

INTEGRATION OF GIS BASED DECISION SUPPORT SYSTEM FOR MANAGEMENT OF OPERATIONS AND MAINTENANCE OF WATER NETWORK

VIDYA GAVEKAR¹ & V. D. NANDAVADEKAR²

¹Associate Professor, Sinhgad Institute of Management, Pune, Maharashtra, India

²Director, Sinhgad Institute of Management, Pune, Maharashtra, India

ABSTRACT

GIS and DSS are used for management of water resources and to identify the relationship between GIS & DSS and used this relation as the base for studying how to use this relationship in the field of maintenance and operation for water networks systems. The research related to study the O&M system for Water Distribution System (WDS) by applying GIS with hydraulic modeling in creating O&M system for water distribution system. The study discusses one of the most existing important technology (GIS & DSS) for managing O&M which occupy the first level in database technology around the world. The aim of this paper is to improve the efficiency and performance for water pipes networks to improve the services for the population. All that done by establishing methods for the management of O& M system for water distribution systems using GIS & hydraulic modeling based on DSS. This will help the manager to select the best decision to managing water networks. The proposed systems for O&M which established in this thesis can be used by Municipality which carries the responsibility for managing water networks services in area.

KEYWORDS: GIS, DSS, Hydraulic, O & M, Water Network, WDS Etc