

UPDATE

US BUREAU OF RECLAMATION

UPPER COLORADO REGION

Number 2

SEVIER RIVER WATER MANAGEMENT STUDY

Sevier River "Real-Time" System Evaluation

In November, staff from Reclamation's Denver Office conducted interviews with the River Commissioners of the Upper and Lower Basins. The purpose of the interviews was to evaluate the in-the-field efficiency and effectiveness of the "real-time" system, as well as determine what changes (if any) should be considered to improve the system.

The following is a summary of the interviews with Ray Owens (Upper Basin), and Jim and Roger Walker (Lower Basin).

RELIABILITY

Users in both basins described the satellite downlink as very reliable. There were no specific incidents which interrupted operations in any significant way during 1991.

AT HOME ACCESS - REAL TIME

In both basins, at home accessibility of the computer and downlink was a definite advantage. Close availability of the information made the functions of knowing where the water is within the system even more beneficial; it allowed the commissioners to communicate with users much more effectively than they were able to do under the "old" system.

The "real-time" information available through the downlink allowed the commissioners to advise users of delivery times very accurately and was often used to

answer specific questions about delivery times and amounts on a day-by-day, hour-by-hour basis. The accuracy of the information and the user trust in it helped alleviate frustrations over delivery priorities, and helped eliminate "second guessing" the fairness of delivery.

IMPROVEMENTS

The system is very effective as it is. In the Upper Basin, the incorporation of a radio communication system might be considered. In the Lower Basin, the system could be improved by the addition of sensing units (stations) on tributaries where no stations are presently installed (i.e., Salina Creek).

GRAPHICS

The map graphics were very useful in both basins. "It helps us in understanding reservoir levels." The commissioners can "see" what is going on in the systems, which helps them operationally, as well as in explaining the system to water users.

SUPPORT

Support to the commissioners from Reclamation (Arlen Hilton), and Utah State University (Greg McCurdy) was excellent.

MAINTENANCE

Both commissioners expressed a

strong interest in becoming more involved in the maintenance trouble shooting, and repair of the system. They feel that maintenance training would be time and effort well spent toward making their operations less dependent on Reclamation time and travel. It would also simplify any questions about maintenance responsibility.

WINTER OPERATION

Since water rights are year-round, continued operation in the winter months would be useful to track storage levels, and make "winter rights" available to users with the same accuracy as spring and summer operations.

CONCERNS FOR THE FUTURE

Both commissioners were very concerned about what will happen to the system once the trial period is over. Both expressed concern for continued agency support (financial and maintenance) and continued access to additional technology.

SUMMARY

The system gets very high marks for function and application of "high-tech" capabilities to the long standing problems of distribution of allocated water. The system is a significant/major improvement over the traditional techniques of calculating the amount of water available, and delivering water to users effectively. Allocations made in "real-time" are equitable; because the system is precise, deliveries are taken accurately.

The system eliminates guesswork about streamflows, reservoir levels, and timing of deliveries because the commissioners can see where the water is, there is less waste, less "argument" among users, and less speculation about when the water will be available.

While both operators acknowledged a lack of technical expertise and expressed a desire and need for more training, neither seemed to be reluctant to use the equipment, or was intimidated by the high-tech

nature of the system. Indeed, both found the equipment relatively easy to use and understand.

There were side benefits produced by the system. The commissioners are responsible for delivering an "annual report" of basin operations which includes an accounting of water delivered to all users. Information that once took several weeks or months to assemble, compile, check for accuracy, print and submit is now available almost instantaneously. All users have access to the same information at the same time, and as a result have very few questions or "challenges" about how fairly or timely deliveries are made throughout the system.

Report by Joe Montgomery (303) 236-7015.

