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Water Level Monitoring and Management of Dams using IoT

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Abstract: *The history, culture, current and future socioeconomic status and environmental sustainability of India and its people are intricately linked to the water resources which are available from dams. These water resources available through dams are one of the main sources available for the usage to industries, livestock, irrigation etc. and there is a critical need to ensure the safety of the water level at these dams against any natural or anthropogenic threats and to develop an effective Water Level Management system using IoT. This paper gives an outline for the development of an information system based on the existing systems with the utilization of some sensors and IoT. This paper also proposes a novel idea of collecting and sharing real-time information about water levels to an authorized central command center through far field communication. The authorized central command center then takes a call whether to release the water by opening dam gates or keep them closed. By doing so, the operation of dams all over the country is centralized and automatized.*

Keywords: *Water Level Management, IoT, Dams,Authorized Handler,LPWAN,NB-IoT.*

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