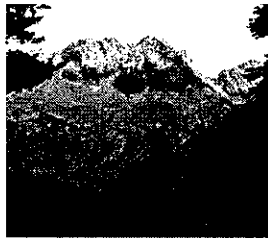


Treasure Valley Comprehensive Aquifer Management Planning

"Considerations for the Future of Water Management in the Treasure Valley"



Dave Tuthill, PhD, PE

July 30, 2010

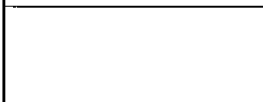


Prediction...

Relative to water delivery in the Treasure Valley...

Change

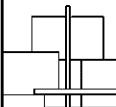
is coming
between now and 2020





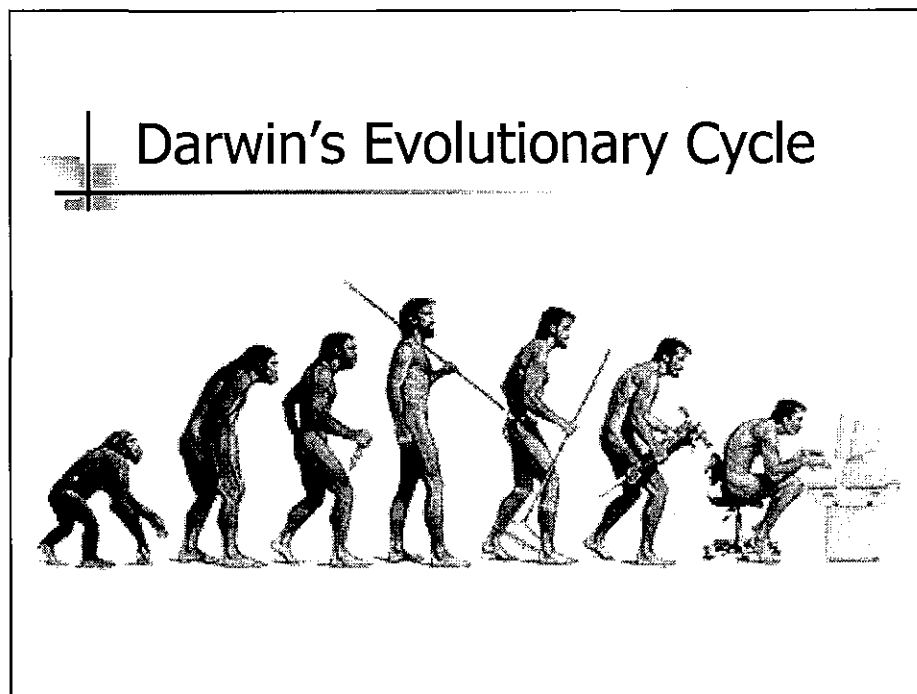
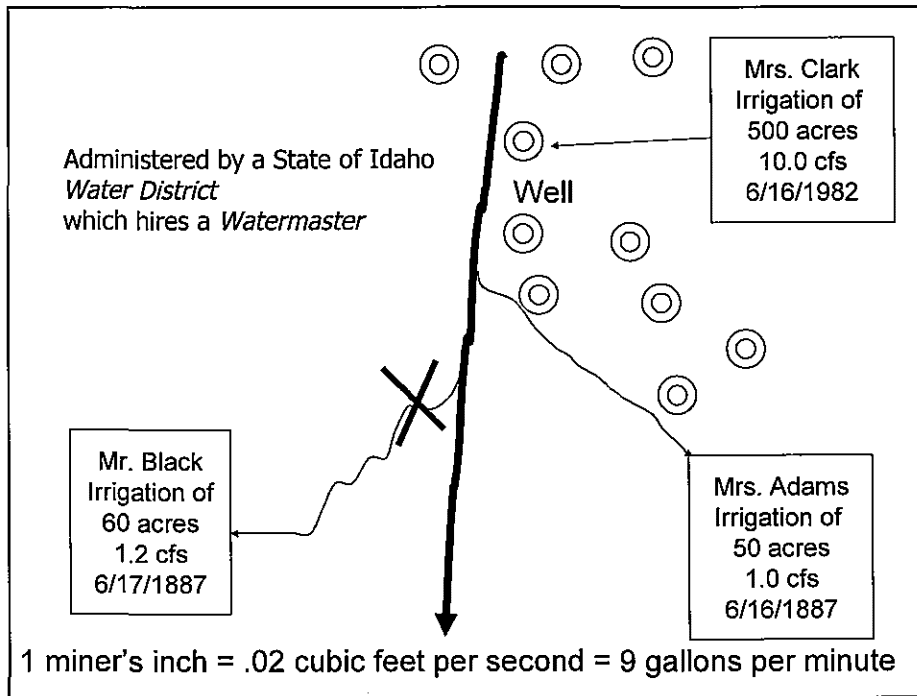
Outline

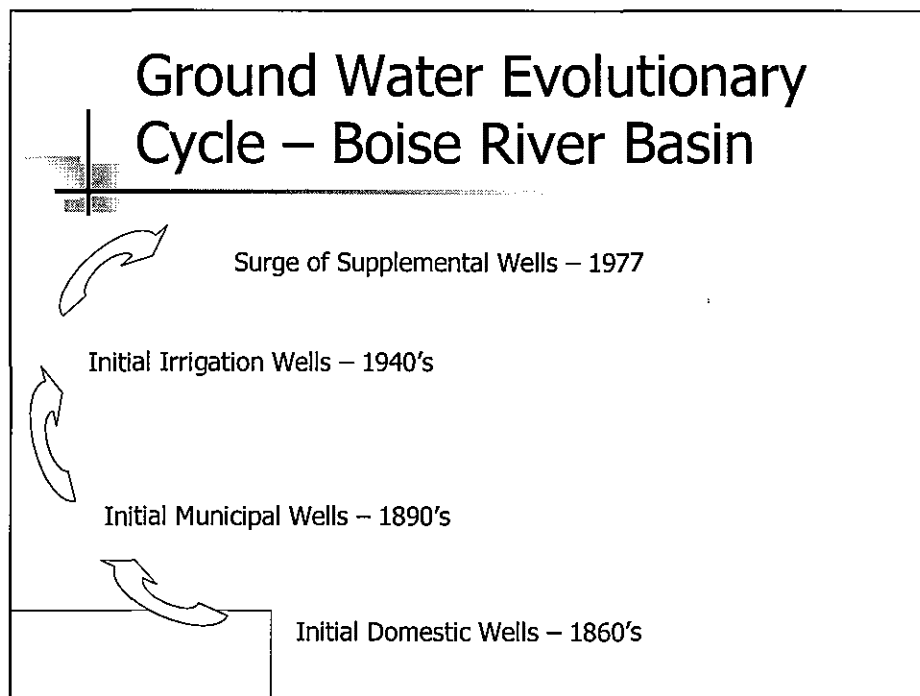
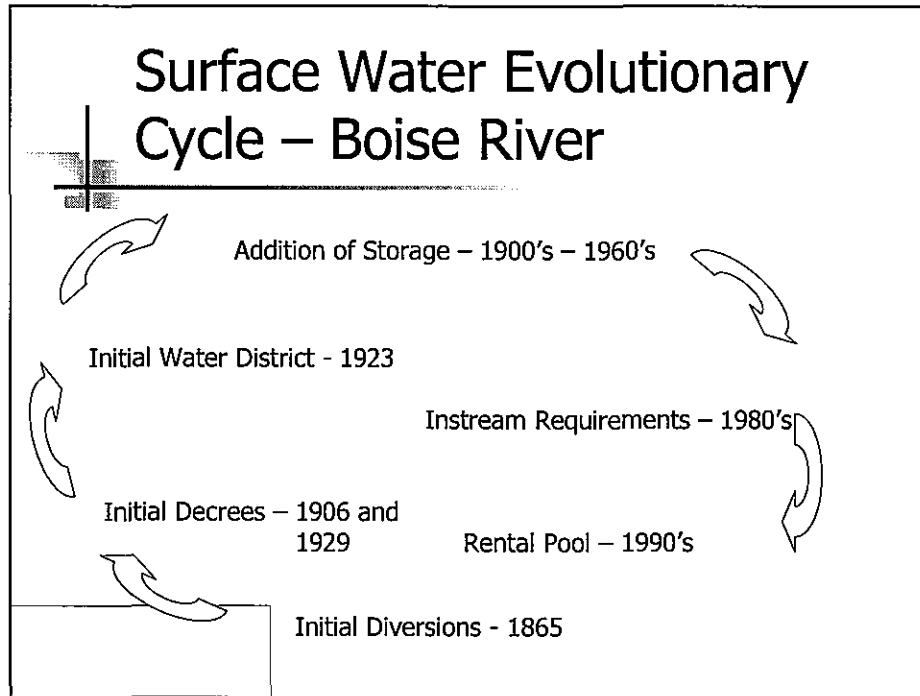
- Water administration basics
- Evolution of surface water management in the Treasure Valley
- Evolution of ground water management in the Treasure Valley
- Implementation of conjunctive administration
- Rapid advances in technology
- How we can deal with change



In Idaho the *appropriation doctrine* is used for the delivery both surface water rights and ground water rights—

“first in time is first in right”







Implementation of Conjunctive Administration

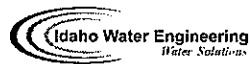
Problem

Water deliveries must consider connections
between ground water and surface water
(conjunctive administration)
if fair delivery is to be achieved



Additional Drivers of Change

- Increased efficiencies of irrigation have led to reduced deep percolation
- Increasing urbanization
- Increased recognition of instream values
- Water needs for energy production
- Impacts of climate change?
- A need to coordinate land use planning with water use planning



Implementation of Conjunctive Administration

All but 100 recommendations resolved
April 22, 2010

Recommended water rights in Basin 63:
13,000+ domestics
6,000+ non-domestics

Basin poised for
Implementation of
Conjunctive
Administration

Snake River Basin Adjudication initiated in 1987

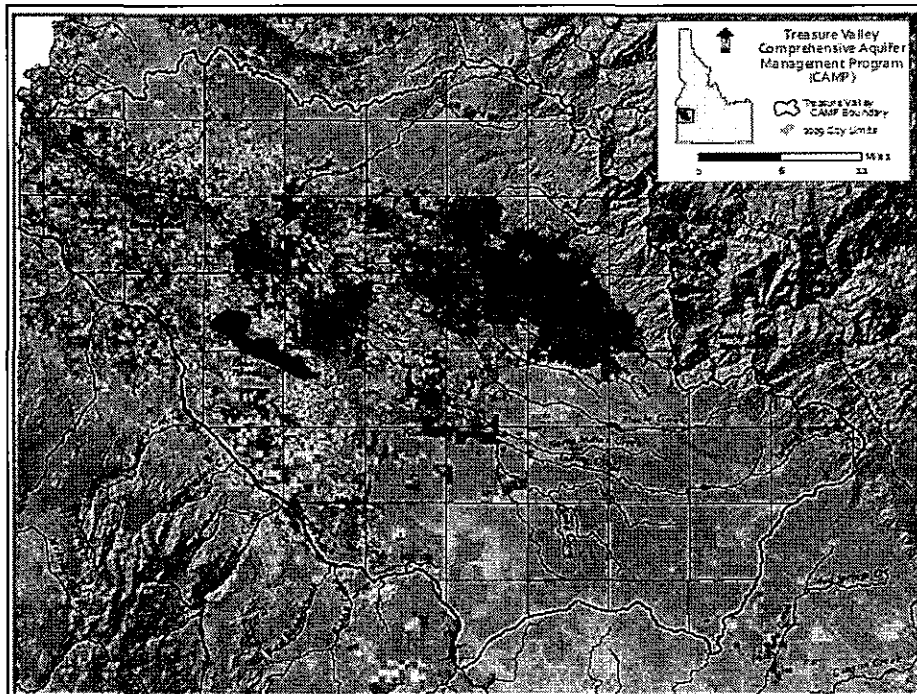
Creation of water rights from surface water
and ground water

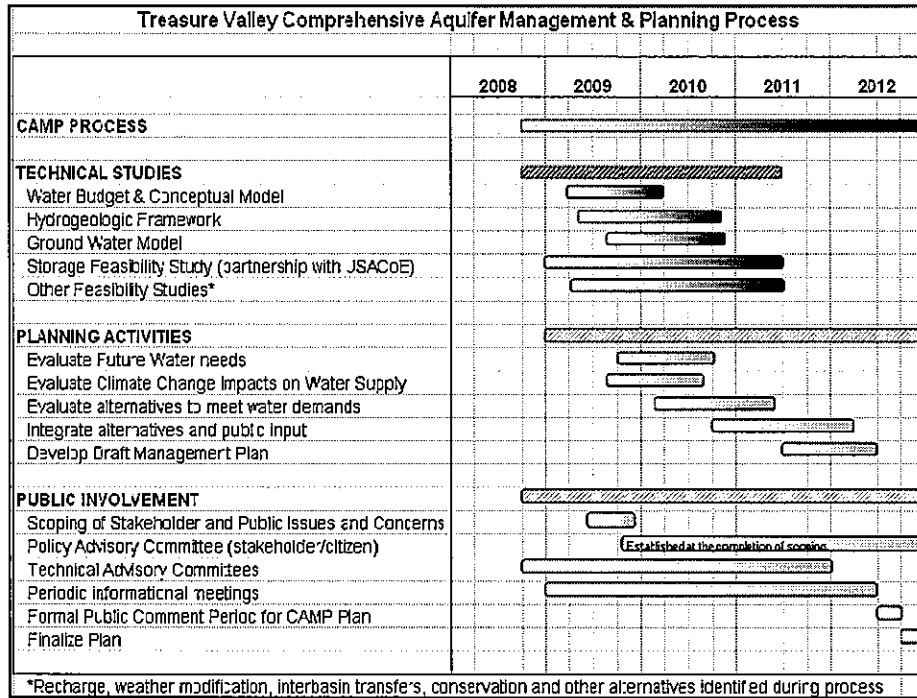
Impact of Implementation of Conjunctive Administration

Ground water diversions are administered with surface water diversions

The diagram illustrates the relationship between surface and groundwater diversions. It shows a curved line representing a river system, with 'Snake River' on the left and 'Boise River' on the right. A small circle labeled 'Star' is positioned on the curve between the two river names. An arrow points from the 'Star' towards the Snake River, and another arrow points from the Snake River towards the left, indicating the direction of water flow and administration.

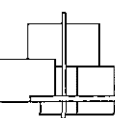
Idaho Water Engineering
Water Solutions



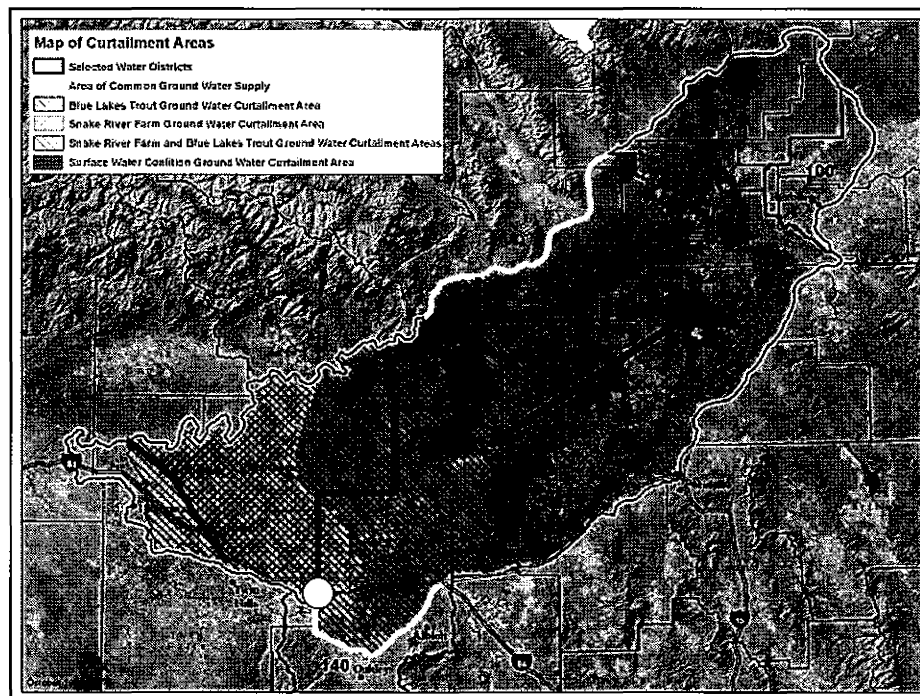
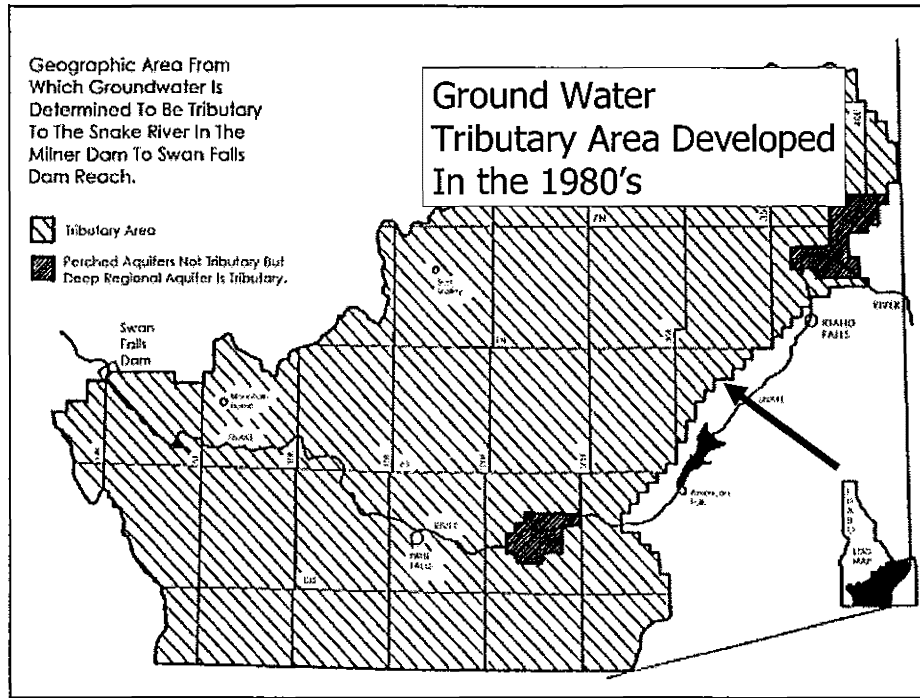


Members	Affiliation	
Abramovich, Ron	NRCS	Treasure Valley Comprehensive Aquifer Management Plan
Atkinson, Michelle	Micron Technology, Inc.	
Barrie, Rex	Boise River Watermaster WD #63	
Batt, Gayle	Wilder Irrigation District	
Bowling, Jon	Idaho Power Company	
Burnell, Barry	Idaho Department of Environmental Quality	
Dane, Russ	Keller Williams Realty	Advisory Committee
Deveau, Paul	Boise Project Board of Control	
Dixon, Dave	Greenleaf Farms Inc. - Owner	
Duspiva, Gary	Canyon County P&Z Commission	
Fraser, Rob	Idaho Wildlife Federation - President	Established March 26, 2010 Slide 1 of 2
Fuss, Michael	Nampa Public Works Director	
Goodson, Stephen	Governor's Office	
Howard, Matt	Bureau of Reclamation	
Jones, Chris	Trout Unlimited - VP Ted Trueblood Chapter	
Larson, Bill	Treasure Valley Partnership	

Mckee, Lynn	Ada Cty. SWCD - Vice Chair	Treasure Valley
Nelson, Greg		
Patton, Brian	Idaho Department of Water Resources	Comprehensive Aquifer Management Plan
Peter, Kathy	Unaffiliated, former Director of USGS Idaho Water Science Program	
Plina, Clinton	Nampa/Meridian Irrigation District - Board	
Prigge, John	Sorrento Lactalis - Wastewater Treatment Manager	
Rhead, Scott	United Water - Director Engineer	Advisory Committee
Ronk, Jayson	VP of Idaho Assn of Commerce & Industry	
Scott, Jeff	Pioneer Irrigation District Water Superintendent	Established March 26, 2010
Shoemaker, Gary	City of Caldwell Water Department	
Stewart, Lon	Sierra Club	
Stewart, Warren	City of Meridian Pub Works Dept - Engineer Manager	Slide 2 of 2
Thornton, John	N. Ada Cty. GW users; N. Ada Co Foothills Assoc; Member of N. Ada Cty. Tech. Working Group	
Ward, Rick	Idaho Department of Fish and Game	
Woods, Paul	Boise City Public Works Department	
Yerton, Janice	Water System Operator, Kuna	



Which Wells are Likely to be Regulated?



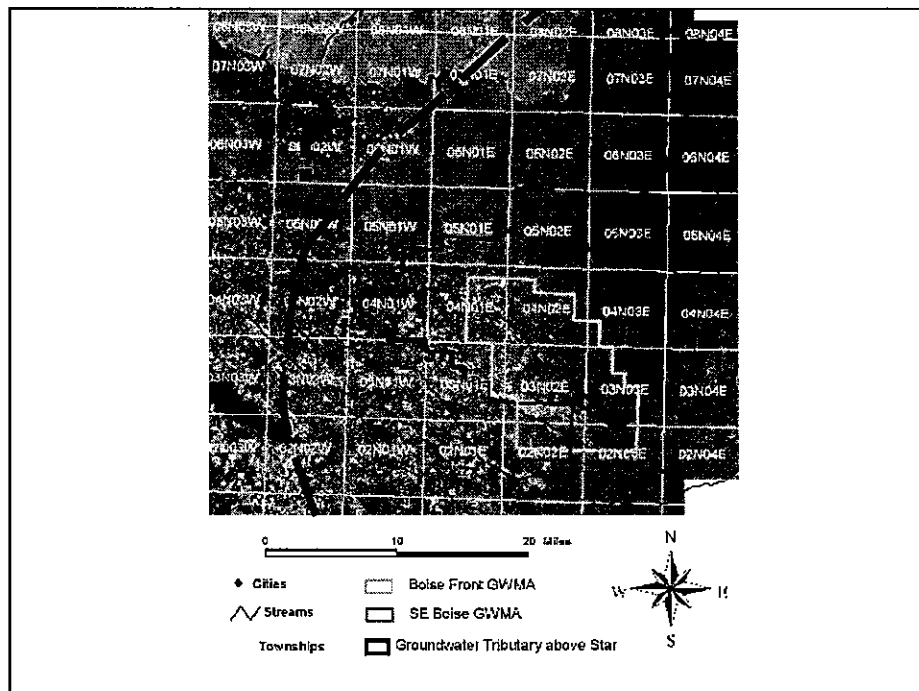
MEMORANDUM

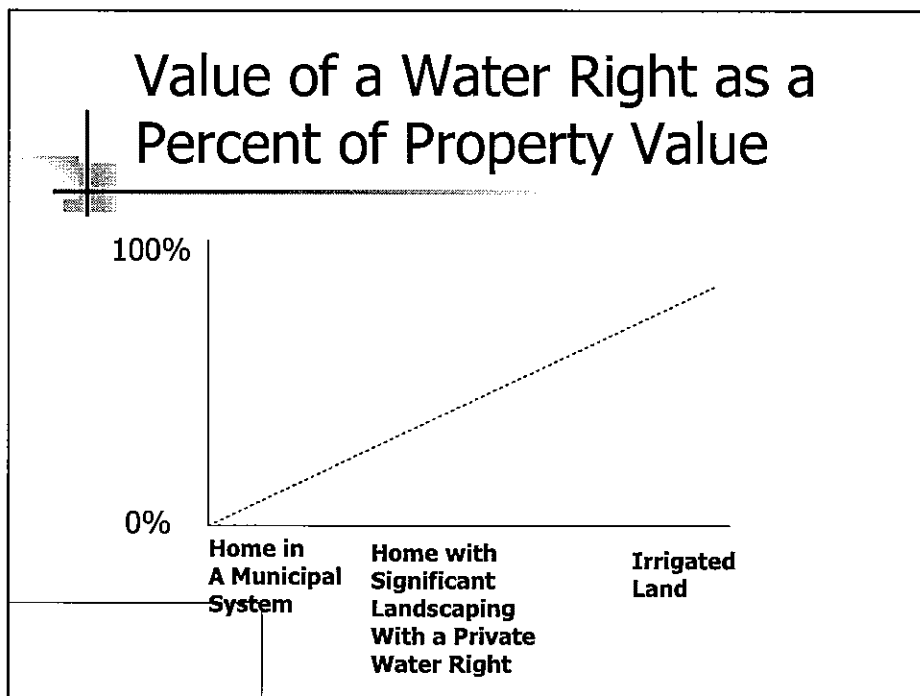
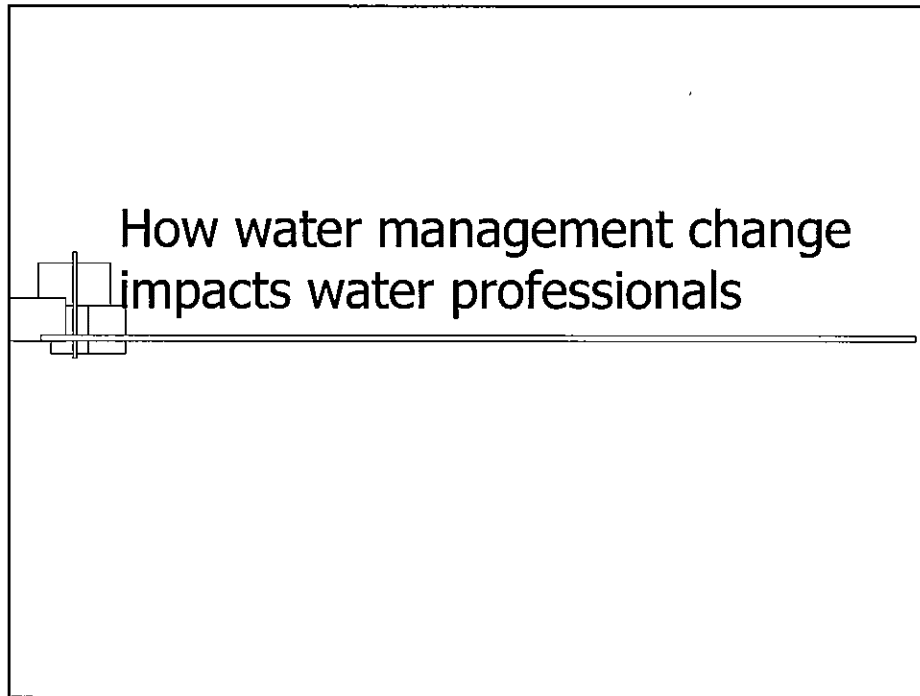
DATE: February 22, 2008 Amended Application Processing No. 59
TO: Water Management Division
FROM: Gary Spackman *GS*
RE: Processing of Applications to Appropriate Water in the Lower Boise River Basin

This memorandum replaces the original Application Processing Memorandum No. 59 issued in 1996.

Until further instructions are given, the following provisions apply to the processing of applications to appropriate water in the Boise River Basin (Administrative Basin 63) downstream from Lucky Peak dam.¹

1. Surface water in the Boise River or tributary to the Boise River upstream from Star Bridge is fully appropriated during the irrigation season and during much of the rest of the year. As stated in the May 3, 1995, Amended Moratorium Order for the Boise River drainage:





Inhibitors to Discussing Water Rights in Property Transactions



Historic

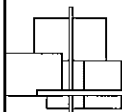
- Lack of buyer awareness
- Lack of determination of water rights
- Lack of regulation
- Lack of measurement
- Lack of enforcement
- Lack of economic incentive

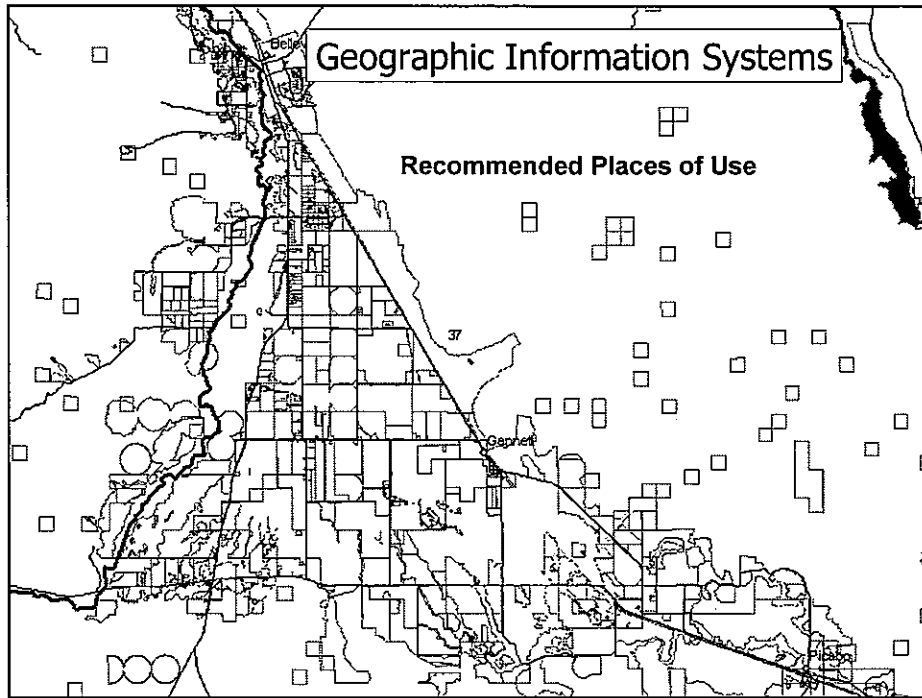
Emerging

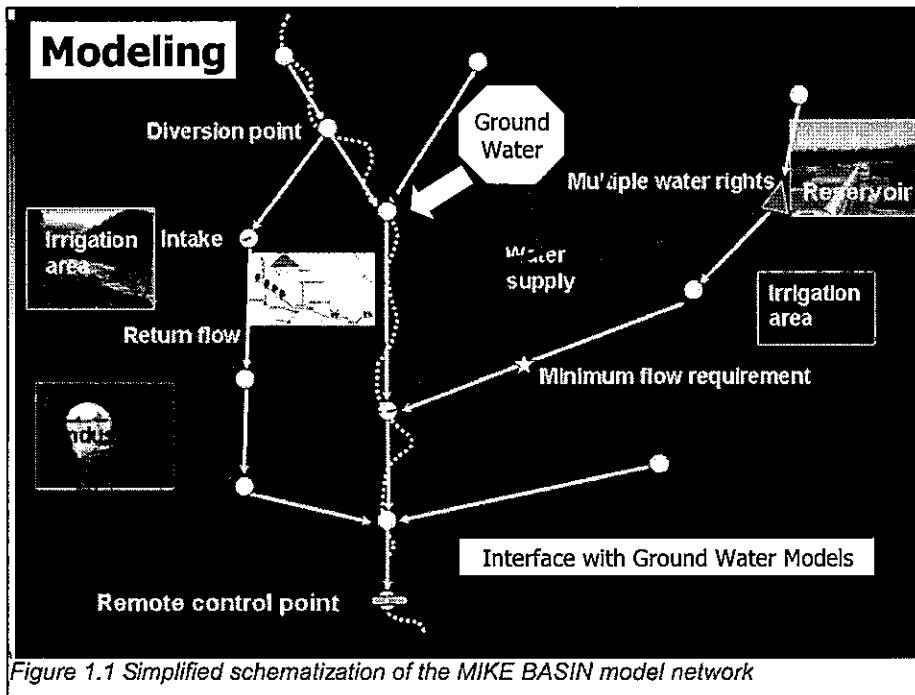
- Increasing awareness
- Snake River Basin Adj.
- Northern Idaho Adj.
- Adjudication enables
- Increased gaging
- Remote sensing
- Increasing water value

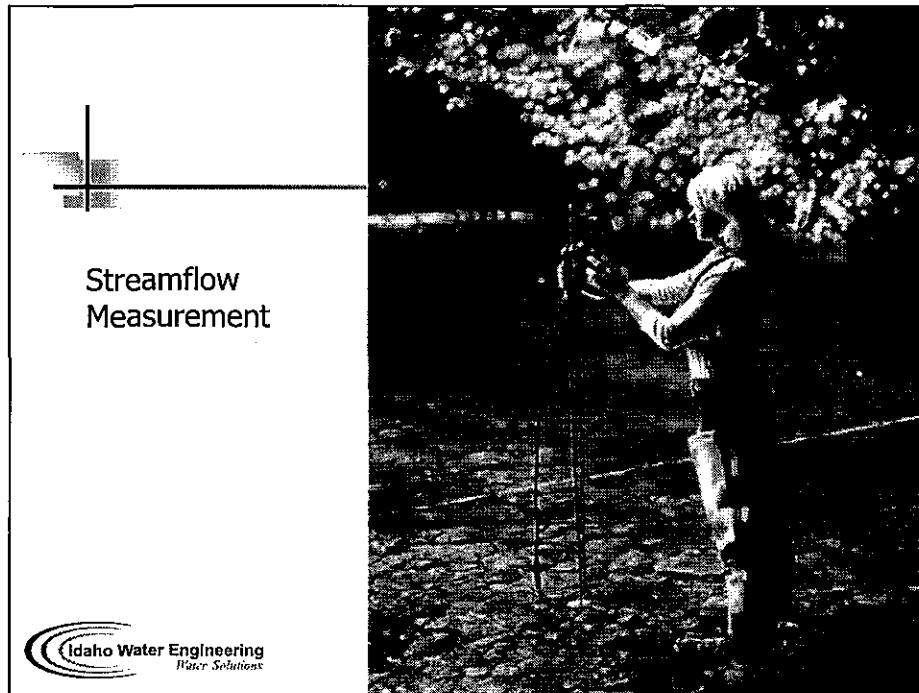
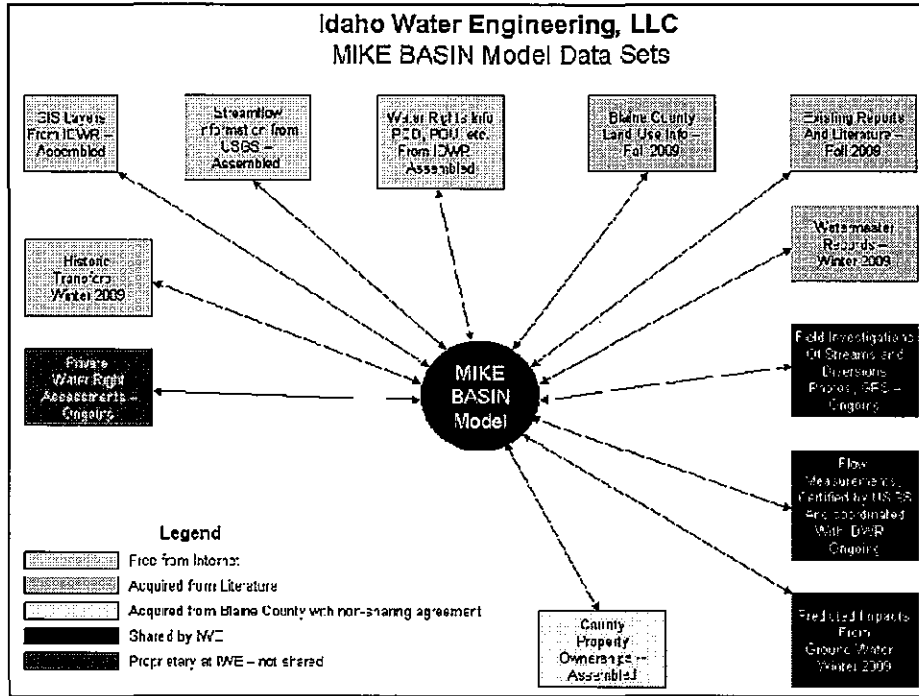


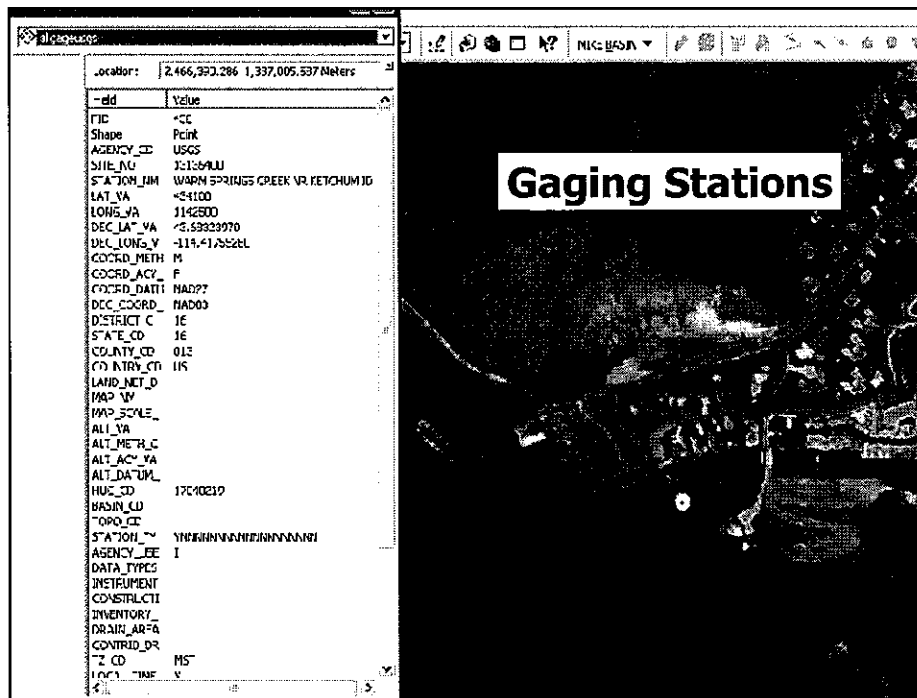
Advances in Technology





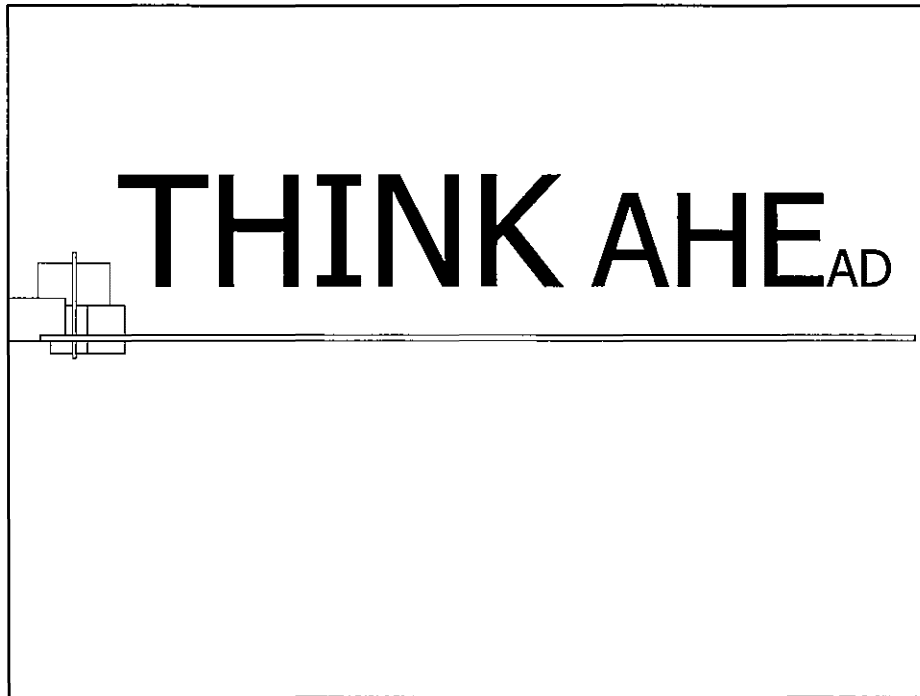






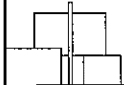
How Water Professionals can Deal with Water Management Change

1. Recognize that conjunctive administration is coming
 2. Stay abreast of technology
 3. Collaborate with specialty expertise
 4. Collaborate between government and private capabilities
- and...



Additional Thoughts...

- Water Management in the Treasure Valley is evolving toward Conjunctive Administration
- An orderly transition can be achieved if steps are taken prior to critical moments
- The Treasure Valley can become a model for this transition
- Water professionals should inform clients of this evolution in their interactions



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