

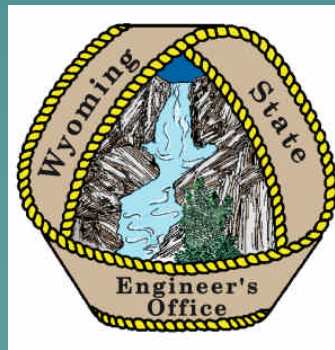
Assessing Current Water Supplies in Wyoming (and monitoring existing uses)

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WSWC/WGA

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Today's Topics

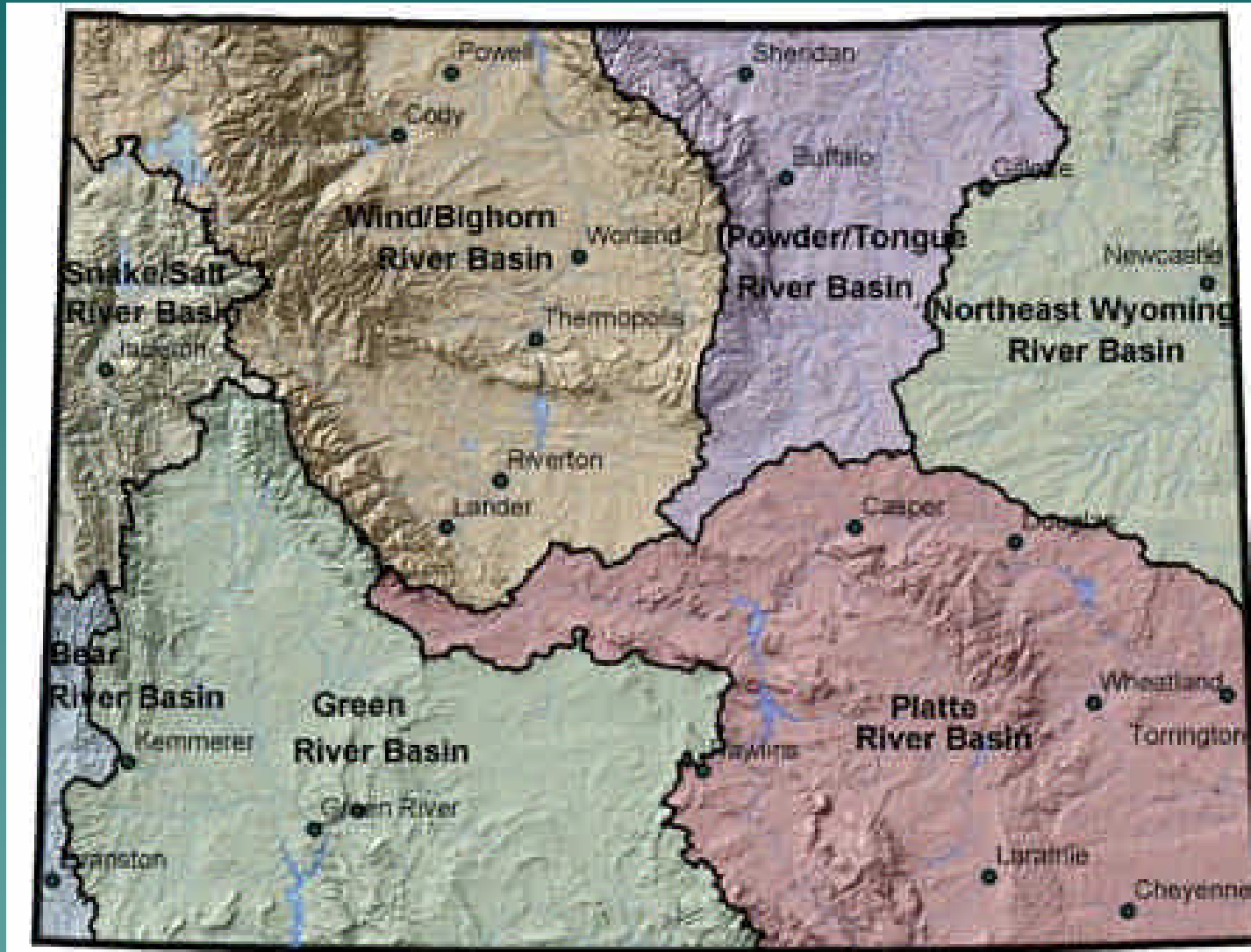
1. Wyoming's Water Planning Efforts
 - ◆ Led by Water Development Office
2. Colorado River Compact Administration Program
 - ◆ State Engineer's Office
 - ◆ Enhancing data collection capabilities

Wyoming's Water Planning Program

- ◆ Initiated in 1999 by the Wyoming legislature
 - Directed the WWDC and SEO to “...initiate a broad-based and comprehensive statewide water planning process.”



Water Planning



Water Plans

- I. INTRODUCTION
- II. BASIN WATER USE AND WATER QUALITY PROFILE
- III. AVAILABLE SURFACE WATER AND GROUNDWATER DETERMINATION
- IV. DEMAND PROJECTIONS
- V. FUTURE WATER USE OPPORTUNITIES
- VI. IMPLEMENTATION PROCESS

Water Plans – Version 1.0

I. INTRODUCTION

II. BASIN WATER USE AND WATER QUALITY PROFILE

III. AVAILABLE SURFACE WATER AND GROUNDWATER DETERMINATION

IV. DEMAND PROJECTIONS

V. FUTURE WATER USE OPPORTUNITIES

VI. IMPLEMENTATION PROCESS

Water Plans – Version 2.0

- I. INTRODUCTION
- II. BASIN WATER USE AND WATER QUALITY PROFILE
- III. AVAILABLE SURFACE WATER AND **GROUNDWATER DETERMINATION**
- IV. **DEMAND PROJECTIONS (> *energy*)**
- V. **FUTURE WATER USE OPPORTUNITIES & CHALLENGES**
- VI. **IMPLEMENTATION PROCESS**

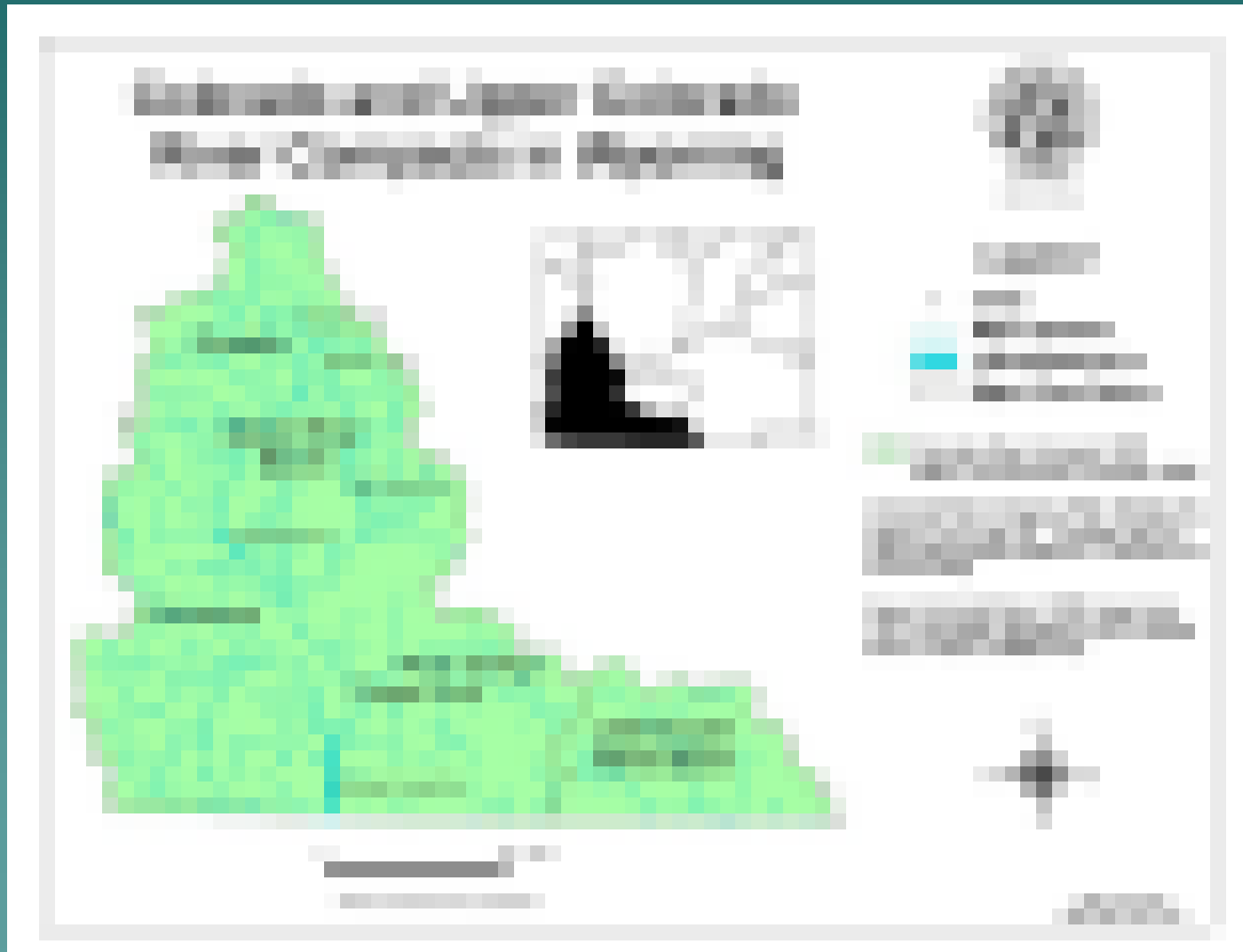
Water Planning

BASIN	YEAR 1st COMPLETED	UPDATE SCHEDULE
Green	2001	2009
Bear	2001	2010
Northeast	2002	???
Powder/Tongue	2002	???
Snake/Salt	2003	???
Wind/Bighorn	2003	2010
Platte	2006	???
SW Framework	2008	???

Monitoring Existing Uses

- ◆ Historical monitoring has been highly variable among basins (litigation?)
- ◆ Increased efforts ongoing statewide to measure/monitor existing uses
- ◆ Nearly \$4 million in current budget to begin to address

Colorado River Compact Administration Program



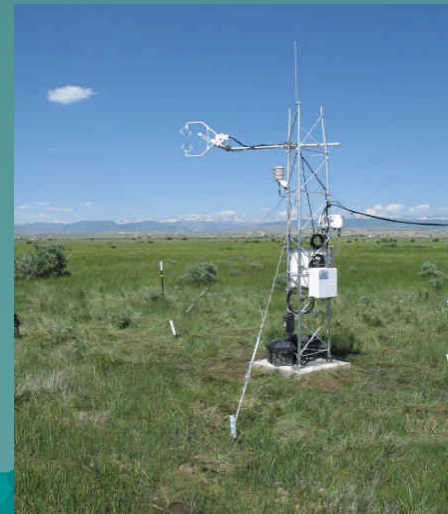
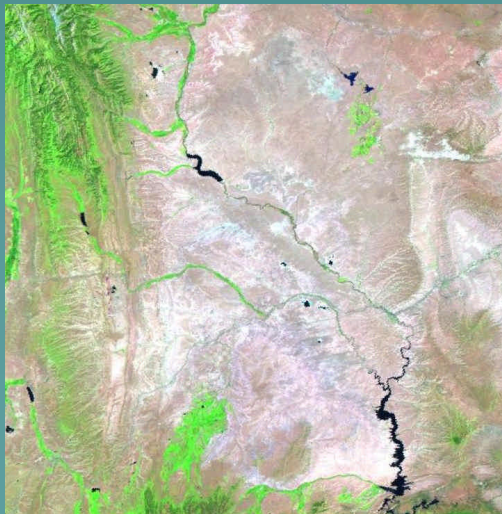
Water Supply & Diversion

- ◆ Instrumentation & Real-Time Data Network
 - Instrumentation of diversions, streams and reservoirs
 - Development of a weather station network
 - Real-time telemetry with internet downlink



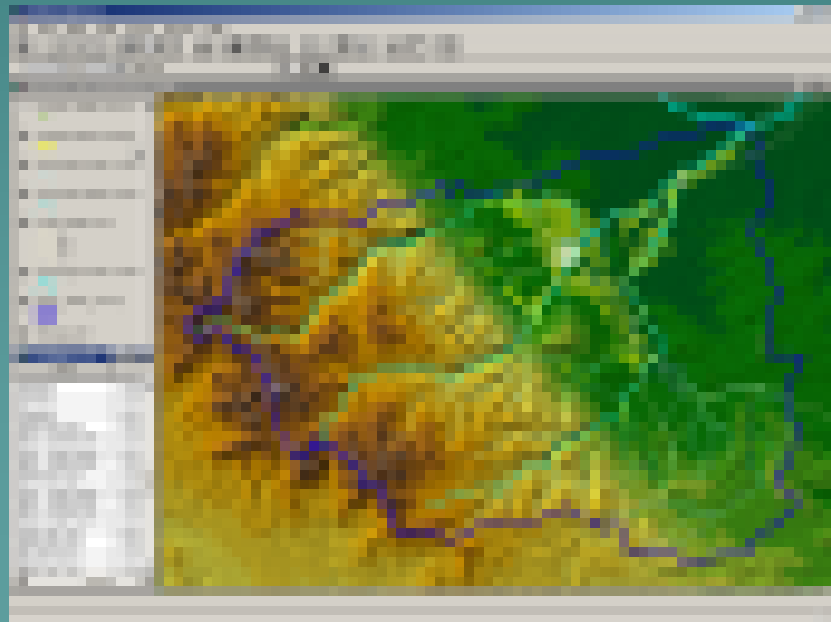
Consumptive Use

- ◆ Application of remote sensing models with Landsat and MODIS imagery
- ◆ Field validation:
 - Operating two eddy covariance towers (energy flux) in the basin
 - Proposed scintillometer work

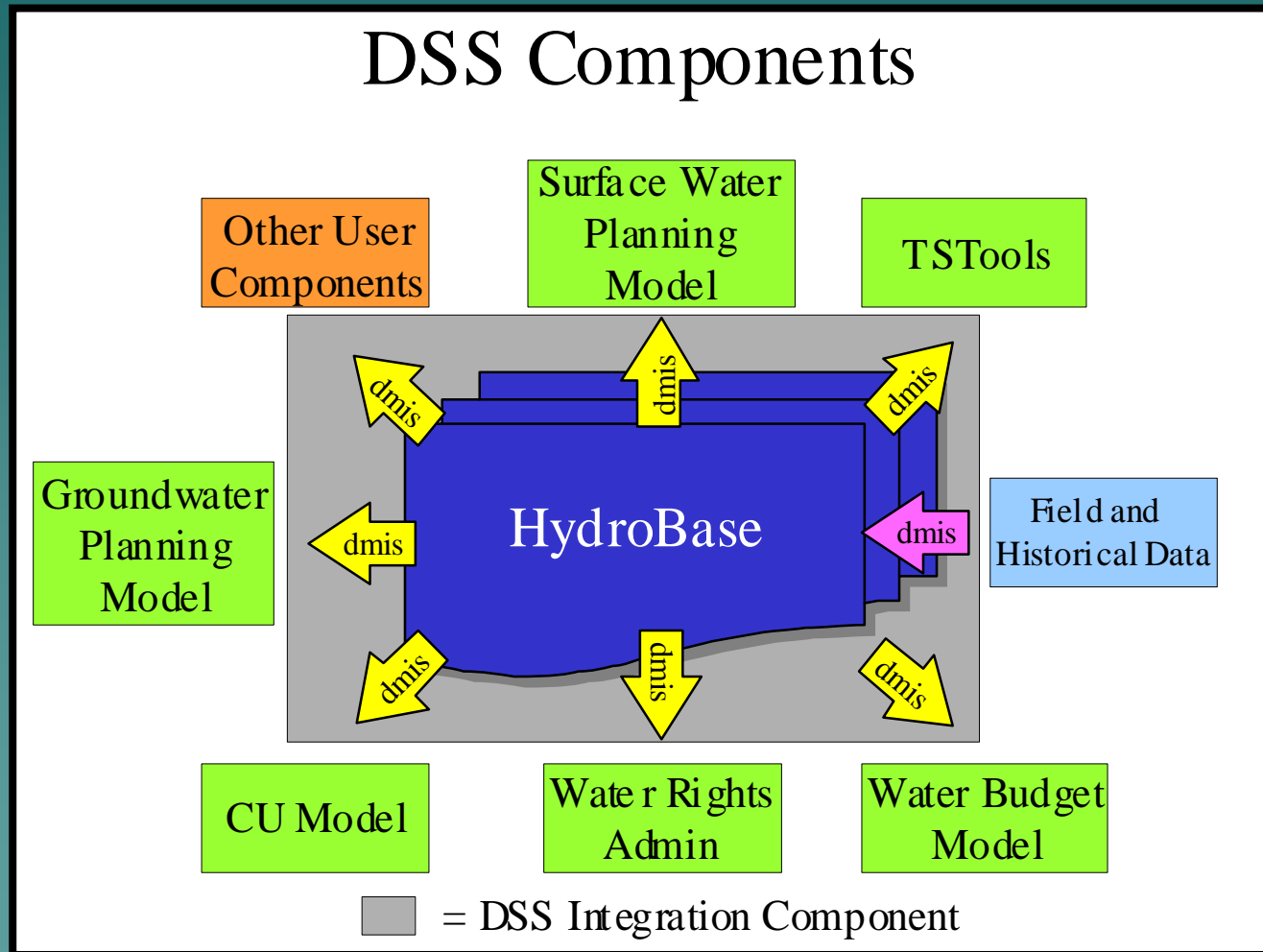


Basin-wide Water Supply Forecasting and Accounting Models

- ◆ Have framework for portions of basin
- ◆ Need for enhanced data to upgrade



Long-Term Goal



A wide, calm river flows through a lush, green valley. The banks are covered in dense forest, and the hills in the background are also covered in greenery. The sky is a pale blue with some light clouds. The text "Questions????" is overlaid in the center of the image in a yellow, bold font with a black outline.

Questions????