

## Publications

### TR- 371

#### Upgrading Existing Databases Recommendations for Irrigation Districts

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- [Full Text](#)

With only a few exceptions, irrigation districts in the Texas border region have old, outdated database systems that need to be replaced. These old databases are costly to maintain, make accessing and analyzing data difficult, and limit a district's ability to implement certain important new technologies and software into district operations. Upgrading out-of-date databases should be a part of any program to renovate and modernize district facilities and to improve the operational efficiency of a district.

Modern databases allow easy integration with GIS and other software packages, facilitating the use of data in making management and operational decisions, and in the design of new facilities. Commercially available databases are also relatively easy to use, thereby reducing the need for external software consultants.

In this report, we discuss important issues and questions that should be considered

when upgrading databases, and provide database and operating system recommendations. Estimated costs of the required software and hardware are also provided.

We recommend that districts move to one of the following two database systems:

- Option 1: Microsoft SQL Server 2000 running on Microsoft Windows; or
- Option 2: MySQL database running on Red Hat Linux

We also recommend that districts team together in database upgrades so that the costs of reprogramming the client software can be shared.

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