Phase 2 Water Portfolios

The Journey Continues . . .
Update 2005 Portfolios

The portfolios developed for the current Update were by Planning Area for the years 1998, 2000, and 2001.

The Microsoft Excel© workbook (lovingly called the “Beast”) containing the calculations has been placed in its entirety on the just-opened Web Portal.
Hydrologic Regions and Planning Areas

Mountain Counties are outlined in red
The Next Generation

Portfolios will be developed using data at the Detailed Analysis Unit (DAU) by County level for the years

- 1999
- 2002
- 2003
- 2004
The 1999 Portfolio

- Being developed in a Balances Workbook (the “Son of Beast”) similar to the Update 2005 portfolios
- In addition, staff is evaluating different methods of developing information
  - Outflow method of calculating supplies and uses
  - Using Imagine That! Extend© Professional Simulation software
Methods of Calculating Water Use

There are two basic methods of calculating water use –

- Applied Water Method
  Calculate water use by need and/or actual deliveries, compare to available water supply
- Outflow Method
  Water into study area = water consumed +/- change in storage + outflow

While the Outflow Method would appear to be the most efficient, the lack of river gauging stations and complete hydrologic studies (including subsurface flow studies) makes the Outflow Method difficult to use Statewide
Methods of Calculating Water Use

- Currently, Applied Water Use Method is used in most areas of the State.
- DWR District Staff will be undertaking a Pilot Study using Outflow Method
  - One DAU per District
  - Mixed water uses
  - Entire DAU lies within single District
- Study will lead the way to develop a simulation model through Extend©
Extend© Model

- Automate Flow Diagram using Extend©
- Track water supply, use and reuse through DAU
- Link DAU models to simulate water flow through Planning Area or Hydrologic Region
- Change parameters to simulate future use
Developing Database

- The “Son of Beast” is being used to develop a database in Microsoft Access©.
- The Data Entry Sheets contained in the workbook will be used as input to the database.
- Database will probably be converted to Oracle© to allow it to be used online.
As database is developed, other data sources may be linked

- Agricultural and Urban databases
- Water Supply module
- Instream Database
- Managed Wetlands Database
- Wild and Scenic Rivers information
Any Questions?