License Agreements, Licensees Upcoming Releases and Upcoming Training Classes

By Edie Zagona



# **RiverWare License MOU**

- > Original R&D funded by TVA, Reclamation
- RiverWare is made available to others in order to:
  - Contribute to more effective water management
  - Allow stakeholders to participate in operations/planning
  - Share the cost of software maintenance
- MOU between CU, Reclamation and TVA agreeing on terms of licensing Riverware to others (dated 1997 with updates in 2001, 2003)
- RiverWare is licensed by CU Office of Technology Transfer. License fees contribute to software maintenance.



# Software Maintenance

> RiverWare is maintained on 2 platforms: Sun Solaris and Windows 2000/XP

> Annual cost is approx \$200,000

In 2005 USBR and TVA will contribute about \$100K through contracts, remainder is funded through license revenues



### Licensees – Reclamation Offices

Lower Colorado Region LC Regional Office Yuma Area **Upper Colorado Region UC Regional Office Provo Area Office** Albuquerque Area **Mid-Pacific Region** Lahonton Basin Area Office (Carson City) Pacific Northwest Area **PN Regional Office – Boise Ephrata Field Office Upper Columbia Area** Yakima **Great Plains Region GP Regional Office – Billings** Austin Area **Technical Services Center - Denver** 

**Boulder Canyon Operations** 

**Grand Junction Area Durango Area** El Paso Area

Fallon Field Office

# Licensees – Federal Agencies

**Corps of Engineers: Albuquerque District** Little Rock District Ft. Worth District **Omaha District** Kansas City District **Tulsa District USGS** – Albuquerque Fish and Wildlife Service – Albuquerque **BIA – Farmington, Albuquerque** National Park Service – Black Canyon of the Gunnison National Renewal Energy Lab (NREL) **Oak Ridge National Labs Reno Federal Water Master** Indian Tribes – Jicarilla Apache; Jemez Pueblo

## Licensees – Utilities

Tennessee Valley Authority Lower Colorado River Authority (Texas) Pacificorps East Bay Municipal Utility District



# Licensees – States, Water Districts, Authorities, Boards

#### **States**

Arizona DWR California – Colorado R. Board

Colorado WCB Montana DNRC

#### Districts

Central Utah Water Conservancy District Coachella Valley Water District (California) Colorado River Water Conservation District (Colorado) Metropolitan Water District of Southern California Tarrent Regional Water District

### **Authorities**

Lower Neches Water Authority Southern Nevada Water Authority Truckee Meadows Water Authority New Jersey Water Supply Authority **New Mexico ISC** 



### Licensees – Consultants

Ayers Associates (Ft. Collins) **Brown and Caldwell (Seattle)** Freese and Nichols, Inc (Ft. Worth) Hydrosphere Resource Consultants, Inc. (Boulder) Keller-Bliesner Engineers, Inc. (Logan, UT) Natural Resources Consulting Engineers (Ft. Collins) Riverside Technology, inc. (Ft. Collins) **R.J. Brandes Company (Austin)** Stetson Engineers (San Rafael, CA) Tetra-Tech, Inc. (Breckenridge, Albuquerque) Wave Engineering, Nephi, Utah



### Licensees – Universities

University of Arizona - SAHRA New Mexico State University Texas A&M University (at El Paso) University of Nevada – Desert Research Institute

### Licensees – Foreign

China Institute of Water Resources and Hydropower Research (IWHR) Public Works Research Institute (PWRI-Japan)



## **Upcoming Release Schedule**

### Version 4.6 – Target release date April 30, 2005

- New Workspace/enhancements
- Scenario Manager
- Enhanced MRM and Single Run Control
- Output single run rdf from batch mode
- New selector
- Performance enhancements
- Link model runs to an external process from RBS
- Engr: partition backwater; multiple canal seepage



## **Upcoming Release Schedule**

### Version 4.7 – Target release date November 30, 2005

- New Policy editor (implemented for RBS and Optimization)
- Accounting visualization
- Optimization addition of IP for refinement of hydropower solution
- New DMI direct data access to DSS and infrastructure for other data sources
  - (possibly direct Excel output, esp. to GPAT)
- MRM mode for iterative runs with RPL logic
- Performance enhancements model size
- Statistical functions on single slots
- SCT enhancements: "go-to" feature; integrated run status and diagnostics;
  - integrated DMI and file open/save menus
- Diagnostic enhancements
- Engr Methods

canal mass balance and evaporation rule functions for scheduling headgate deliveries target operations with elevation limits pipe flow inline pumping plants COE hydropower method

# **Upcoming Training**

**Rulebased Simulation – March 9-11** 

At least 1 (probably 2) additional Intro and Rules classes this year

May – special training for CRSS-Lite (date, location TBD)

April or May – special training for URGWOM testers in Albuquerque

May or June – First Water Accounting class – for "testers"

FY06 – Optimization training class?

