

ABSTRAK

Tujuan dari laporan akhir ini adalah untuk membuat sebuah Aplikasi Monitoring dan Pelaporan Kegiatan Rehabilitasi DAS berbasis website di Balai Pengelolaan Daerah Aliran Sungai Musi Provinsi Sumatera Selatan. Aplikasi ini dirancang untuk mendukung proses monitoring dan pelaporan kegiatan rehabilitasi daerah aliran sungai (DAS) secara lebih efektif, efisien, dan terstruktur. Aplikasi ini dikembangkan menggunakan bahasa pemrograman PHP dengan database MySQL, serta menerapkan model pengembangan sistem Rapid Application Development (RAD). Tahapan pengembangan aplikasi meliputi perencanaan kebutuhan, desain *user (prototype)*, pembangunan, dan implementasi sistem. Proses perancangan aplikasi menggunakan alat bantu seperti Diagram Konteks, Data Flow Diagram (DFD) Level 1, Flowchart, Entity Relationship Diagram (ERD), dan Kamus Data. Aplikasi ini diharapkan mampu meningkatkan efisiensi dalam pengelolaan dan penyampaian laporan kegiatan rehabilitasi DAS di Balai Pengelolaan Daerah Aliran Sungai Musi Provinsi Sumatera Selatan. Selain itu, aplikasi ini juga mempermudah pelacakan status dan perkembangan kegiatan, sekaligus menghasilkan laporan yang akurat, *real-time*, dan mudah diakses. Dengan aplikasi ini, monitoring dan pelaporan kegiatan rehabilitasi DAS menjadi lebih transparan, terorganisir, dan mendukung kelancaran operasional.

Kata Kunci: *Monitoring*, Pelaporan, Rehabilitasi DAS, Aplikasi, DAS Musi.

ABSTRACT

The objective of this final project report is to create a web-based application for monitoring and reporting on Watershed Rehabilitation Activities at the Musi Watershed Management Office in South Sumatra Province. This application is designed to support a more effective, efficient, and structured process for monitoring and reporting on watershed rehabilitation activities. The application was developed using the PHP programming language with a MySQL database and implemented using the Rapid Application Development (RAD) system development model. The development phases included requirements planning, user design (prototyping), construction, and system implementation. The design process utilized tools such as Context Diagrams, Level 1 Data Flow Diagrams (DFD), Flowcharts, Entity Relationship Diagrams (ERD), and a Data Dictionary. This application is expected to enhance efficiency in the management and delivery of reports on watershed rehabilitation activities at the Musi Watershed Management Office. Furthermore, it simplifies the tracking of activity status and progress while generating accurate, real-time, and easily accessible reports. Through this application, the monitoring and reporting of watershed rehabilitation activities become more transparent, organized, and supportive of smooth operational workflows.

Keywords: *Monitoring, Reporting, Watershed Rehabilitation, Application, Musi Watershed.*