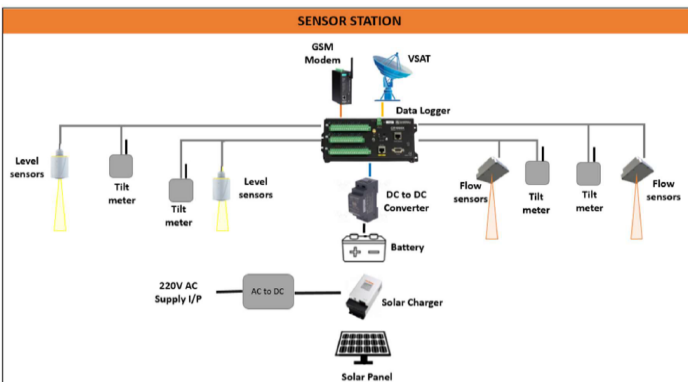
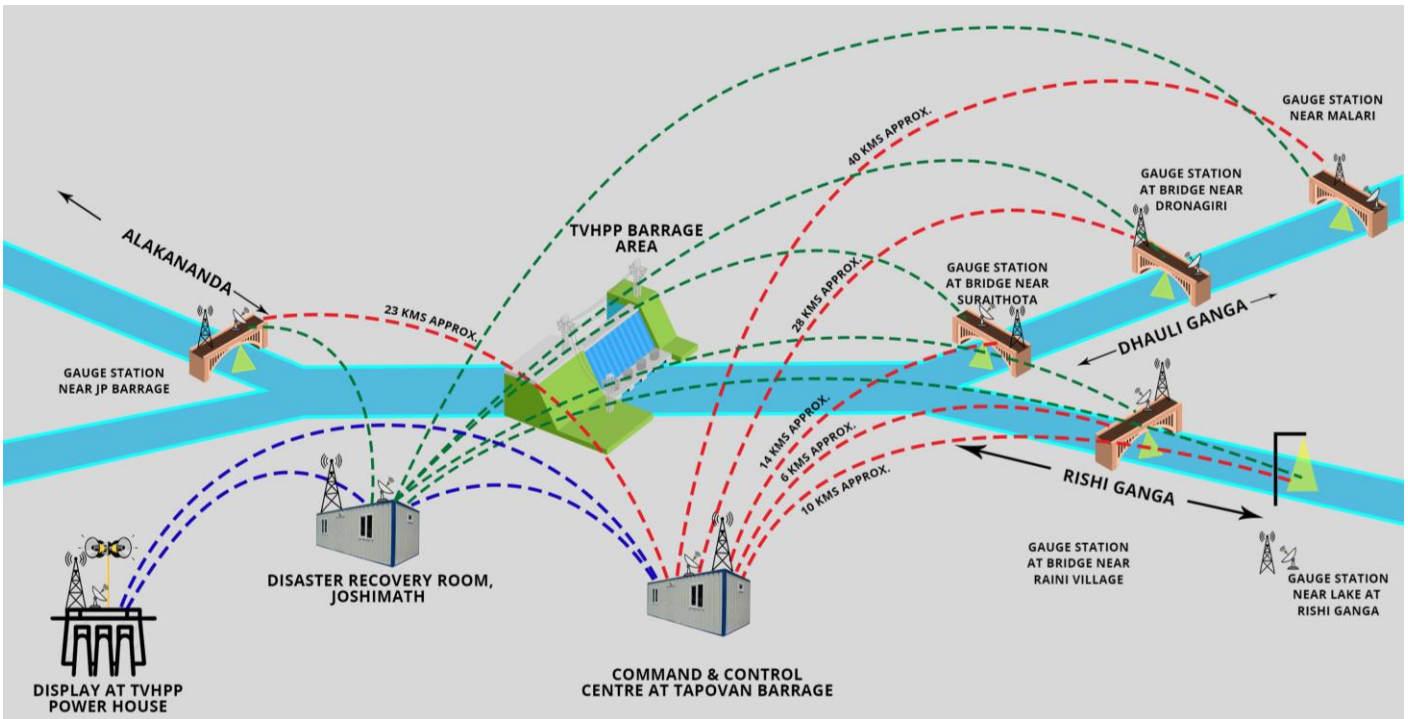


Most Comprehensive Early Warning System in India

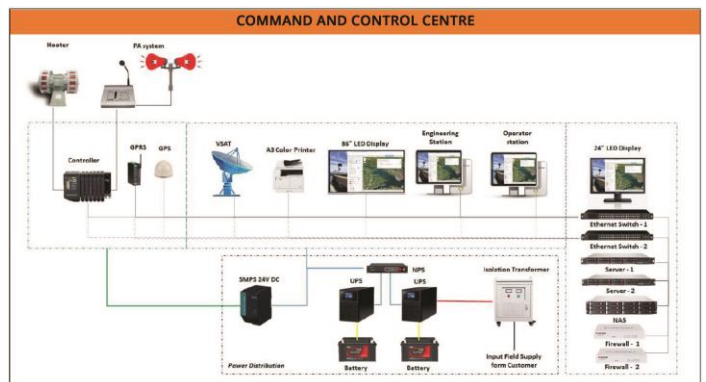


- ❖ Customized solution provider for Comprehensive Early Warning System for Hydro Projects
- ❖ With In-House Design, Engineering, Manufacturing and Testing Capabilities
- ❖ Lotus Wireless Technologies strive to work with customers to meet their demanding requirements

EARLY WARNING SYSTEM



Sensors Station Components



Command and Control Centre Components

Advanced Flow Modelling Based - Early Warning System (EWS):

- Generates and disseminate timely and meaningful warning information of the possible extreme flood events or disasters.
- The Purpose: To prepare and act in sufficient time to reduce the possibility of harm, loss or risk.
- What it does: Provides prediction of scale, timing, location and likely damages of impending flood.

Importance of Early Warning System:

- Public Safety and the protection of human lives
- Protection of Nation's resource base and productive assets

EARLY WARNING SYSTEM



Sensors Position on Bridge



Sensors Station



Command & Control Centre



Inside Command & Control Centre



Early Warning System Software - Dashboard



Sensor Stations Status

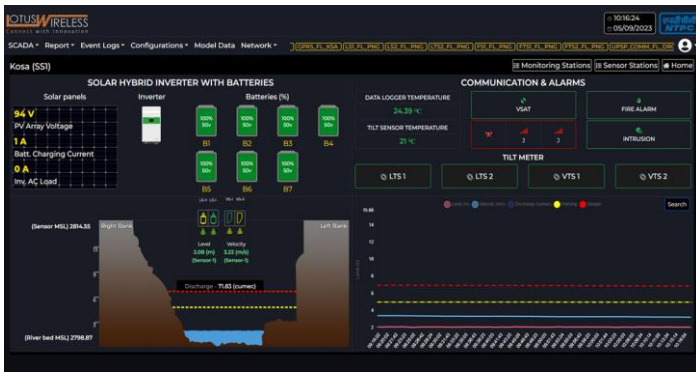
How the System Works:

- Continuously Monitor Water Levels and Flow Velocity on upstream of the point of interest
- Process data on river model on real time basis
- Provide alerts in case of any abnormality in order to ensure safety of humans and other resources

Components of Early Warning System

- Monitoring: Sensor Based Monitoring of the Rivers and its Tributaries.
- Assessments: Risk Assessment based on models and sensor input for the Extent and Time of impact.
- Information Dissemination: Siren, PA Systems, SMS, Voice Calls
- community response: Evacuation Centres, Search & Rescue, Relief Good

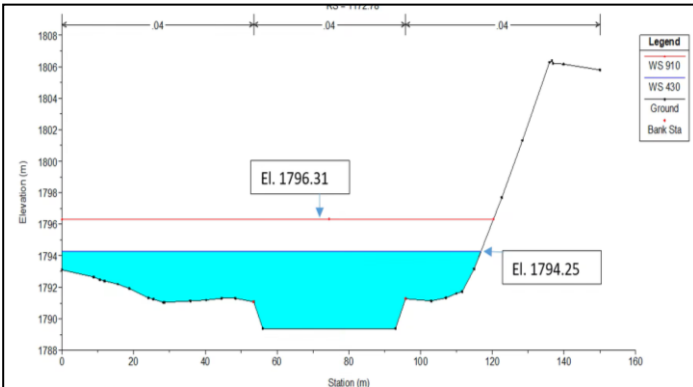
EARLY WARNING SYSTEM



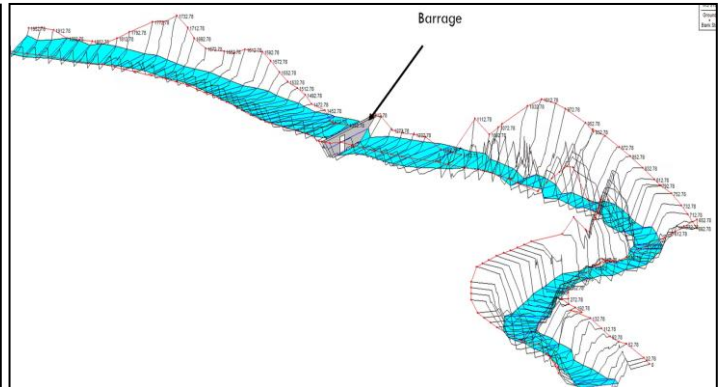
Individual Sensor Station Status



Flow Model



Flow Modeling Software



Flow Modeling Software

Early Warning System Key Features

- Real-time monitoring of river levels, velocity & flow.
- Solar Hybrid Power Supply and Redundant Communication infrastructure (VSAT & Cellular)
- Real-time relay of data to Command & Control Central (C&CC), Disaster Recovery Centre (DRC) and Monitoring System (MS).
- GIS-based 1D/2D map application.
- Immediate alarm generation for abnormalities.
- Automated notifications via voice calls, PA, SMS, email, and sirens.
- Self-diagnostic signals for component healthiness.
- Comprehensive Safety & Security Systems: Fire Detection & Suppression, CCTV Surveillance, Intrusion Alerts.
- Data and records archived for future reference, accessible through Historical Storage & Retrieval System (HSRS).
- Advanced Flow-model predicts flood dynamics, integrating cross-section variations for accurate outputs like inundation maps and velocity, triggering alarms at critical thresholds.

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