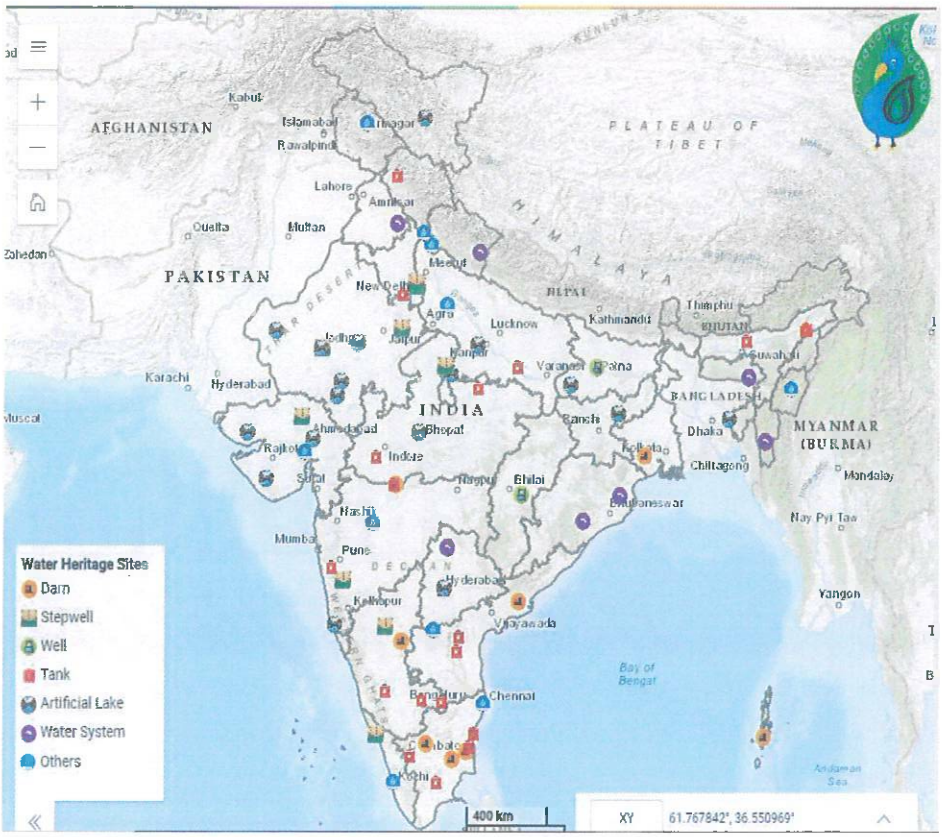
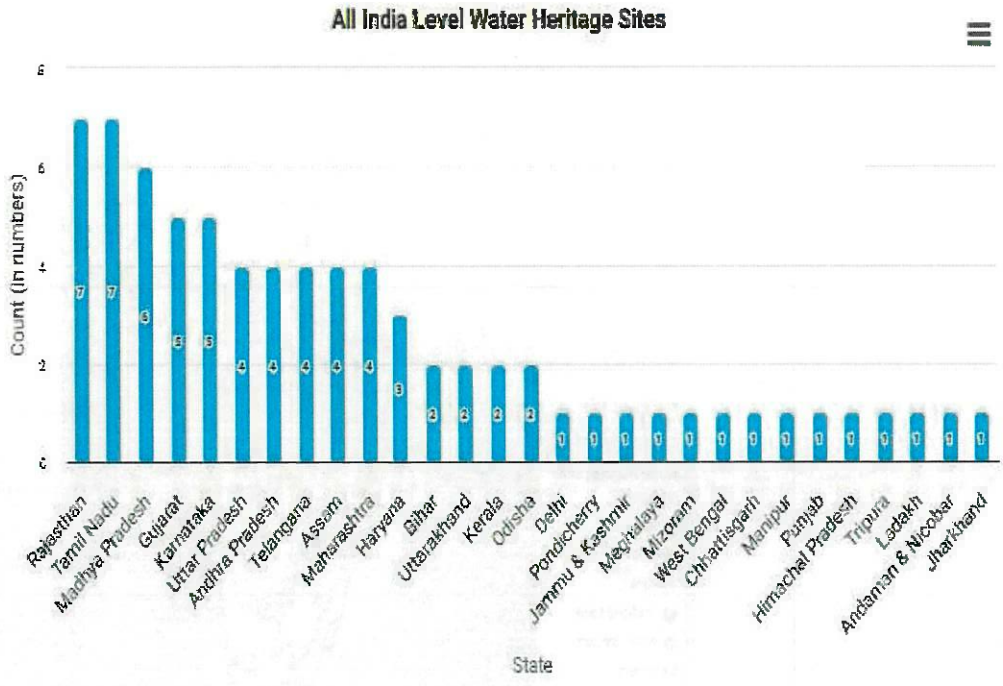
Business Specific Requirements	
Theme	Existing IT system for internal agencies of MoJS
Application	**WIMS expansion-WRIS**
Use Case	Jal-Itihaas
Use Case ID	WRIS-SSA-07
Other linked Use Case	N/A
Description	Water heritage structures are a vital component of India's rich cultural heritage. The deep understating of its significance need to established to preserve the water heritage structures exist in the country. The geo-mapping of the water heritage sites could lead to create an inventory of these structures to gain a comprehensive overview of the state of water conservation and augmentation in the country which can ensure the availability of the heritage sites information to the future generation
Used by	Planners, Decision makers, administrators, academicians, farmers, and the public in general
Priority	**Low Priority** – this application is not interlinked with any DSS of the WARIMS portal.
Phase	**Phase 1**
Business Problem	**Issues:** Data received from State and Central Agencies are in the .pdf formate which can not be directly incoporated in the database. Mulitple heritage sturtures are shown on a same point. Data will be manipulated on various boundaries for better visulaization **Approch:** The location of water heritage sites shoul be in proper geospatial formate which neeed to validated with Ground Control Points for proper visualization
Output	
Outcome	Jal Itihaas will provide a comprehensive view of water heritage structures of the country, allowing for a better understanding of their historical significance and importance.
Visualization	1. **Map:** Geolocation of water heritage sites in the country will be shown with respect to; • Political Boindaries o State o District  (A). Water Heritage Strutures at India Level	

User Selection: When the user clicks on the location of water heritage site in an application, the below mention table will pop-up on the screen with key salient features of the heritage sites so that the user can easily identify them.

Details of Heritage

Name of Heritage	*Topchanchi Lake*
State	*Jharkhand*
District	*Dhanbad*
Village	*Dumdumi*
Latitude	*23.922*
Longitude	*86.182*
Built By	*Governor sir, Hennery whiller*
Present Ownership	*Govt. Of Jharkhand*
Status	*Presently Maintained by Mineral area Development Authority, Dhanbad (MADA)*
Present Condition	-
Typology	*Artificial Lake*
Year	*1915-1924*
Regime	*Governor (Bihar & Odisha) Combined state*

2. Graph / Charts
(X-Axis: State name, Y-Axis: Count of water heritage sites)



3. Output in tabular form

Sr No	Heritage Name	State	District	Type	Year
1	Panighat Aqueduct	Andaman & Nicobar	South Andamans	Dam	During British period
2	K. C. Canal Aqueduct Across Handri River	Andhra Pradesh	Kurnool	Others	19th Century
3	Sir Arthur Cotton Barrage(Dowleshwaram Anicut)	Andhra Pradesh	East Godavari	Dam	1852
4	Porumamilla Tank (Anantharaja Sagaram)	Andhra Pradesh	YSR Kadapa	Tank	1369
5	Cumbum Tank	Andhra Pradesh	Prakasam	Tank	1522-1524 AD
6	Bor Pukhuri Or Sivasagar Tank	Assam	Sivasagar	Tank	1734

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Present Condition	-
Typology	***Artificial Lake***
Year	***1915-1924***
Regime	***Governor (Bihar & Odisha) Combined state***
Ruler	***Governor***
Description	***Topchahchi Lake in Jharkhand is an artificial water reservoir which was constructed by the British Govt. to supply drinking water to Jharia Township. It receives water fi.om the streams that flow fi.om Parasnath Hills. In 1914, Jharia Jal Board was constituted to form a massive reservoir. Crystal blue colour water of the lake and the beautiful hills surroundings make it an attraction to Tourist. It covers a total area of 214 acres. Syberian birds also attraction for Tourists.***
Photos	

Frequency	Static in nature, However, data will be updated as per their availibility
Measures of Success (KPIs)	The application shows a comprehensive view of water heritage structures, allowing for a better understanding of their historical significance and importance.

Input Data Required

Data Points:

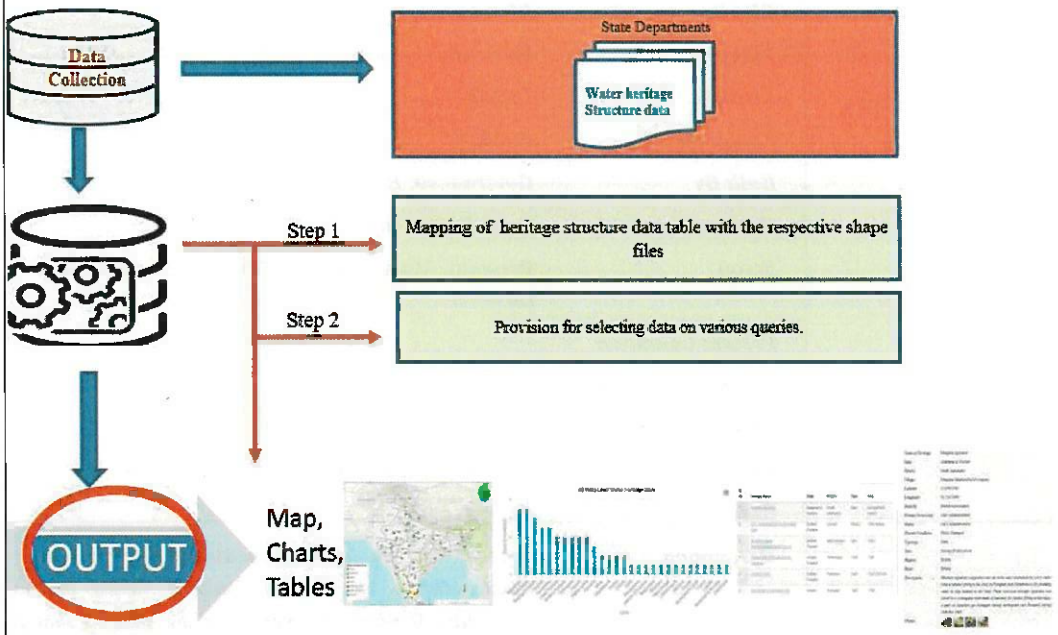
S. No	Data point	Type	Unit	Data Provider
1	Name of Heritage	String	Text	National Water Mission
2	Latitude	Float	Degree Decimal	
3	Longitude	Float	Degree Decimal	
4	Region	String	Text	
5	State	String	Text	
6	District	String	Text	
7	Village	String	Text	
8	Built by	String	Text	
9	Present ownership	String	Text	
10	Status	String	Text	
11	Present Condition	String	Text	
12	Topology	String	Text	
13	Year	String	Text	
14	Regime	String	Text	
15	Ruler	String	Text	
16	Photographs		hyperlink	

Process

Algorithm/Tool

Representation of Water heritage Structures on map and heritage Information on the users defined queries).

Flow diagram:



Data Validations	Water heritage Structures Information data may require validation before use.
Software Requirement (specific if any)	ArcGIS, Python, Angular
Dependencies & Risks	Data availability with source agencies
User Acceptance Testing (UAT) By	NWIC
Development Responsibility	NWIC
Reference Material	https://indiawris.gov.in/wris/#/jalitihaas

For any communication/clarification on the BSR, the following Officer may be contacted.		
Nodal Officer Name & Designation:	Dr. Rakesh Singh, Deputy Director	**Signature :** 22/5/23
Organization:	NWIC	
Contact No.: **Email id:**	9006150281 dd-services-nwic@gov.in	
BSR prepared by Subject Matter Expert (SME), Name & Designation:	Dr. Dharmesh Singh Hydrologist	**Signature :** 22/05/23
Organization:	NWIC	
Contact No.: **Email id:**	8447025987 hydrologist.nwic@gmail.com	

This is to certify that the above BSR has been vetted and found satisfactory.

Details of Domain Organization SPOC and SME for Verification and Approval of above BSR

22/5/23 **(Signature of SPOC)** **SPOC Name:** Rakesh Singh **SPOC Designation:** Dy. Director **Organization:** NWIC, Delhi	**(Signature of SME)** **SME Name:** **SME Designation:** **Organization:**