

Building water environment monitoring software for Thai Nguyen province based on GIS technology

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Abstract: This topic aims to research and develop a water environment monitoring software system for Thai Nguyen province, based on GIS technology. The practical context requires effective management of water quality in rivers, lakes, and agricultural areas. The objective of the topic is to build a technical platform to monitor, analyze, and report the status of the water environment in real time. The research method combines GIS theory with practical application in environmental management. Expected results will contribute to improving environmental quality and supporting the province's sustainable development policies.

Keywords: GIS, water environment monitoring, information technology, water resource management, Thai Nguyen province