Thousand Springs Surface and Ground Water Users and Stakeholders Second Public Meeting

"Development of Modeling Tools and Public Interfaces to be Used in the Implementation of Adaptive Management in the Thousand Springs Area"

Dave Tuthill

January 20, 2004

Discussion Outline

- Introduction of Participants
- Purpose of the Meeting
- Background
- Phases
  - MikeBasin Model
  - Development of Public Interfaces
- What’s Next
- Presentation by Carter Borden
- Presentation by Kevin Ramsey

Introduction of Participants

- IDWR Planning and Technical Services Division
  - Hal Anderson, Administrator
  - Paul Castelin, Technical Services Bureau Chief
  - Sudhir Goyal, Project Leader
- IDWR Water Management Division
  - Tim Luke, Supervisor, Water Distribution Section
  - Steve Clelland, SRBA Investigator
  - Carter Fritschle, Water Resources Supervisor
  - Cindy Yenter, Watermaster, Water District 130
  - Frank Erwin, Watermaster, Water District 36-A

Introduction of Participants

- U.S. Bureau of Reclamation
  - Lesa Stark, Planning Program Manager
  - Allyn Meuleman, Activity Manager
- DHI Water and Environment
  - Carter Borden, Contractor and Ph.D. Student, U of I
- University of Washington
  - Kevin Ramsey, M.S. Student, Dept. of Geography

Purpose of the Meeting

- Share the continuing developments in our Thousand Springs research
- Receive input from you in this process
- This meeting will ***not*** address the preliminary mitigation plan submitted by the North Snake Ground Water District and the Magic Valley Ground Water District
  - See **www.idwr.state.us**

Background

Thousand Springs Area

Eastern Snake Plain Aquifer

IDWR Modeling

Stakeholder Involvement

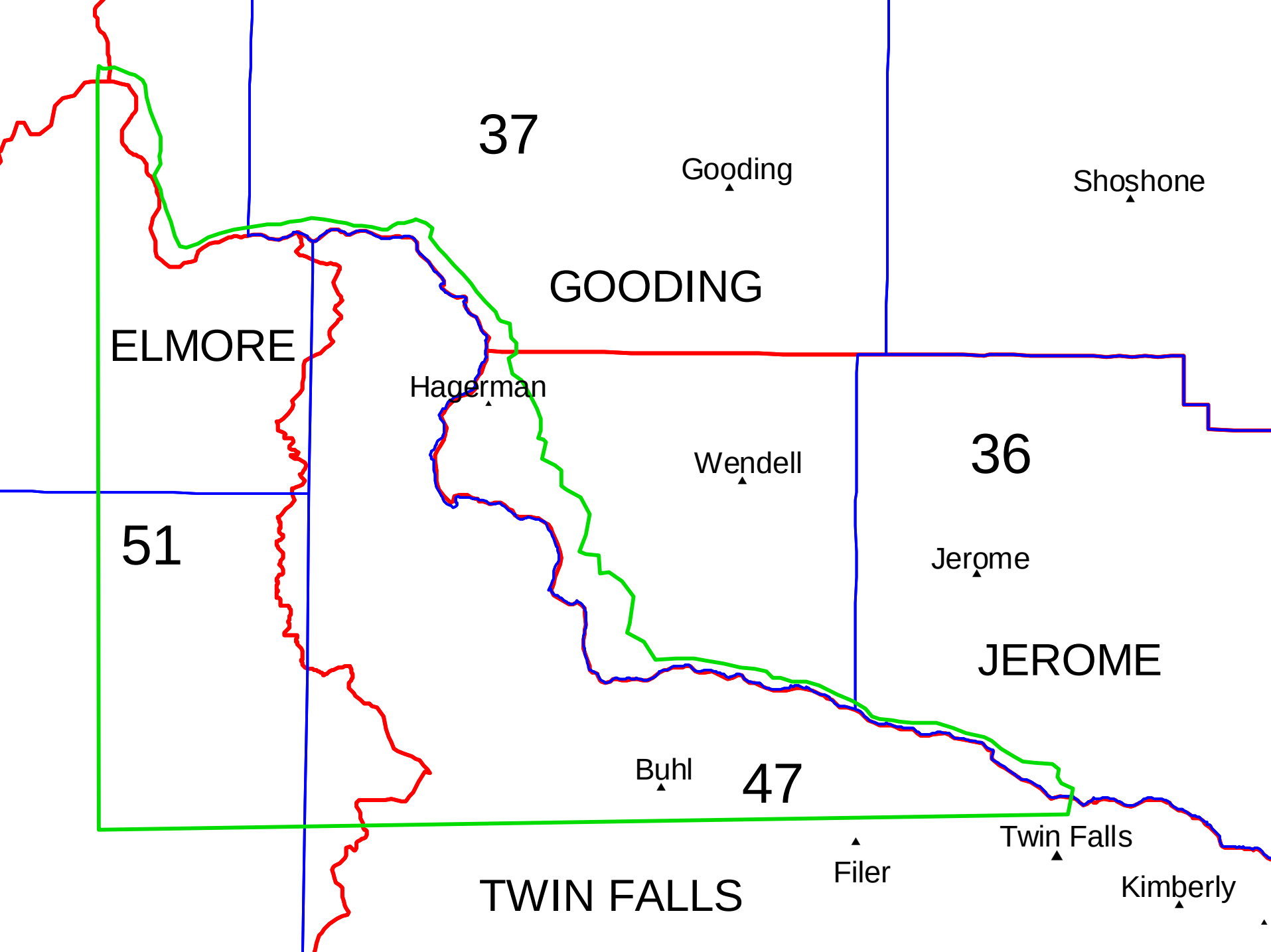
Phase 1a

Thousand Springs Modeling with MikeBasin

Enhanced Public Outreach

Phase 1b

Purpose: Identify and address *unmet* demand of senior water rights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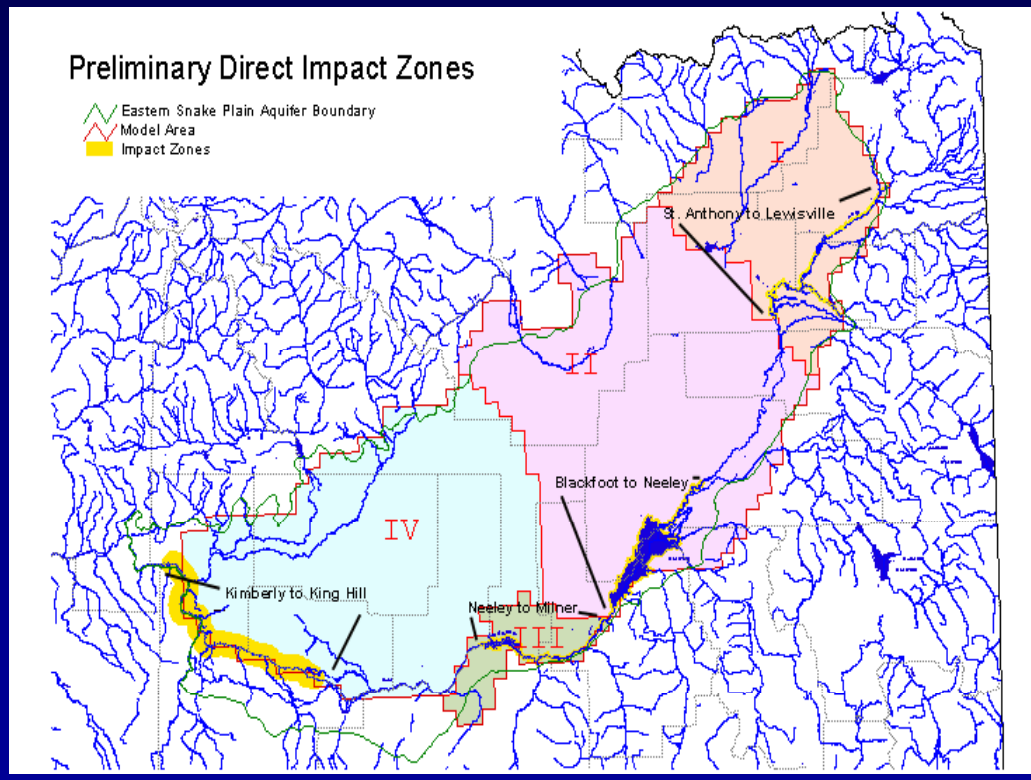
TWIN FALLS
Kimberly

Thousand Springs Area

- Snake River Basin Adjudication largely complete in Basin 36 portion, being conducted in Basin 37 portion
- Some diversions have reported water shortages
- Flows in the Thousand Springs area are interconnected with the Eastern Snake Plain Aquifer

Eastern Snake Plain Aquifer

- Flow of aquifer is generally southwesterly
- Diversions upgradient from Thousand Springs impact flows in the Thousand Springs area, to some extent
- Reduction in flow does not necessarily constitute injury

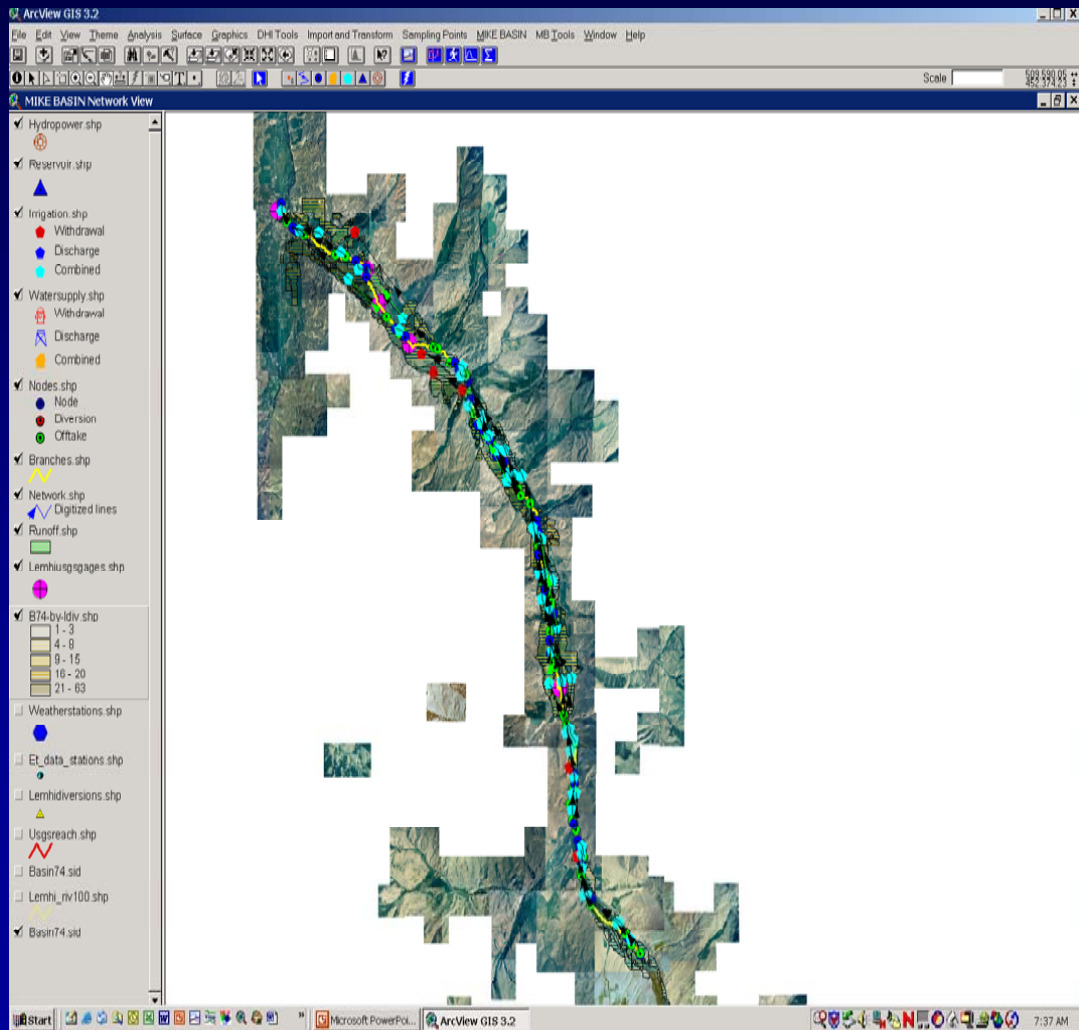


Recent Project Example

- North Snake Ground Water District
- Hagerman Valley Mitigation Pipeline
- Total Project: $986,000

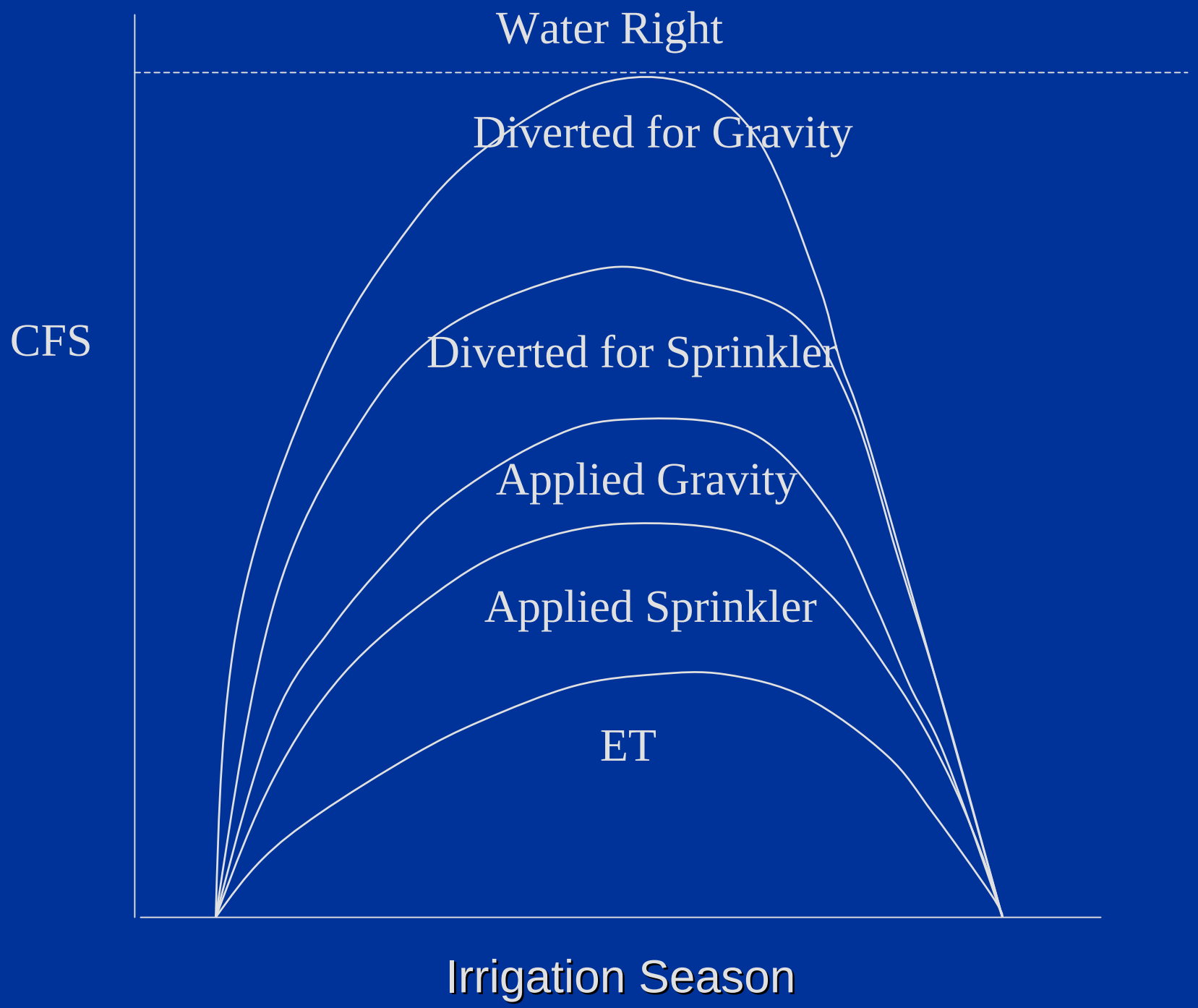
IDWR Modeling

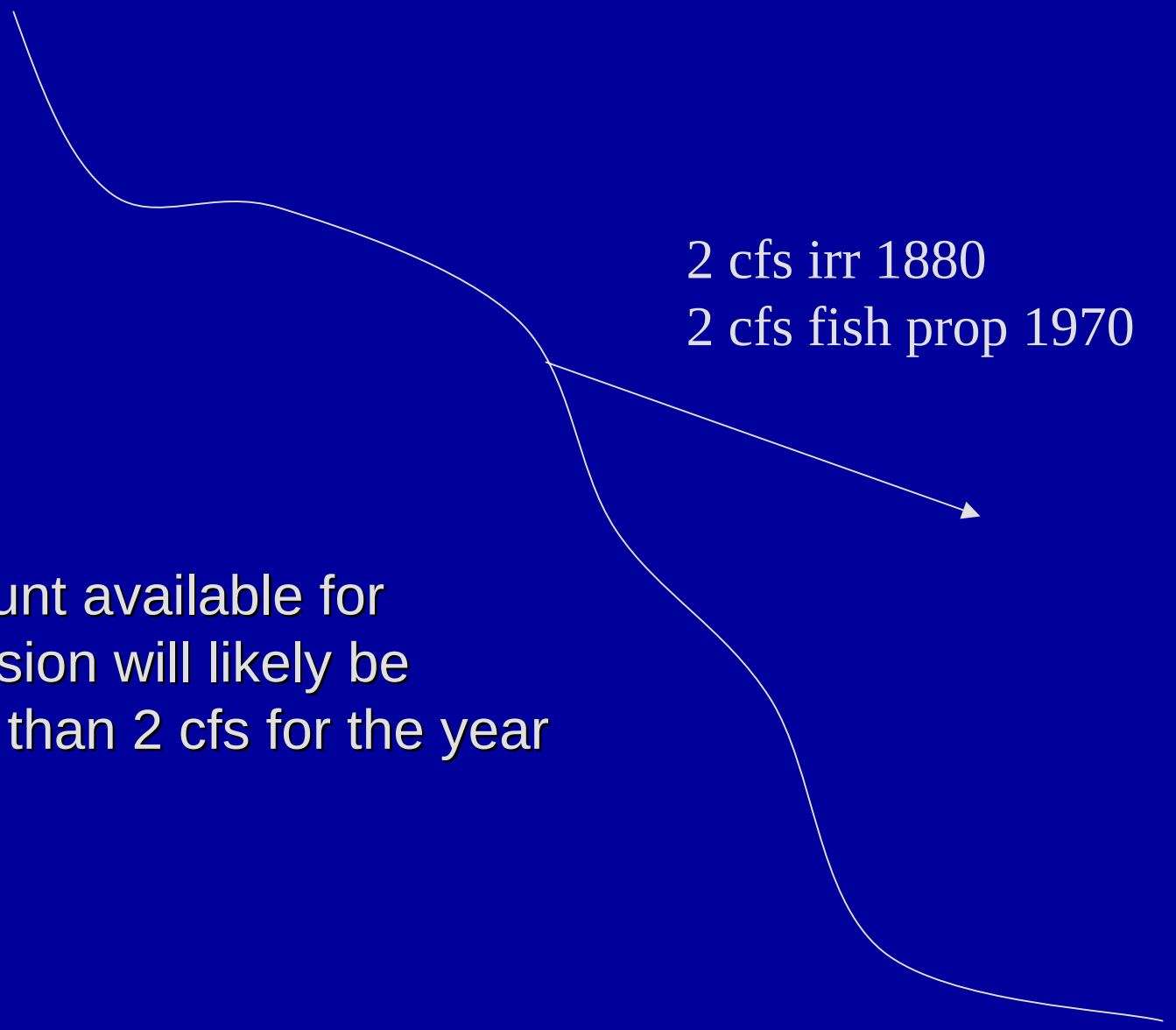
- IDWR develops and maintains many types of models
- It appears that the MikeBasin model has utility in the Thousand Springs Area
- This model has been used successfully by IDWR in other basins (e.g. Lemhi and Upper salmon)



Stakeholder Involvement

- IDWR experience is that involvement of stakeholders improves the water management **process** and **outcome**


Water Right
Diverted for Gravity
CFS
Diverted for Sprinkler
Applied Gravity
Applied Sprinkler
ET
Irrigation Season



Amount available for
diversion will likely be
Less than 2 cfs for the year

Two Phases of Implementation

- Phase 1a
  - Construct MikeBasin Model
- Phase 1b
  - Enhance Public Interface

Timeline

- May 2003
  - Karl Dreher announces at a Water District 130 Mitigation Meeting an initiative for Phases 1a and 1b
- Summer 2003
  - Phase 1a: Contract drafted and funding sought
  - Phase 1b: Investigation conducted
- Fall 2003
  - Phase 1a: Funding secured, work begins
  - Phase 1b: Work products developed

Timeline (cont.)

- Winter 2003-2004
  - Phase 1a: Stakeholder input gathered and Model developed
  - Phase 1b: Work products finalized
- Spring 2004
  - Phase 1a: Model completed and promulgated
  - Phase 1b: Thesis written

Future Steps

- Adaptive Management – a step by step approach for improvement of management over time
- Summer 2004
  - Use model to assist with water management
    - Provide additional data points where required
    - Interface between Water District 36A Watermaster and IDWR
  - Use public interface tools to assist with information dissemination
- Unspecified timing
  - Develop interface between ESPA model and surface water model (Phase 2)

Questions?