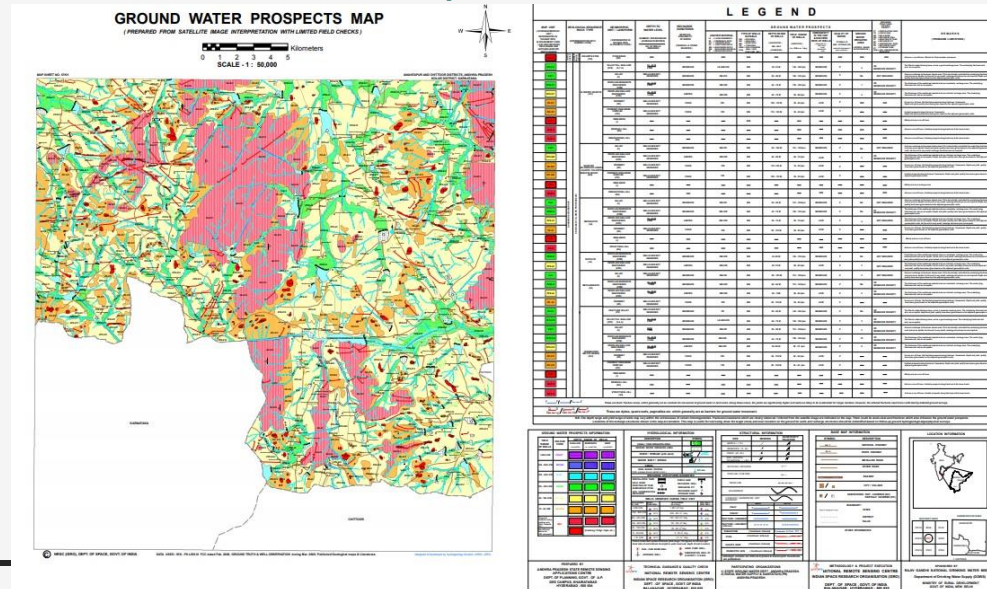


3.6 Groundwater Prospects

- Provides information regarding potential areas in terms of ground water availability (both quantity and quality).
- Maps are provided on 1:50,000 scale.



Groundwater Prospects Grid in selected state



Downloads – View of the map with legend

3.8 Soil

- Distribution of soil layer for entire country
- represents variation of soils in terms of texture, depth, slope, erosion and productivity.

Soil

State Name : Madhya Pradesh

Download Excel

Soil Depth | Soil Erosion | Soil Productivity | Soil Slope | Soil Texture

Statistics | Chart

SN.	State	District	Description	Area in (ha)
1	Madhya Pradesh	Alirajpur	Deep,Moderately deep, slightly/moderately shallow (depth>50cm)	193196.421
2	Madhya Pradesh	Alirajpur	Extremely shallow (< 10cm)	3512.861
3	Madhya Pradesh	Alirajpur	Shallow (25-50cm)	107187.948
4	Madhya Pradesh	Alirajpur	Very shallow (10-25 cm)	17582.564
5	Madhya Pradesh	Anuppur	Deep,Moderately deep, slightly/moderately shallow (depth>50cm)	322332.317
6	Madhya Pradesh	Anuppur	Extremely shallow (< 10cm)	
7	Madhya Pradesh	Anuppur	Shallow (25-50cm)	
8	Madhya Pradesh	Anuppur	Very shallow (10-25 cm)	

State Selection and Statistics

Soil Report

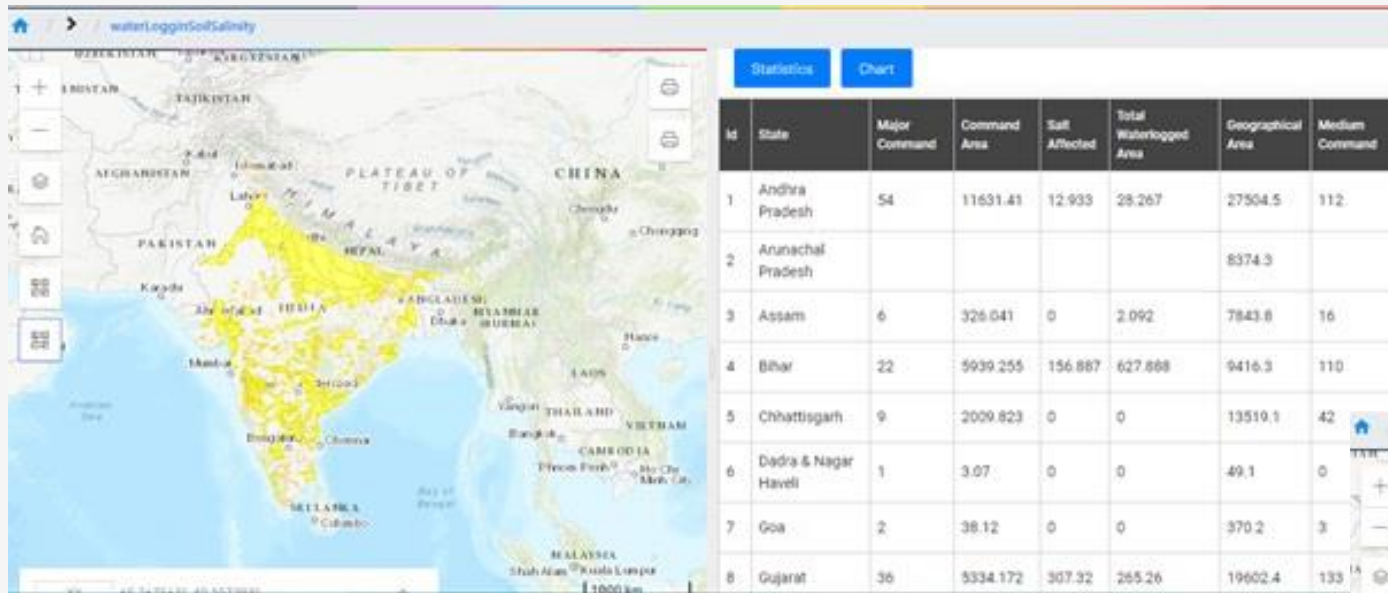
Date : May 21, 2020, 5:04:52 PM

Area	State	Description	District	Tbl
27.878	BR	DATA NOT AVAILABLE	Araia	soil_depth
27051.012	BR	Deep,Moderately deep, slightly/mod	Araia	soil_depth
42175.627	BR	Deep,Moderately deep, slightly/mod	Anwal	soil_depth
2363.175	BR	Extremely shallow (< 10cm)	Anwal	soil_depth
15238.104	BR	Shallow (25-50cm)	Anwal	soil_depth
278805.358	BR	Deep,Moderately deep, slightly/mod	Aurangabad	soil_depth
8929.316	BR	Extremely shallow (< 10cm)	Aurangabad	soil_depth
19734.39	BR	Shallow (25-50cm)	Aurangabad	soil_depth
7648.153	BR	Very shallow (10-25 cm)	Aurangabad	soil_depth
273201.17	BR	Deep,Moderately deep, slightly/mod	Banka	soil_depth
6374.313	BR	Extremely shallow (< 10cm)	Banka	soil_depth
398.223	BR	Shallow (25-50cm)	Banka	soil_depth
18105.346	BR	Very shallow (10-25 cm)	Banka	soil_depth
166834.29	BR	Deep,Moderately deep, slightly/mod	Begusarai	soil_depth
19452.714	BR	Extremely shallow (< 10cm)	Begusarai	soil_depth
207398.749	BR	Deep,Moderately deep, slightly/mod	Bhagalpur	soil_depth
37141.154	BR	Extremely shallow (< 10cm)	Bhagalpur	soil_depth
204434.052	BR	Deep,Moderately deep, slightly/mod	Bhojpur	soil_depth
23630.923	BR	Extremely shallow (< 10cm)	Bhojpur	soil_depth
159949.252	BR	Deep,Moderately deep, slightly/mod	Buxar	soil_depth
4348.298	BR	Extremely shallow (< 10cm)	Buxar	soil_depth
218254.686	BR	Deep,Moderately deep, slightly/mod	Darbhanga	soil_depth
1858.278	BR	Extremely shallow (< 10cm)	Darbhanga	soil_depth
411454.386	BR	Deep,Moderately deep, slightly/mod	Gaya	soil_depth

Data in Excel format

3.9 Water logging & Soil salinity

- Provides statistical analysis of water-logging area and soil salinity under major and medium commands in different State along with chart view.



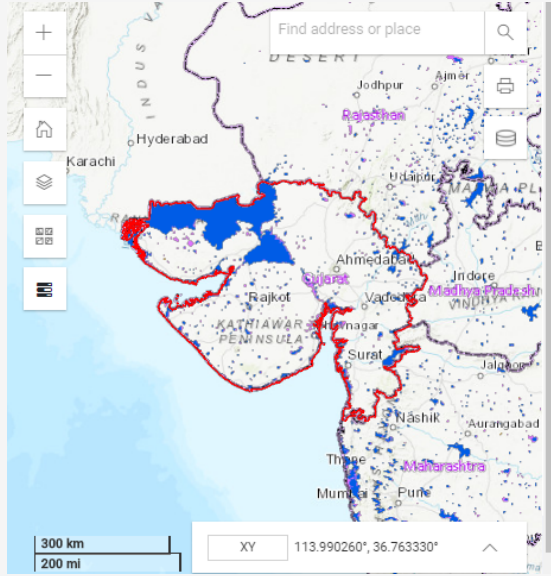
Water Logging and Soil Salinity Module

Statistics and Charts



3.10 Wet Lands

- Spatial distribution and extent of wetlands for the year 1994 & 2005 (pre and post monsoon)
- Satellite based product



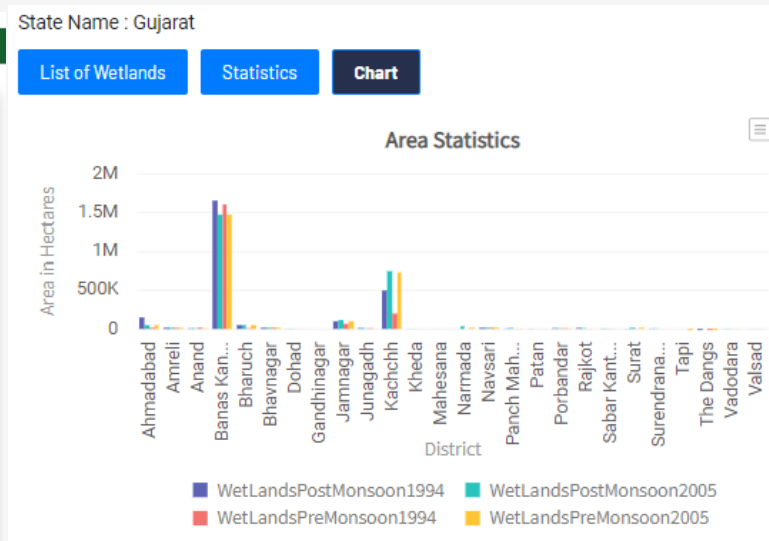
State Name : Gujarat

List of Wetlands | Statistics | Chart | Download Excel

SN.	State	District	Location of Wetland	Nature of Wetland	Basin	Sub Basin	Type of Wetland	Wet Name	Wet Time	Area
1	Gujarat	Ahmadabad	Inland	Natural	Sabarmati	Sabarmati Lower	Ox-bow lakes/cut off meanders		WetLandsPostMonsoon1994	58.3
2	Gujarat	Ahmadabad	Inland	Natural	Sabarmati	Sabarmati Lower	Lake/ponds		WetLandsPostMonsoon1994	1596
3	Gujarat	Ahmadabad	Inland	Natural	Sabarmati	Sabarmati Lower	Lake/ponds		WetLandsPostMonsoon1994	7940
4	Gujarat	Ahmadabad	Inland	Man-made	Sabarmati	Sabarmati Lower	Reservoirs		WetLandsPostMonsoon1994	141.1
5	Gujarat	Ahmadabad	Coastal	Natural	Sabarmati	Sabarmati Lower	Sand/beach/spit/bar		WetLandsPostMonsoon1994	81.3
6	Gujarat	Ahmadabad	Coastal	Natural	Sabarmati	Sabarmati Lower	Sand/beach/spit/bar		WetLandsPostMonsoon1994	700

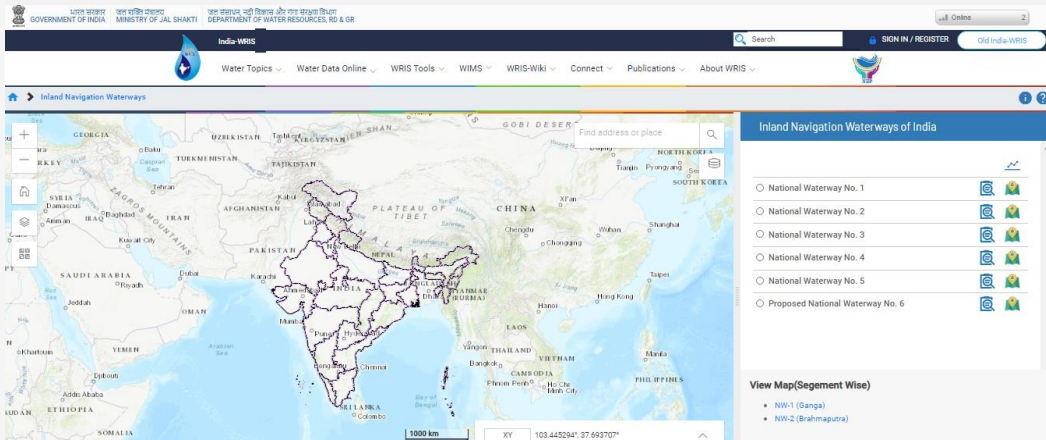
List of Wetlands | Statistics | Chart | Download Excel

SN.	District	WetLands Post Monsoon 1994 (Area (Ha))	WetLands Post Monsoon 2005 (Area (Ha))	WetLands Pre Monsoon 1994 (Area (Ha))	WetLands Pre Monsoon 2005 (Area (Ha))
1	Ahmadabad	164343.409	56361.360	22562.365	50663.856
2	Amreli	19665.688	18458.501	14537.872	13911.876
3	Anand	9362.729	9660.722	17612.530	9793.457
4	Banas Kantha	1656868.764	1485024.998	1619283.244	1480469.808
5	Bharuch	53121.648	52327.808	10696.383	51730.916
6	Bhavnagar	27311.142	30875.074	15610.027	25066.474
7	Dohad	2700.005	5694.024	1110.373	1226.156
8	Gandhinagar	459.647	84.101	149.130	59.738



3.11 Inland Navigation Waterways

- Brief summary of all inland waterways along with the maps as well as all relevant information.
- 5 Navigation Waterways namely,
 - (a) the Ganga (NW-1),
 - (b) the Brahmaputra (NW-2),
 - (c) the West Coast Canal (NW-3),
 - (d) Kakinada-Puducherry Canals system along with Godavari and Krishna rivers (NW-4) and
 - (e) East Coast Canal with Brahman River and Mahanadi delta (NW-5).
- Sixth proposed navigation waterway (The Barak – NW-6).



Inland Navigation Waterways

National Waterway-1	
Salient Features	
1. Name	National Waterway-1
2. State of destination	Source on National Waterway 1 at 230 Km from Durg
3. Total length	1300 Km
4. Source details	1) Farakka Feeder- 500 Km 2) Farakka Canal- 400 Km 3) Farakka Bypass- 400 Km
5. Route No.	1/1/1/1/1
6. Route No.	1/1/1/1/1
7. Route No.	1/1/1/1/1
8. Route No.	1/1/1/1/1
9. Route No.	1/1/1/1/1
10. Route No.	1/1/1/1/1
11. Route No.	1/1/1/1/1
12. Route No.	1/1/1/1/1
13. Route No.	1/1/1/1/1
14. Route No.	1/1/1/1/1



Downloads – Salient features and Map



Overview of Waterway

3.12 Interbasin Transfer Links

- Information and maps of the various components of the Inter Basin Transfer Links.
- Detailed structures and water bodies associated for Peninsular component
- Published maps of NWDA in .pdf format are available for Himalayan component.



Himalaya Inter Basin Transfer Link



Downloads – Map view of links

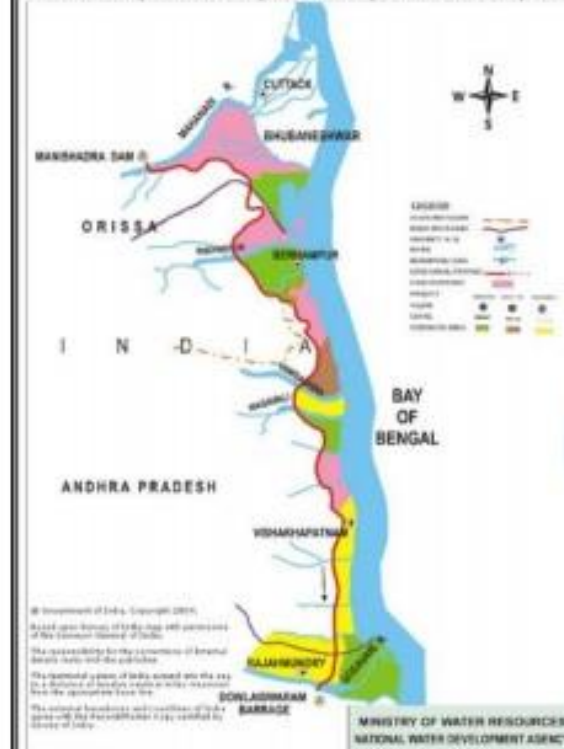


Zoom to link on click

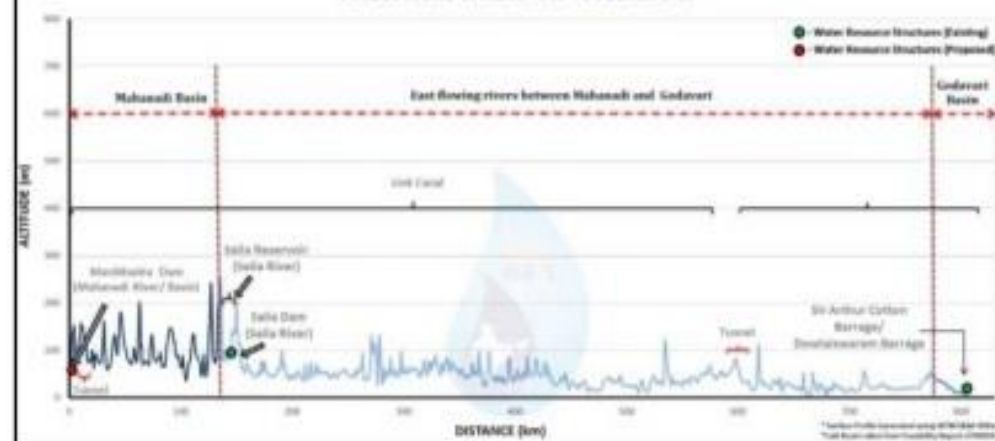
Salient Features of Mahanadi - Godavari Link Project

1.	Name of the project	Mahanadi (Manibhadra) – Godavari (Dowlaiswaram) Link Project
2.	Purpose	Diversion of 12165 Mm ³ of Mahanadi waters to meet en route irrigation, domestic and industrial needs in Orissa and Andhra Pradesh States and to deliver a quantum of 6500 Mm ³ at upstream, of the Dowlaiswaram barrage on the Godavari river to meet part requirement of Godavari delta.
3.	Quantum of water diversion (Mm ³)	12165
4.	En route Irrigation/Utilisation	
a)	In Orissa State	
	i) C.C.A (ha)	256770
	ii) Annual Irrigation (ha)	351786
	iii) Annual Utilisation (Mm ³)	3184
b)	In Andhra Pradesh State	
	i) C.C.A (ha)	107189
	ii) Annual Irrigation (ha)	91110
	iii) Annual Utilisation (Mm ³)	606
c)	Total	
	i) C.C.A (ha)	363959
	ii) Annual Irrigation (ha)	442896
	iii) Annual Utilisation (Mm ³)	3790

MAHANADI (MANIBHADRA)-GODAVARI (DOWLAISWARAM) LINK

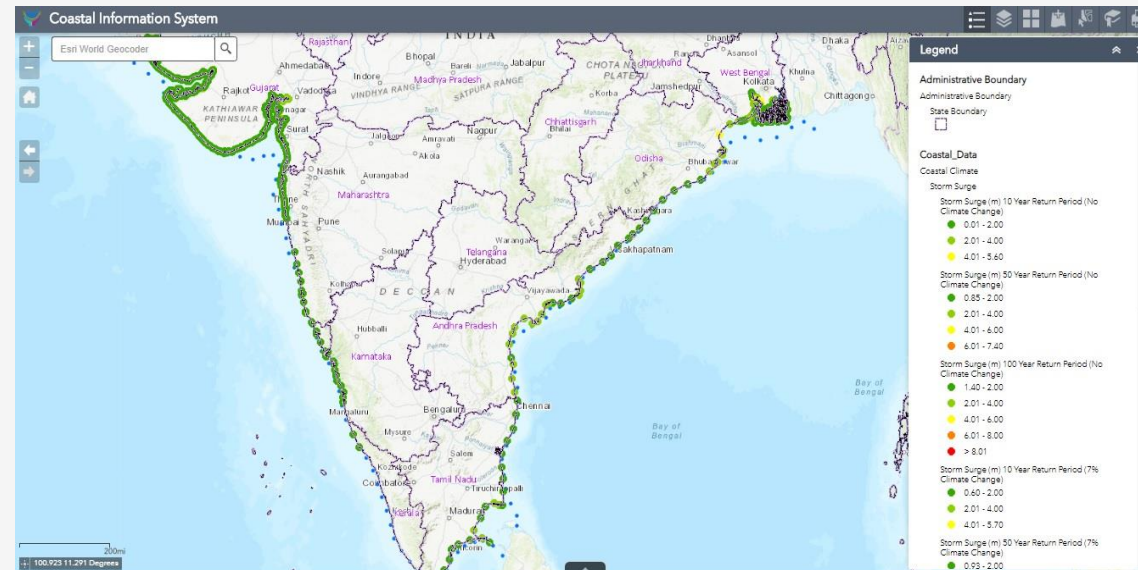


Surface Profile of Mahanadi - Godavari Link



3.13 Storm Surge Study

-Storm Surge are provided at a distance of 10 km for Gujarat, Maharashtra, and West Bengal and rest of the coast line at 50 km interval.

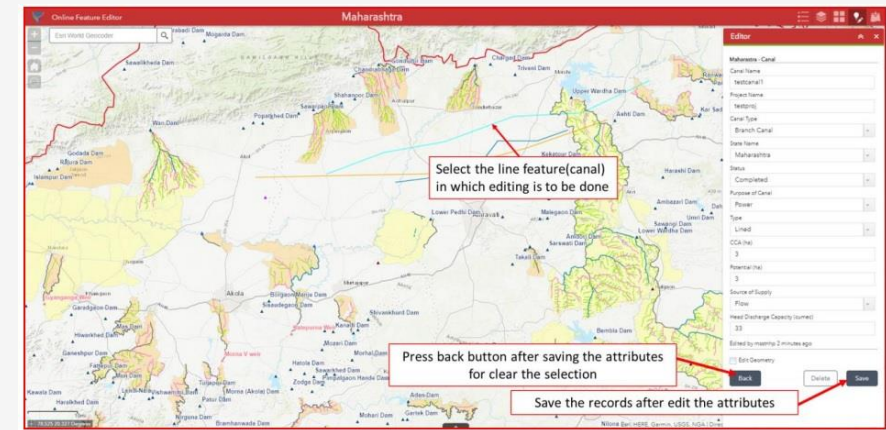
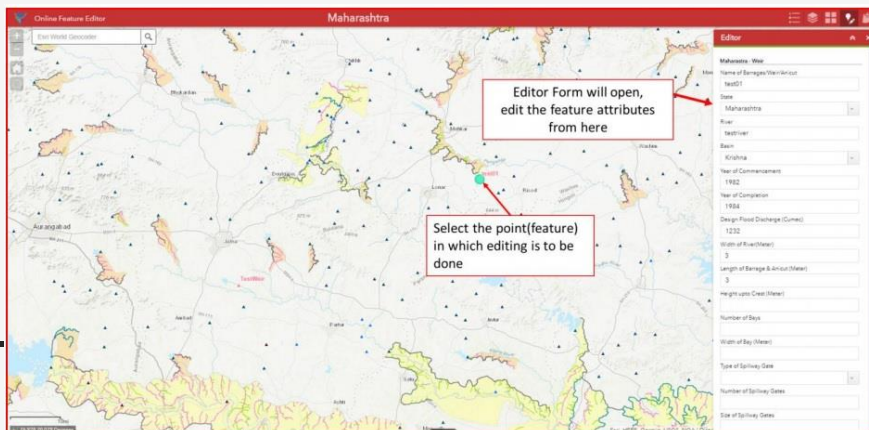
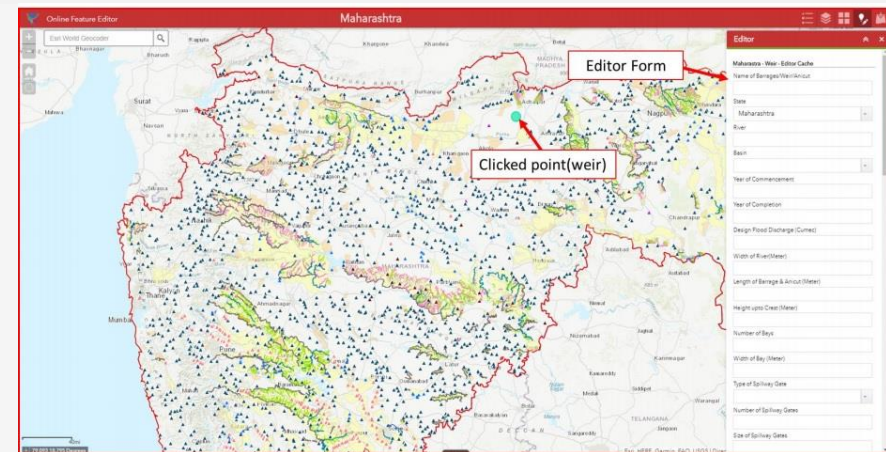
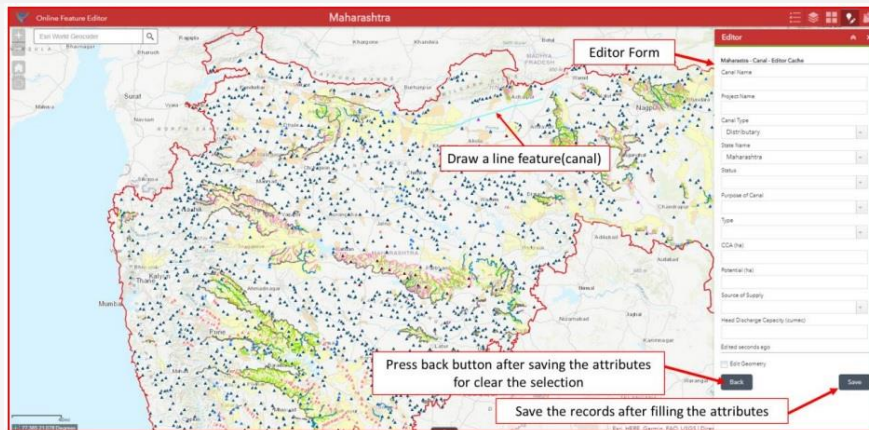


Coastal Information System

4. Tools

4.1 Online Web Editor

- To provide a platform for the state agencies to upload the water resources information
- Add/edit/delete the features and attributes online for six themes namely, dam, barrage, weir, anicut, lift and canal for further dissemination at India-WRIS platform.
- State users can update Irrigation Projects with authorized access.



4.2 ARS – Data Entry

- Data Entry Platform to ingest the attribute data directly into the India WRIS database.

- Create features such as
- Edit Existing features
- Download Data

2 sections in Data Entry Form:

Part A: Primary Field Related To 'Location Details'

Part B: Secondary field are for 'structure details' such as like width, height, storage capacity etc.

Login Based

Sign in

Please sign in to access the item on <https://gis.indiawris.gov.in/portal> (item)

Username:

Password:

OK Cancel

Zoom in

Zoom out

Default Extent

Global Search

Print map

Data Panel

Base map Gallery

Layer List

Legend

ARS Layer Edit

- Check Dam
- Desilting tanks
- Percolation tanks
- Recharge Shaft
- Roof Top Rainwater Harvesting
- Watershed Development
- Subsurface Dyke

Create new Structure

Edit

View

ARS List

Artificial Recharge Structure

State: Select State

Structure Type: Select Structure

Sub Structure Type: Select Sub Structure

Created On: dd-mm-yyyy

Search Clear

Create New Structure

Download Data

Type of Structure	Sub Structure Type	State	District	Block	Basin	Subbasin	Created Date	Action
Check Dam	Check Dam	Andhra Pradesh	Chittoor	Tirupati (Rural)	West flowing rivers of Kutch and Saurashtra including Luni	Palar and other	2021-02-24 10:43:51	[Edit] [View]
Check Dam	Check Dam	Telangana	Karimnagar	Elkathurthi	Godavari	Pranhita and others	2021-02-24 06:16:26	[Edit] [View]
Check Dam	Check Dam	Telangana	Mahbubnagar	Peddamaddur	Krishna	Krishna Middle	2021-02-24 05:41:06	[Edit] [View]
Check Dam	Check Dam	Bihar	Saran	Dariapur	Ganga	Gandak and others	2021-02-24 05:29:55	[Edit] [View]
Check Dam	Check Dam	Uttar Pradesh	Sant Kabir Nagar	Ghanghata	Ganga	Ghaghara	2021-02-24 05:27:11	[Edit] [View]
Subsurface Dyke	Subsurface Dyke	Rajasthan	Sawai Madhopur	Bonli	Ganga	Banas	2021-02-23 09:18:30	[Edit] [View]
Subsurface Dyke	Subsurface Dyke	Rajasthan	Tonk	Tonk	Ganga	Banas	2021-02-23 09:16:52	[Edit] [View]
Subsurface Dyke	Subsurface Dyke	Rajasthan	Tonk	Tonk	Ganga	Banas	2021-02-23 08:13:19	[Edit] [View]
Check Dam	Check Dam	Bihar	Buxar	Barhampur	Ganga	Ghaghara Confluence to Gomti confluence	2021-02-22 11:57:28	[Edit] [View]



ARS – Data Entry

Create new feature–

- Primary and Secondary data form
- Select Structure type & Subtype
- Plot point – Latitude/Longitude
- Autofill of details (grey fields) based on location
- Upload image facility
- Add details for the fields
- Save

2 sections in Data Entry Form:

---Part A

Primary Field Related To 'Location Details'

Artificial Recharge Structure

Primary Data

Type of Structure: Check Dam | Sub Type of Structure: Check Dam

Latitude (Degree Decimal): Latitude.. | Longitude (Degree Decimal): Longitude | Plot Point

Upload: File: Choose File | No file chosen | State: State

District*: District | Tehsil/block*: Tehsil/block..

Location Type (Urban/Rural): URBAN | City Name*: City name..

Address: Address.. | Pin*: Pin Code

Basin Name*: Name of Basin.. | Sub Basin Name*: Name of Sub Basin..

Watershed Code*: Watershed Code | Structure Code*: Structure code

Next → | Close

---Part B

Secondary field are for 'structure details' such as like width, height, storage capacity etc. <D:\data collection sheet.xlsx>

Artificial Recharge Structure

Secondary Data

Type of Agency*: CENTRAL | Name of Agency/Owner*: Name of Agency..

Source of Funding (Name of the scheme)*: Drought Prone Areas Programme (DPAP) | Height of Structure (Meter): Height of structure..

Length of Structure (Meter): Length of structure.. | Storage Capacity (Cub.Meter)*: Storage capacity..

Functional Status (Existing/Closed): EXISTING | Expenditure (Rupees)*: Expenditure..

Year of Completion (YYYY)*: Year of completion.. | Month*: -Select Month-

Prev | Save | Close



ARS – Data Entry

Edit existing feature–

- Select Structure to edit
- Add/update details for the fields in primary & secondary form
- Upload image facility
- Save

Artificial Recharge Structure

Primary Data

Type of Structure: Check Dam (dropdown)
Sub Type of Structure: Check Dam (dropdown)

Latitude (Degree Decimal): 13.576
Longitude (Degree Decimal): 79.377
Please click on map to get accurate lat/long for your point

Upload: File: Choose File No file chosen Image Not Available

State*: Andhra Pradesh

District*: Chittoor
Tehsil/block*: Tirupati (Rural) (dropdown)

Location Type (Urban/Rural): URBAN (dropdown)
City Name*: Chittor

Address: Pahadganj
Pin*: 2232323

Basin Name*: West flowing rivers of Kutch and Saurashtra including Luni
Sub Basin Name*: Palar and other

Watershed Code*: C18PAL39
Structure Code*: APC18PAL39A10001

Next → Close

Artificial Recharge Structure

Secondary Data

Type of Agency*: CENTRAL (dropdown)
Name of Agency/Owner*: INSTITUTION 3

Source of Funding (Name of the scheme)*: Drought Prone Areas Programme (DPAP) (dropdown)
Height of Structure (Meter): 3

Length of Structure (Meter): 22
Storage Capacity (Cub.Meter)*: 22

Functional Status (Existing/Closed): EXISTING (dropdown)
Expenditure (Rupees)*: 120000

Year of Completion (YYYY)*: 2021
Month*: JAN (dropdown)

← Prev Save Close

5. Utilities

5.1 Data/Report Download (Tabular)

- Offers download of time series data
- Various types of reports already generated, for ease of data assessment and usage.
- Also has a comparison dashboard for comparing the reservoirs and river points data.

The screenshot displays the 'Water Data Online' interface with several panels for report generation. Each panel includes a 'Back to Water Data Online' link, a 'Download Data' button, and a 'Download Data' dropdown menu. The main content area features a navigation bar with 'Application' and 'Report Type' dropdowns, and a 'Source' dropdown. Below this, there are sections for 'Location' (State and District) and 'Time' (Time Step, Start, Stop). A 'DOWNLOAD REPORT' button is visible at the bottom of the panels.

- Panel 1:** Application: Select Application (Rainfall, Reservoir, River Point, Ground Water); Report Type: Select Required Report.
- Panel 2:** Application: Ground Water; Report Type: Select Required Report (State wise Level Report, District wise Level Report, State Wise Station Level Report).
- Panel 3:** Application: Rainfall; Report Type: Select Required Report (Rainfall, Reservoir, River Point, Ground Water).
- Panel 4:** Application: Rainfall; Report Type: Select Required Report (State Wise Timeseries, District Wise Timeseries, Station Wise Timeseries).
- Panel 5:** Application: Rainfall; Report Type: District Wise Timeseries. Includes fields for Source, Location (State, District), Time (Time Step, Start, Stop), and Aggregation Type (Sum).

The screenshot shows the 'Storage Comparison' dashboard. It features a navigation bar with 'Back to Water Data Online', 'Download Data', and 'Download Data' dropdown. The main area has 'Application' and 'Report Type' dropdowns. Below, there are sections for 'Source', 'Location' (View, State, District, Reservoir), and 'Time' (Date). A 'DOWNLOAD REPORT' button is at the bottom.

- Panel 1:** Application: Reservoir; Report Type: Select Required Report.
- Panel 2:** Application: Reservoir; Report Type: Select Required Report (Change Reservoirs, Storage Timeseries, Storage Comparison).
- Panel 3:** Application: Reservoir; Report Type: Level & Storage Bulletin.

A data table is shown below the panels, displaying columns for 'Station Name', 'Station Code', 'Station Type', 'Station Category', 'Station Status', 'Station Location', 'Station Address', 'Station Contact', 'Station Email', 'Station Phone', 'Station Fax', 'Station Website', 'Station Logo', 'Station Photo', 'Station Video', 'Station Audio', 'Station Image', 'Station Document', 'Station File', 'Station Link', 'Station URL', 'Station IP', 'Station Port', 'Station Protocol', 'Station Method', 'Station Parameter', 'Station Unit', 'Station Range', 'Station Accuracy', 'Station Precision', 'Station Resolution', 'Station Sensitivity', 'Station Specificity', 'Station Selectivity', 'Station Reliability', 'Station Validity', 'Station Usability', 'Station Feasibility', 'Station Viability', 'Station Sustainability', 'Station Resilience', 'Station Robustness', 'Station Flexibility', 'Station Adaptability', 'Station Inflexibility', 'Station Inadaptability', 'Station Inflexibility', 'Station Inadaptability'.

Utilities

Groundwater data download

-Groundwater Level - State-wise | District wise | Station wise | Report of Seasonal Fluctuation | Report of Annual Fluctuation | Report of Decadal Water Level Fluctuation | Report of Depth to Water Level | Report of Trends of Water Level

The screenshot displays the web application interface for downloading groundwater data. It is divided into two panels. The top panel shows the initial selection screen with a navigation menu on the left containing 'Back to Water Data Online' and 'Download Data'. The main area has 'Application' set to 'Ground Water' and 'Report Type' set to 'Select Required Report'. A dropdown menu for 'Application' is open, listing 'Rainfall', 'Reservoir', 'River Point', and 'Ground Water'. The bottom panel shows a more detailed configuration screen. The 'Application' is 'Ground Water' and 'Report Type' is 'Select Required Report'. A dropdown menu for 'Report Type' is open, listing various report options, with 'Report of Trends of Water Level' selected. The 'Source' is set to 'CGWB + OTHER AGENCIES'. The 'Location' section has 'State' set to 'DELHI' and a dropdown menu for 'State' is open, listing various Indian states, with 'UTTAR PRADESH' highlighted. The 'Daily' frequency is selected, and there are 'Start' and 'Stop' date selection fields.

Utilities

River Monitoring stations data download

Level and flow

The screenshot shows a web application interface for downloading data from River Monitoring stations. The interface is divided into a left sidebar and a main content area. The sidebar contains a 'Back to Water Data Online' link and a 'Download Data' section with a sub-link '» Download Data'. The main content area has a blue header with 'Application' set to 'River Point' and 'Report Type' set to 'Level & Flow Timeseries'. Below the header, there are three columns of filters: 'Source' (set to 'CWC'), 'Location' (with sub-filters for 'View' (set to 'Admin'), 'State' (set to 'Select State'), 'District' (set to 'Select District'), and 'River Point' (set to 'Select River Point'); and 'Time' (with sub-filters for 'Time Step' (set to 'Daily'), 'Start' (set to 'Select date'), and 'Stop' (set to 'Select date')). A 'FEED BACK' button is located in the top right corner. At the bottom of the main content area, there is a note: '(*) marked locations are classified. Please [Login](#) to access Data.' and a blue 'DOWNLOAD REPORT' button.

Title	Location	Time
Source CWC	View Admin State Select State District Select District River Point Select River Point	Time Step Daily Start Select date Stop Select date

(*) marked locations are classified. Please [Login](#) to access Data.

DOWNLOAD REPORT

Utilities

Reservoir data download

- Level & Storage Bulletin | Storage & Level Time-series | Storage Comparison | Level Timeseries | Storage Timeseries

The screenshot displays a web interface for downloading reservoir data. On the left, there is a sidebar with a 'Back to Water Data Online' link and a 'Download Data' section containing a 'Download Data' link. The main content area has a top navigation bar with 'Application' set to 'Reservoir' and 'Report Type' set to 'Level & Storage Bulletin'. A dropdown menu is open under 'Report Type', listing options: 'Level & Storage Bulletin', 'Select Required Report', 'Level & Storage Bulletin', 'Storage Timeseries', 'Storage Comparison', 'Level Timeseries', and 'Level & Storage Timeseries'. Below the navigation bar, there are two columns: 'Source' and 'Location'. The 'Source' column has a 'Select Source' dropdown. The 'Location' column includes a 'View' dropdown set to 'Admin', a 'Select date' field with a calendar icon, and three more dropdowns for 'State', 'District', and 'Reservoir', all currently set to 'Select [Category]'. At the bottom of the form is a large blue button labeled 'DOWNLOAD REPORT'.

Utilities

Rainfall data download

- Rainfall - State wise | District wise | Station-wise | Basin-wise

The screenshot displays the 'Water Data Online' interface for downloading rainfall data. It is organized into three main sections, each with a 'Back to Water Data Online' and 'Download Data' link.

- Top Section:** Application is set to 'Rainfall'. The Report Type dropdown is open, showing options: 'Select Required Report', 'State Wise Timeseries', 'District Wise Timeseries', and 'Station Wise Timeseries'.
- Middle Section:** Application is 'Rainfall'. The Report Type dropdown is open, showing options: 'Select Required Report', 'State Wise Timeseries', 'District Wise Timeseries', and 'Station Wise Timeseries'.
- Bottom Section:** Application is 'Rainfall'. The Report Type is set to 'District Wise Timeseries'. The configuration panel includes:
 - Source:** Select Source dropdown with options: 'Select Source', 'IMD GRID', 'AP STATE', and 'CWC + OTHER AGENCIES'.
 - Location:** State (Select State dropdown) and District (Select District dropdown).
 - Time:** Time Step (Daily dropdown), Start (Select date), and Stop (Select date).
 - Aggregation Type:** Sum dropdown.

A 'DOWNLOAD REPORT' button is located at the bottom right of the interface. A data table is visible at the bottom left, showing columns for State, District, and various rainfall metrics.

Utilities

Water Quality data download

- Groundwater Sites | Surface Water Sites

The image displays two screenshots of the 'Water Quality data download' web application interface. The browser address bar shows 'indiaiwris.gov.in/wris/#/waterData'.

Top Screenshot (Surface Water Quality Station Wise):

- Application:** Water Quality (dropdown menu is open, showing options: Select Application, Rainfall, Reservoir, River Point, Ground Water, Water Quality).
- Report Type:** Surface Water Quality Station Wise (dropdown menu is open, showing options: Select Required Report, Surface Water Quality Station Wise, Ground Water Quality Station Wise).
- Source:** Select Source (input field).
- Time:** Time Step (Monthly), Start (Select date), Stop (Select date).
- Location:** District (Select District), Station (Select Station).

Bottom Screenshot (Ground Water Quality Station Wise):

- Application:** Water Quality.
- Report Type:** Ground Water Quality Station Wise.
- Source:** Select Source.
- Location:** View (Admin), State (Select State), District (Select District), Station (Select Station).
- Time:** Time Step (Monthly), Start (Select date), Stop (Select date).

Both screenshots include a 'Download Data' section on the left and a 'DOWNLOAD REPORT' button at the bottom. The bottom screenshot also shows a footer with 'Reservoir (Analysis)' and 'Riverpoint (Analysis)' links.

5.2 Data Availability

- Availability of time series data of telemetry and manual stations as per State/Agency/Basin wise.
- Color code is provided to display the recent data availability and availability report download for selected unit is also provided through this module.

5.3 Geoviewer

- Tool to visualize all the different sets of data on a single application for a comparative and interlinked view to derive a holistic picture with overlay.

5.4 WRIS Wiki

- Comprehensive information for the water resources assets and projects of the country is made available through WRIS Wiki application.

5.5 Metadata

- Metadata module offers the information about the different GIS layers, its source, Citation and other details.
-

Utilities

5.2 Data Availability

-Availability of time series data of telemetry and manual stations as per State/Agency/Basin wise.

-Color code is provided to display the recent data availability and availability report download for selected unit is also provided through this module.

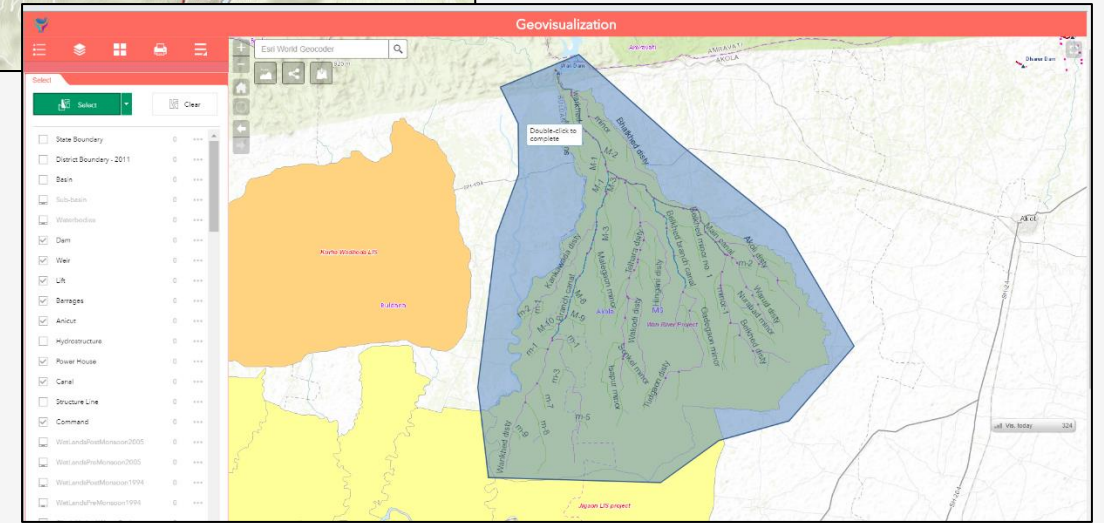
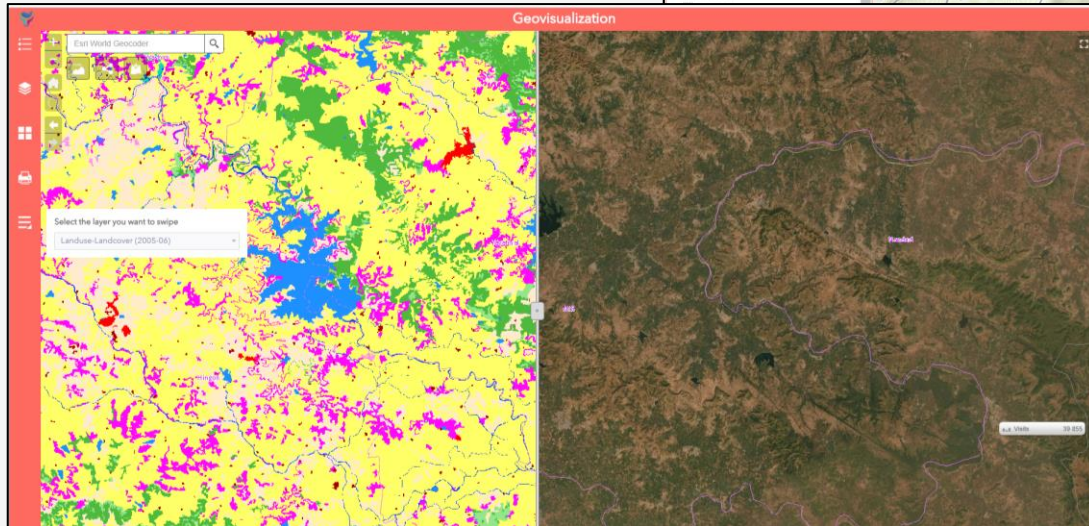
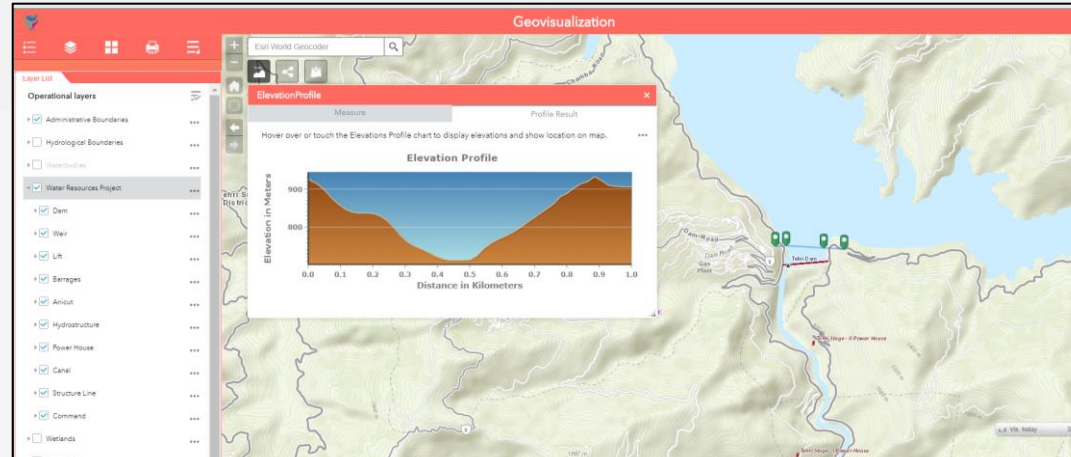
S.No.	Parameter Name	Number of Stations	Data Availability Dates	Action
1.	Surface Water Level - Manual	41	01-11-1970 – 26-07-2019	...
2.	Surface Water Level - Telemetric	39	11-08-1965 – 26-07-2019	...
3.	Ground Water Level - Manual	2528	05-01-1996 – 05-11-2018	...

S.No.	Station Name	Station Code	From Date	To Date	Availability Type	Open on Field
1	UP_Agri, Bhauk. Ahs. PMV, Kalyanaria	010118PU	02-07-2018	02-07-2018	●	●
2	UP_Agri, Achharia's, Junior School, Raibha	010118PU	04-04-2018	19-07-2019	●	●
3	UP_Agri, City U.P. Tourism Office	010118PU	25-03-2019	26-05-2019	●	●
4	UP_Agri, Achharia's, Junior School, Misra	010118PU	04-04-2018	25-07-2019	●	●
5	UP_Agri, Achharia's, Junior School, Mishra	010118PU	04-04-2018	25-07-2019	●	●
6	UP_Agri, Behrouz B. Columbia	010118PU	04-04-2018	25-07-2019	●	●
7	UP_Agri, Agri. City (HBT)	010118PU	25-03-2019	26-05-2019	●	●

Utilities

5.3 Geoviewer

- Tool to visualize all the different sets of data on a single application for a comparative and interlinked view to derive a holistic picture with overlay.



5.4 WRIS Wiki

- Comprehensive information for the water resources assets and projects of the country is made available through WRIS Wiki application.
- Available information has been organized under following heads:

- *Water Resources of India - An overview*
- *Rivers of India*
- *River Basins – Facts at a glance*
- *Major & medium irrigation projects*
- *Inland Navigation Waterways*
- *Inter-Basin Water Transfer Links*
- *Ground Water Resources*
- *Hydro-Meteorological sites*
- *State wise Information*
- *Legal Instruments on Rivers in India*
- *Inter State Water Dispute*

India's Water Wealth

India is one of the most important renewable natural resources for supporting the 11th the increasing population of India as well as its all-round development; the utilization of water is also increasing at a fast pace. On an average, India receives annual precipitation (including snowfall) of about 4000 km³. However, there exist considerable spatial and temporal variations in the distribution of rainfall and hence in availability of water in time and space across the country. It is estimated that out of the 4000 km³ water, 1000 km³ is average annual potential flow in rivers available as water resource. Out of this total available water resource, only 1122 km³ is utilized (500 km³ from surface water resources and 422 km³ from ground water resources). The water demand in the year 2000 was 624 km³ and it is likely to be 1083 km³ by the year 2025. Due to rapid rise in population and growing economy of the country, there will be continuous increase in demand for water, and it will become scarce in the coming decades (Refer Table-1).

Table 1: Water Availability Facts at a Glance

Area of the country as % of World Area	2.4%
Population as % of World Population	17.1%
Water as % of World Water	6%
Rank in per capita availability	132
Rank in water quality	122
Average annual rainfall	1180 mm (world average 1115 mm)
Range of distribution	150-1180 mm
Range Rainy days	5-150 days, mostly during 15 days in 100 mm
Range PET	1500-3500 mm
Per capita water availability (2010)	1580 m ³

According to the international norms, a country can be categorized as 'water stressed' when water availability is less than 1700 m³ per capita per year whereas classified as 'water scarce' if it is less than 1000 m³ per capita per year. In India, the availability of surface water in the years 1991 and 2011 were 2308 m³ and 1962 m³. However, it has been projected that per capita surface water availability is likely to be reduced to 1401 m³ and 1181 m³ by the years 2025 and 2050, respectively. The Per capita water availability in the year 2010 was 1588 m³ against 5200 m³ of the year 1991 in the country.

Table 2: India's Water Resources

S.No.	Water Resource at a Glance	Quantity (km ³)	Percentage
-------	----------------------------	-----------------------------	------------

5.5 Metadata

- Metadata module offers the information about the different GIS layers, its source, Citation and other details.

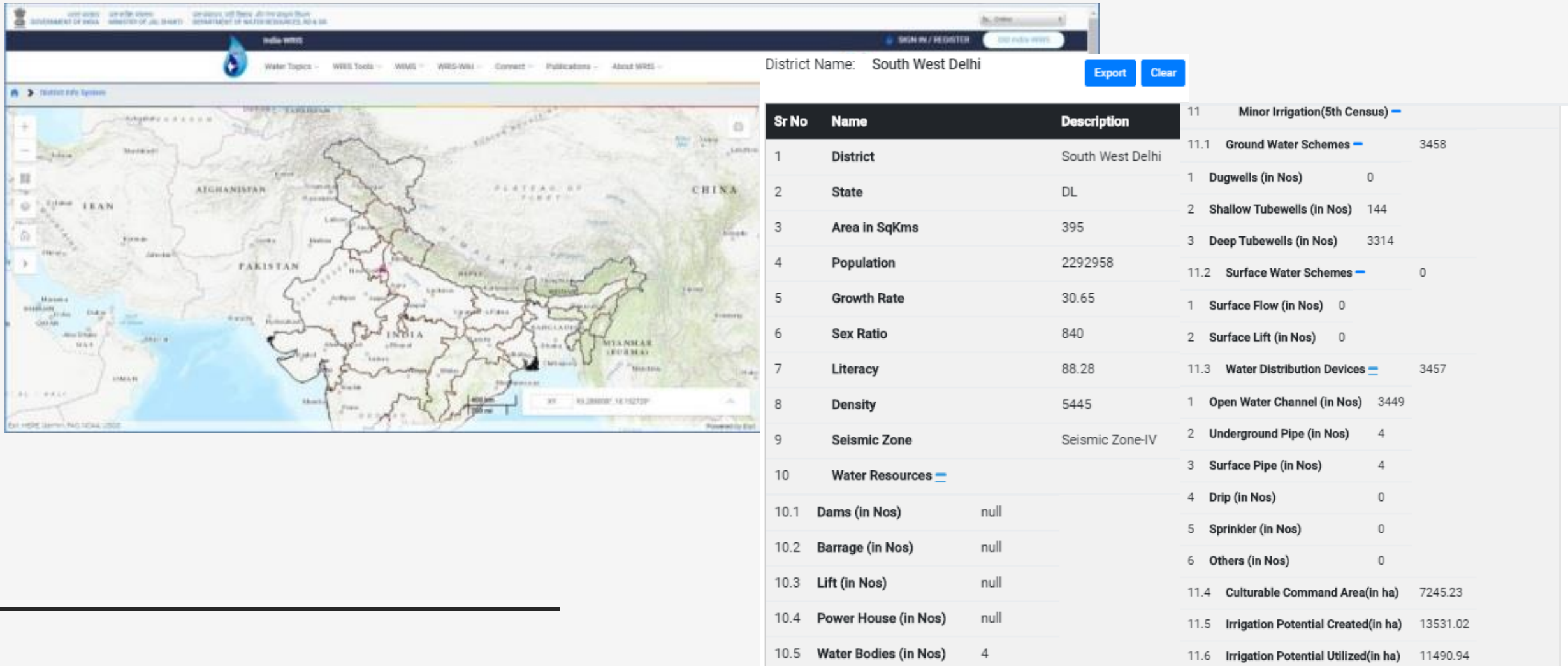
The metadata can be viewed in three formats –

- HTML
- XML
- JSON

The screenshot displays the 'Meta Data' interface. At the top, there is a navigation bar with 'Search', 'Map', and 'About' tabs, and a 'Sign In' button. Below the navigation bar, there is a search bar with a 'Search' button. To the left of the search bar, there are several filter categories: 'Map' (with radio buttons for 'Any', 'Intersects', and 'Within'), 'Time Period', 'Date', 'Owner', 'Topic Category', 'Metadata Type', 'Organizations', 'Keywords', and 'Source of Origin'. Each filter category has a gear icon for settings. The main content area shows a list of results under the heading 'AIBP HYDROSTRUCTURE'. The first result is dated '2020-08-10 gptadmin' and includes a description: 'This layer contains the hydrostructures in 55 AIBP projects of India delineated under 'Assessment of Irrigation Infrastructure and Irrigation potential for Accelerated Irrigation Benefit Programme (AIBP) using Cartosat satellite data' funded projects by National Remote Sensing Centre (NRSC)'. Below the description are links for 'HTML', 'XML', and 'JSON'. The second result is dated '2021-01-13 gptadmin' and includes links for 'HTML', 'XML', 'JSON', and 'Links'. The third result is dated '2021-02-20 gptadmin' and includes links for 'HTML', 'XML', 'JSON', 'Links', 'Add to Map', and 'Preview'. The fourth result is dated '2021-02-22 gptadmin' and includes links for 'HTML', 'XML', 'JSON', and 'Links'. The interface also shows 'Filters' and 'Results' sections, with a 'By Relevance' dropdown and a '340 items' count. Navigation arrows and 'Page 1' are visible at the bottom of the results list.

5.6 District at a glance

- acts as a tool to provide first level of information of at a glance.
- Overview of the national level scenario of water resources at a district level scale.



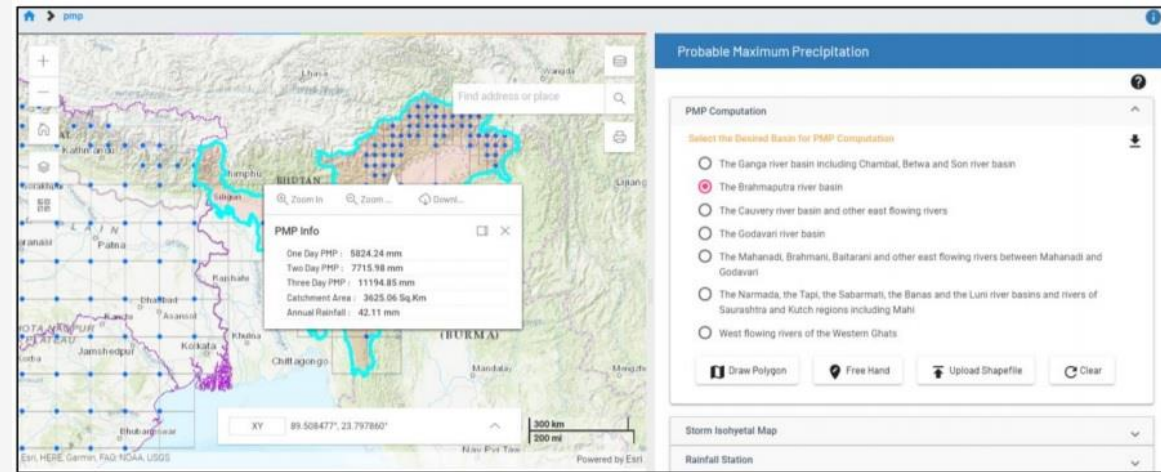
The screenshot displays the India WRS web application interface. On the left, a map of India is shown with South West Delhi highlighted. The main content area features a data table for the selected district, South West Delhi. The table is organized into sections: District Information, Demographics, Seismic Zone, Water Resources, and Minor Irrigation (5th Census).

District Name: South West Delhi

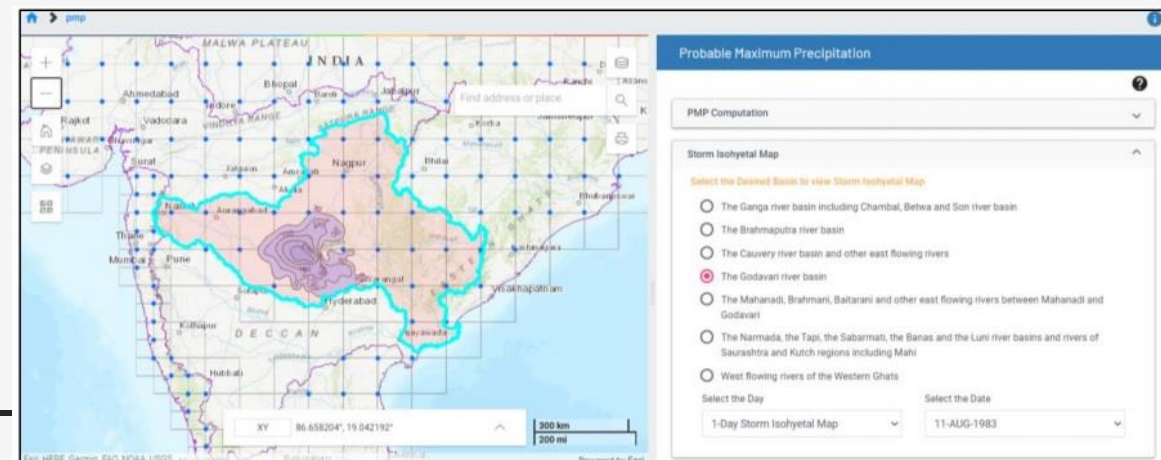
Sr No	Name	Description
1	District	South West Delhi
2	State	DL
3	Area in SqKms	395
4	Population	2292958
5	Growth Rate	30.65
6	Sex Ratio	840
7	Literacy	88.28
8	Density	5445
9	Seismic Zone	Seismic Zone-IV
10	Water Resources	
10.1	Dams (in Nos)	null
10.2	Barrage (in Nos)	null
10.3	Lift (in Nos)	null
10.4	Power House (in Nos)	null
10.5	Water Bodies (in Nos)	4
11	Minor Irrigation(5th Census)	
11.1	Ground Water Schemes	
1	Dugwells (in Nos)	0
2	Shallow Tubewells (in Nos)	144
3	Deep Tubewells (in Nos)	3314
11.2	Surface Water Schemes	
1	Surface Flow (in Nos)	0
2	Surface Lift (in Nos)	0
11.3	Water Distribution Devices	
1	Open Water Channel (in Nos)	3449
2	Underground Pipe (in Nos)	4
3	Surface Pipe (in Nos)	4
4	Drip (in Nos)	0
5	Sprinkler (in Nos)	0
6	Others (in Nos)	0
11.4	Culturable Command Area(in ha)	7245.23
11.5	Irrigation Potential Created(in ha)	13531.02
11.6	Irrigation Potential Utilized(in ha)	11490.94

5.7 Probable Maximum Precipitation (PMP)

- PMP value will be computed for an area of interest
- Query area limit is 500 Sq. km.



PMP Computation - Result



Storm Isohyetal Map



India Water Resources Information System



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Please enter comments here if any (Max 50 Characters)

For specific suggestions, write to us on helpdesk-nwic@gov.in

Reset Submit

Reservoir Information

Currently more than ninety major reservoirs which account for 75% of the total storage capacity are monitored by the Central Water Commission. Knowing the existing water level and the stored volume is important for reservoir operation and achieving optimum flood protection and irrigation benefits.

[View More](#)

Contact Us at helpdesk-nwic@gov.in

Thank you