

## 2. Introduction

### a. Background

The current effort to develop a common River Forecast Center (RFC) hydrology archive database grew out of discussions started at the Hydrology Science Conference held in August 2000. The project was selected by Region Hydrologic Service Divisions (HSD) and RFCs as one of the top priority issues for the newly created RFC Development Manager (RDM). As part of the RDM process, a 3 phase process was defined to accomplish this project. The three phases of this project are: (1) design, (2) implementation and (3) operational maintenance of an RFC Archive Database/Files System. The phase one team completed it part of the project the fall of 2001 and their findings are reported in the *“Final RFC Archive Database/Files System Design”* document dated November 30, 2001. The RDM in the late fall of 2001 formed the phase two team. The phase two team used the aforementioned design document as its guide for the design of the database, file system, and associated applications for the version 1 RFC Archive Database/Files System.

### b. Purpose of the RFC Archive Database/Files System

As stated in the Requirements Document, this Archive Database/Files System will store “data” (observations and model information) that will enable the River Forecast Centers to perform the following:

- < verification
- < studies to improve current and future products
- < calibration activities
- < channel routing development
- < unit graph development
- < case studies
- < operational forecast assistance
- < applied research
- < customer inquiry support.

Many of these applications will require additional development (beyond the scope of this project) on either the local or national level.

The Archive Database/Files System will allow data to easily be accessible and

transportable across the AWIPS and office LAN environment. In addition, the Archive Database/Files System will give the RFCs a common environment which will be conducive to sharing of information. The system will accommodate the varying needs of each RFC, and be expandable and up-gradable. It will have a backup procedure and disaster recovery process, as well as a change management procedure, to accommodate future needs.

### **c. Scope**

The scope of this document is to describe the hardware and software of the version 1 RFC Archive Database/Files System.