THE UMATILLA BASIN

2050 Plan Background, Priorities and Next Steps!

UMATILLA COUNTY

CRITICAL GROUNDWATER

TASKFORCE

WRD

Confederated Tribes of The Umatilla Indian Reservation

UMATILLA COUNTY

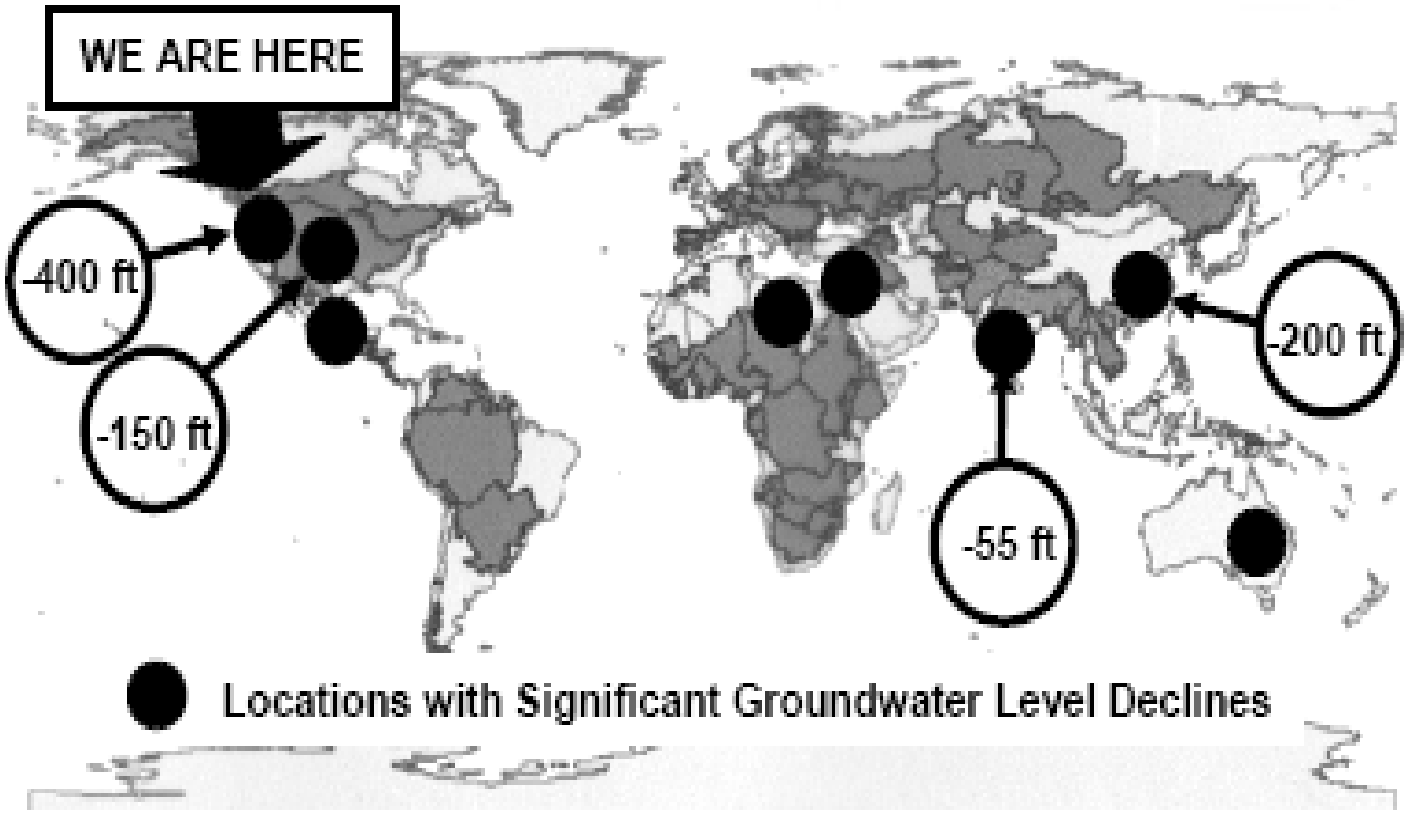
Focus of Presentation

- Brief Background of Task Force, 2050 Planning Process and Recommended Management Alternatives
- 2050 Plan – Priorities
- Plan Implementation – Where We Are and Why AR/ASR Not the Silver Bullet

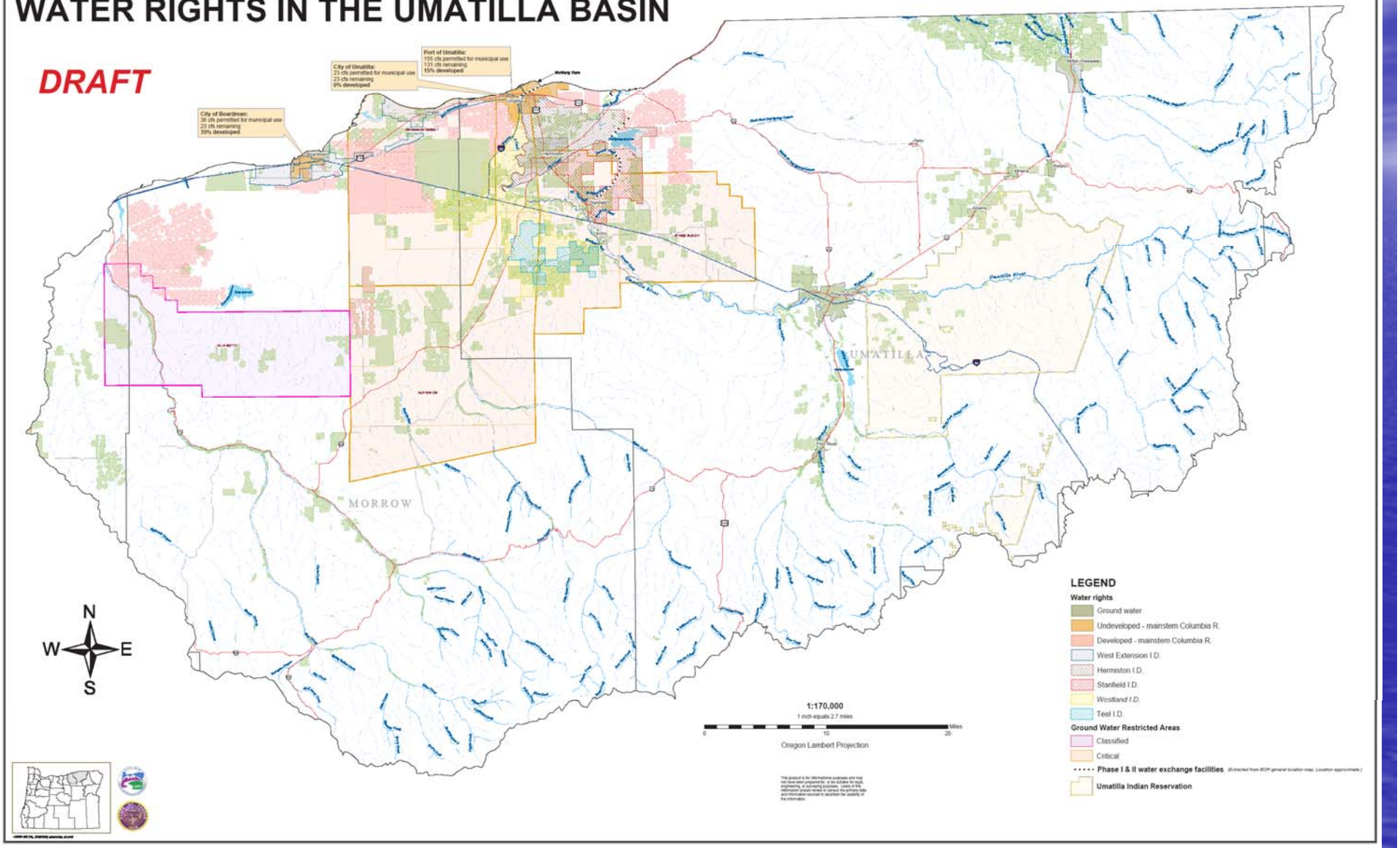
WHY THE TASK FORCE

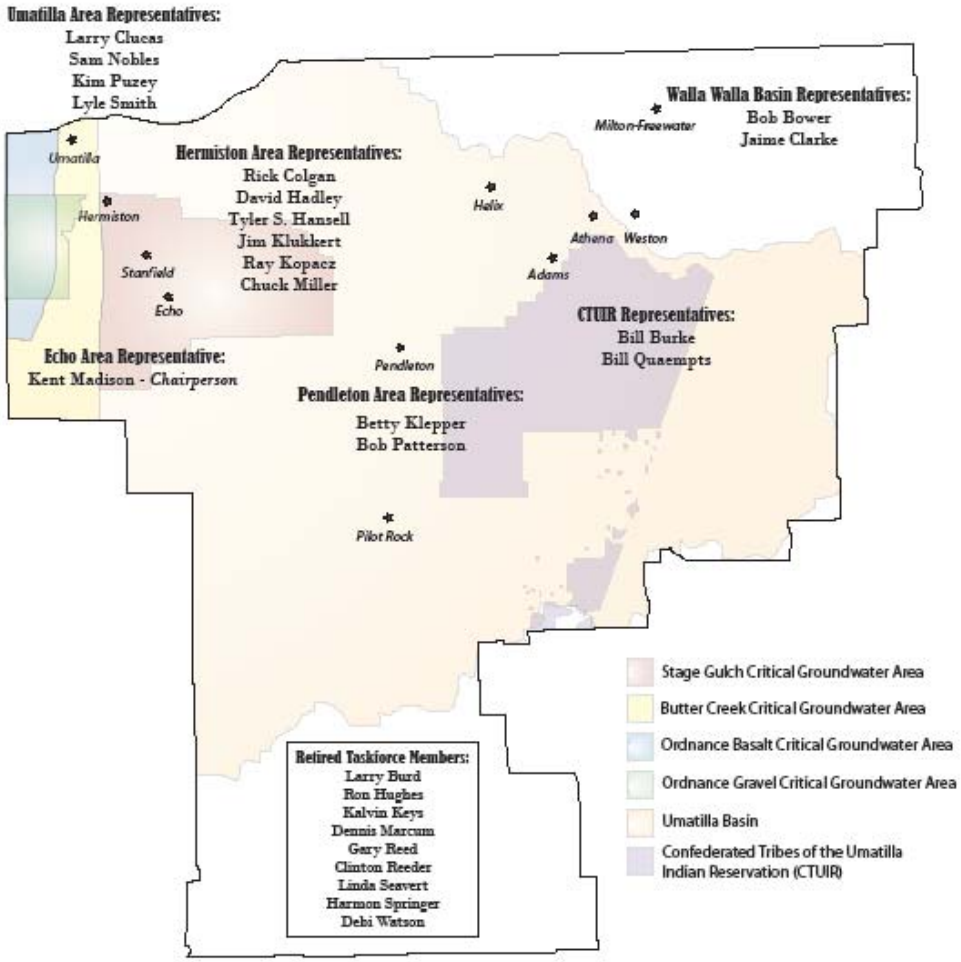
- 1855 Treaty with the Walla Walla, Cayuse and Umatilla Tribes
- 1916 Adjudicated decree of water rights to use waters of Umatilla River and its tributaries
- 1954 Pendleton Project Investigation by BoR. Concluded that potential irrigable land far exceeded available water supply
- 1958 First reports of water table decline in Butter Creek area
- 1966 BoR reports that any significant increase in pumping from basalt aquifers would likely result in accelerated decline of water tables
- 1976 OWRD designates Butter Creek a Critical Groundwater Area (remanded until 1986)
- 1976 Critical Groundwater Area designated by OWRD for Ordnance Basalt and Gravel
- 1977 Lost Lake/Depot well owners initiated project to artificially recharge shallow gravel aquifer using existing canal system
- 1983 Umatilla County Comprehensive Plan recognizes that availability of water is a key resource for economic growth
- 1986 Critical Groundwater Area designated by OWRD for Buttercreek Basalt
- 1988 Umatilla Basin Project authorized and funded by Congress -- allows irrigators to exchange Umatilla River water for Columbia River water)
- 1990 ODEQ declares 352,000 acres in Umatilla and Morrow counties as a groundwater management area (GWMA) due to nitrate contamination
- 1991 Critical Groundwater Area designated by OWRD for Stage Gulch Basalt
- 2004 Umatilla County Critical Groundwater Task Force created by Board of Commissioners to address water limitations
- 2005 Board of Commissioners of Umatilla County adopt Exempt Well Resolution until 2050 plan is authorized

Fissure Eruption



Oregon Water Resources Department
WATER RIGHTS IN THE UMATILLA BASIN




Umatilla Area Representatives:
Larry Cluces
Sam Nobles
Kim Puzey
Lyle Smith
Umatilla
Hermiston
Stanfield
Echo
Hermiston Area Representatives:
Rick Colgan
David Hadley
Tyler S. Hansell
Jim Klukkert
Ray Kopacz
Chuck Miller
Echo Area Representative:
Kent Madison - Chairperson
Pendleton
Pendleton Area Representatives:
Betty Klepper
Bob Patterson
Pilot Rock
Helix
Milton-Freewater
Walla Walla Basin Representatives:
Bob Bower
Jaime Clarke
Athena
Weston
Adams
CTUIR Representatives:
Bill Burke
Bill Quaempts
Retired Taskforce Members:
Larry Burd
Ron Hughes
Kalvin Keys
Dennis Marcum
Gary Reed
Clinton Reeder
Linda Seavert
Harmon Springer
Debi Watson
Stage Gulch Critical Groundwater Area
Butter Creek Critical Groundwater Area
Ordnance Basalt Critical Groundwater Area
Ordnance Gravel Critical Groundwater Area
Umatilla Basin
Confederated Tribes of the Umatilla Indian Reservation (CTUIR)

2050 PLANNING PROCESS

Desired Outcome

A doable "2050 Plan" which has consensus support and which will assure adequate groundwater for <u>broad community</u> needs through the year 2050

Planning Effort

- 2004 (Exempt Well Resolution)
  - Task Force gets educated, focused on periodic review
- 2005 (Goals and Principles)
  - Task Force decides where to go!
- 2006 (Planning Concepts)
  - Task Force builds off of four basic concepts
- 2007 (Plan Development)
- 2008 (Review, Adoption and Implementation)

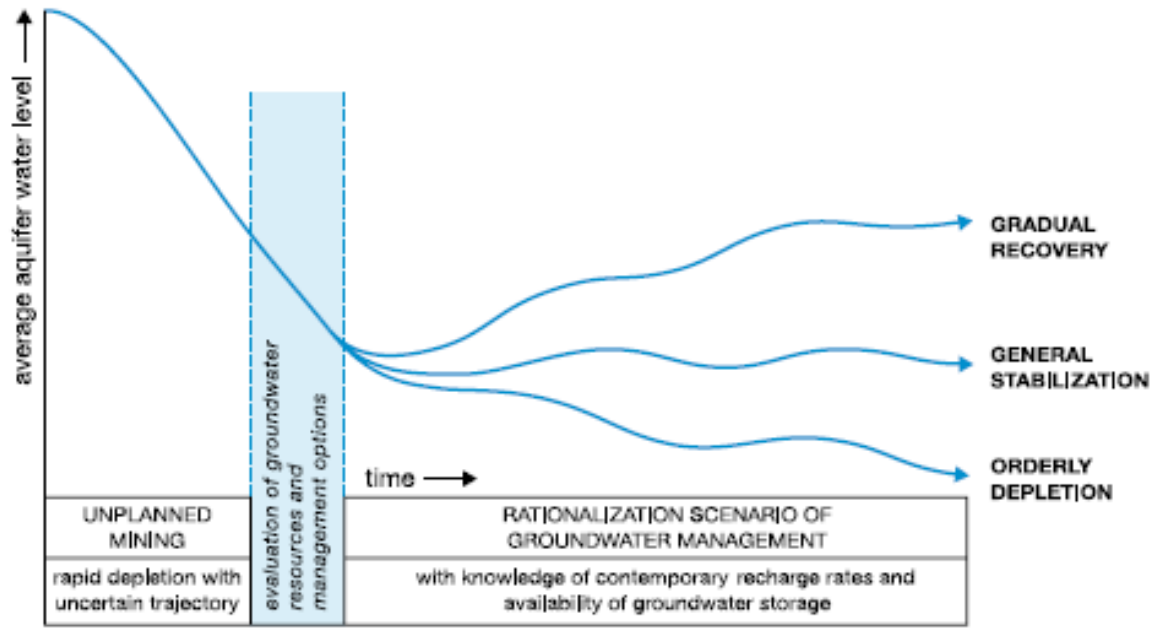
2050 PLAN (Adopted Nov. 10, 2008)

- Is a water management "road map" to pursue over the next fifty years to assure long term water supplies
- Is an effort by local citizens to provide the BOC with tools to influence water policy

- Is Not Water Law or Land Use Law
- Is Not an attempt to take over water management

Adopted Plan Goal: Gradual Recovery of Basalt Aquifer

Figure 2: Targets for groundwater resource management in 'rationalization scenarios' following indiscriminate and excessive exploitation



WHY GRADUAL RECOVERY ?

- Economics
  - Improved static water levels, decreased pumping costs, minimized well deepening and capital outlay, and redundancy
- Environment
  - Improve groundwater quality (dilution and flushing), improve return flows to streams (ecosystem function)
- Drought Mitigation
  - Assure that groundwater supply available when surface water supply is diminished by drought

2050 Plan Developed to Meet the Gradual Recovery Goal

1. Governing the Process (In Progress)
2. Meeting Current Water Demands (In Progress)
   1. Supply Projects to Replace Basalt Groundwater Irrigation Rights in CGA's (Emphasis Currently on AR/ASR)
   2. Meeting Other Current Water Demands
   3. Preventing Additional Groundwater Declines
3. Developing a Water Budget (Quantifying Water Availability)
   1. Quantifying Water Availability, Groundwater Characterization and Natural Recharge Rates
   2. Involvement in Columbia River Water Policy
4. Future Policy Updates to Address Water Budget and Maximize Use and Protection of Available Water

Meeting Current Water Demands

- **Irrigation**
  - Irrigation from basalt aquifers (Deficit Reduction)
  - Westland Irrigation District (Phase III)
- **Municipal and Industrial**
  - Protecting municipal investment and minimizing additional impacts
  - Identifying water supply options for rural industrial needs
- **CTUIR Water Rights Settlement**
  - Addressing and satisfying the current claims
- **Rural Domestic**
  - Protecting investment in exempt wells and minimizing additional impacts
  - Improving groundwater quality in the LUBGWMA
  - Identifying alternative water supply options for high density areas and areas with increasing declines in water quality and quantity

- Note: Meeting current water demands must not result in degradation of water quality or environment

Priority: CGAs

Project

- Develop storage and supply to replace existing groundwater rights in CGA's (e.g. SB 1069/HB 3369)

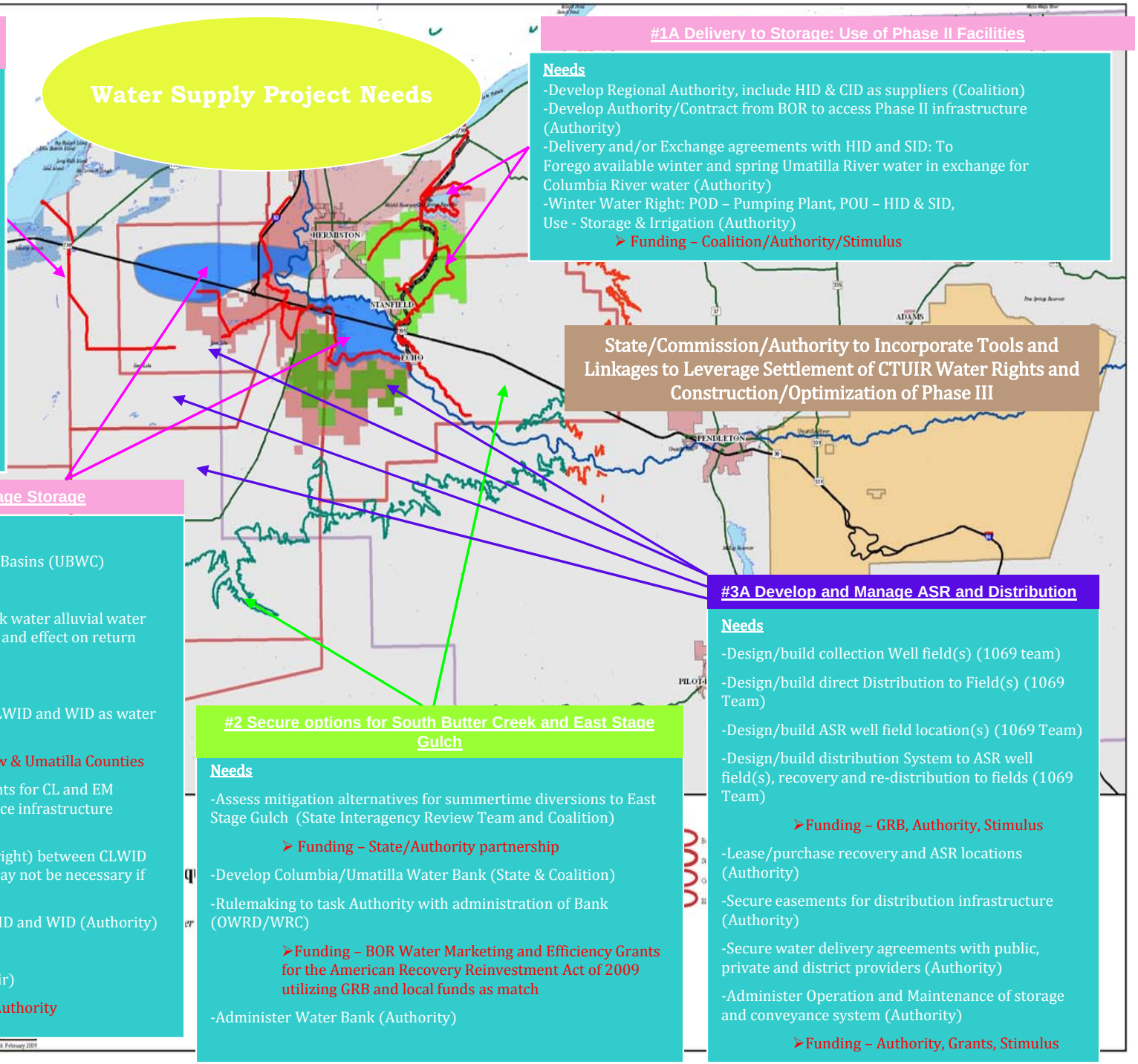
Policy & Regulation

- Classification of new supply for replacement of existing groundwater rights
- Banking/Brokerage System to optimize replacement water (to be developed while testing supply options)

Funding

- Debt Repayment based upon Public Vs. Private Benefit

Water Supply Project Needs



#1A Delivery to Storage - Columbia to AR Via CID

Needs

-Final Design/Build/Survey from C. River to CL Recharge (1069 Team)

➢Funding - GRB

-Develop Regional Authority, include CID as water supplier (Coalition)

➢Funding – CTUIR, Morrow & Umatilla County

-Water Delivery & Easement Agreements w/ CID and landowners to AR site Authority)

-Winter Water Right, POD-CID, POU – CL, Use – AR (Authority)

➢ Funding – GRB, Authority

#1A Delivery to Storage: Use of Phase II Facilities

Needs

-Develop Regional Authority, include HID & CID as suppliers (Coalition)
-Develop Authority/Contract from BOR to access Phase II infrastructure (Authority)
-Delivery and/or Exchange agreements with HID and SID: To Forego available winter and spring Umatilla River water in exchange for Columbia River water (Authority)
-Winter Water Right: POD – Pumping Plant, POU – HID & SID, Use - Storage & Irrigation (Authority)

➢ Funding – Coalition/Authority/Stimulus

State/Commission/Authority to Incorporate Tools and Linkages to Leverage Settlement of CTUIR Water Rights and Construction/Optimization of Phase III

#1B Develop and Manage Storage

Needs

-Final Design/Build of AR Infiltration Basins (UBWC)

➢Funding – HB 3369

-Monitoring/Modeling System to track water alluvial water movement, alluvial storage capability and effect on return flows (UBWC)

➢Funding - GRB

-Authority Development, including CLWID and WID as water suppliers (Coalition forms UBWC)

➢Funding – CTUIR, Morrow & Umatilla Counties

-Lease/purchase/easement agreements for CL and EM recharge locations and new conveyance infrastructure (Authority)

-Exchange agreement (maybe water right) between CLWID and WID for Umatilla River water – may not be necessary if Phase II is utilized (UBWC)

-Water Delivery Agreements w/ CLWID and WID (Authority)

➢Funding - Authority

-New Storage Right (Alluvial Reservoir)

➢Funding – GRB through Authority

#2 Secure options for South Butter Creek and East Stage Gulch

Needs

-Assess mitigation alternatives for summertime diversions to East Stage Gulch (State Interagency Review Team and Coalition)

➢ Funding – State/Authority partnership

-Develop Columbia/Umatilla Water Bank (State & Coalition)

-Rulemaking to task Authority with administration of Bank (OWRD/WRC)

➢Funding – BOR Water Marketing and Efficiency Grants for the American Recovery Reinvestment Act of 2009 utilizing GRB and local funds as match

-Administer Water Bank (Authority)

#3A Develop and Manage ASR and Distribution

Needs

-Design/build collection Well field(s) (1069 team)

-Design/build direct Distribution to Field(s) (1069 Team)

-Design/build ASR well field location(s) (1069 Team)

-Design/build distribution System to ASR well field(s), recovery and re-distribution to fields (1069 Team)

➢Funding – GRB, Authority, Stimulus

-Lease/purchase recovery and ASR locations (Authority)

-Secure easements for distribution infrastructure (Authority)

-Secure water delivery agreements with public, private and district providers (Authority)

-Administer Operation and Maintenance of storage and conveyance system (Authority)

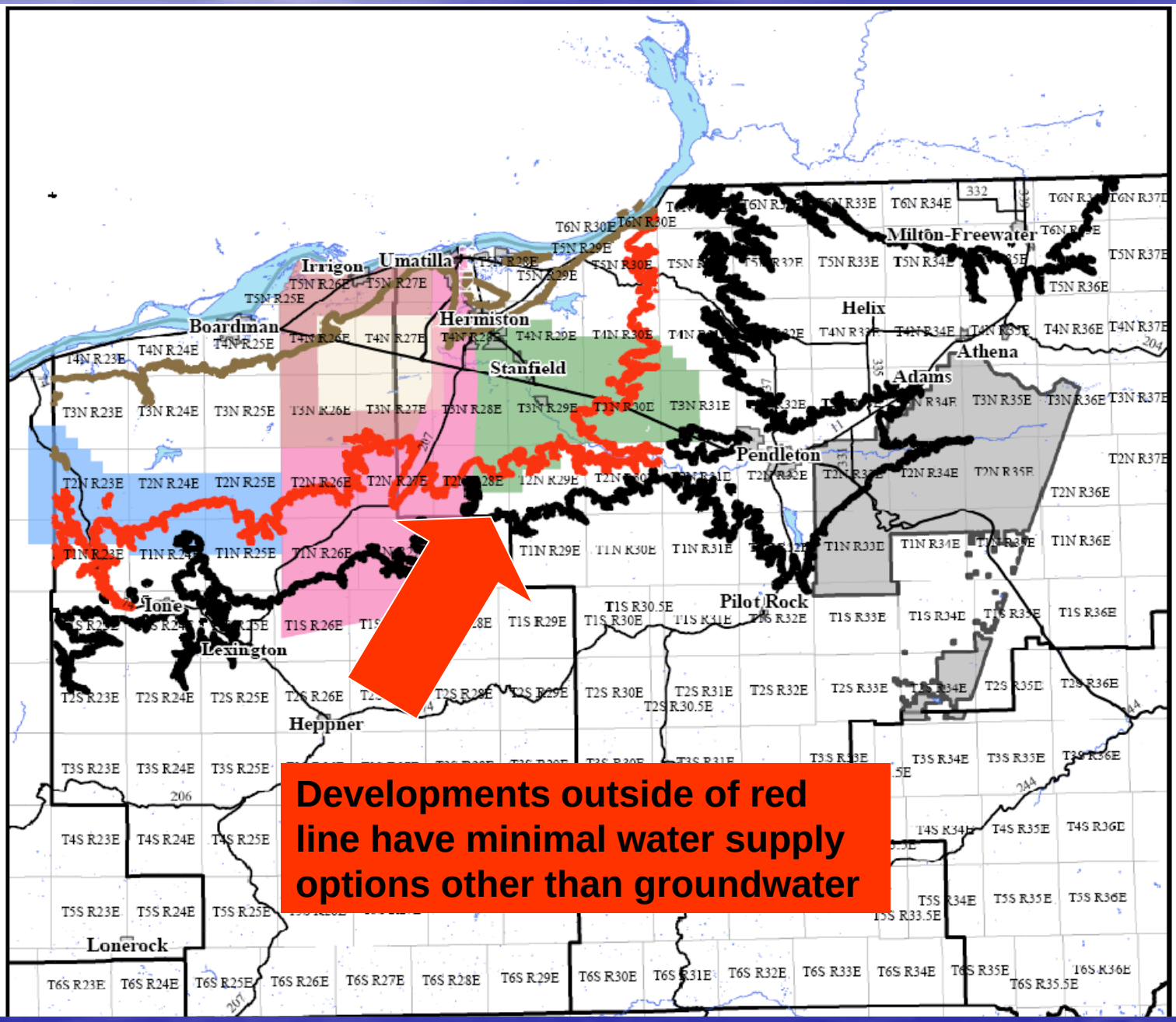
➢Funding – Authority, Grants, Stimulus

Preventing Basin-Wide Overappropriation While Assessing Groundwater Characterization

- Updates to Umatilla Basin Rules
  - Work to Form a RAC to begin negotiations
  - Limit large scale basalt groundwater development
  - Sunset the requirements either after a certain time period or based on completion of necessary groundwater studies and Tribal water right assessment

Quantifying Water Availability

- Monitor Benefits of Gradual Recovery
- Obtain Necessary Scientific Data for groundwater characterization and availability (e.g. a groundwater characterization study)
- Work With State and other interests on Columbia River Management


Irrigon
Umatilla
Boardman
Hermiston
Stanfield
Milton-Freewater
Helix
Athena
Adams
Pendleton
Pilot Rock
Ione
Lexington
Heppner
Lonerock
Developments outside of red line have minimal water supply options other than groundwater

Governing the Process

Managing Basin-Wide Management Projects

- Multiple phases, districts, jurisdictions and water users involved requires formal coordination and negotiation
- New water right(s) will have to be held by an entity for specific use(s)
- Project will involve a mix of public and private funding, requiring accountability to public as well as users benefited

Concepts in Motion

Replacement of Groundwater Rights

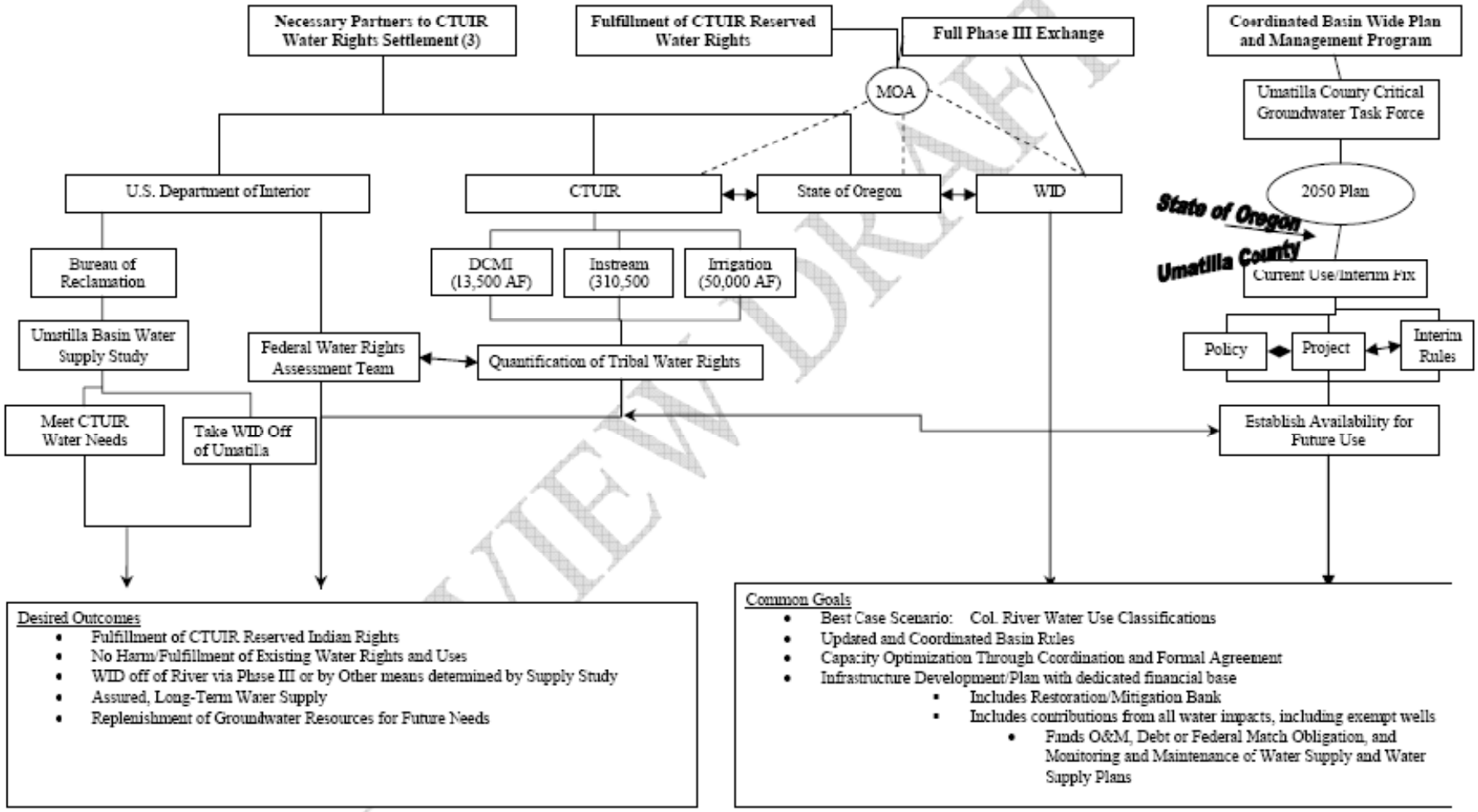
- SB 1069 (Umatilla Basin Aquifer Recovery Assessment) 2008
- HB 3369 Passed in '09 Session ($2.5 Million Grant, $15 million available through loans)
- USDA Funded Economic Impact Study Related to Replacement Water Projects Complete for Basin (IRZ.COM)

CTUIR Water Rights Settlement

- Umatilla Basin Water Supply Study
- Dept. of Interior Assessment Team Report

Management

- Umatilla Basin Coalition Formed – Basin Wide Policy Guidance
- Umatilla Basin Water Commission Formed
  - Members include Umatilla County, Morrow County, CTUIR, WID and CLWID
- 2050 Plan Transition Teams to tie in 2050 Plan


Necessary Partners to CTUIR Water Rights Settlement (3)
Fulfillment of CTUIR Reserved Water Rights
Full Phase III Exchange
Coordinated Basin Wide Plan and Management Program
MOA
Umatilla County Critical Groundwater Task Force
U.S. Department of Interior
CTUIR
State of Oregon
WID
2050 Plan
State of Oregon
Umatilla County
Bureau of Reclamation
DCMI (13,500 AF)
Instream (310,500
Irrigation (50,000 AF)
Current Use/Interim Fix
Umatilla Basin Water Supply Study
Federal Water Rights Assessment Team
Quantification of Tribal Water Rights
Policy
Project
Interim Rules
Meet CTUIR Water Needs
Take WID Off of Umatilla
Establish Availability for Future Use
Desired Outcomes
Fulfillment of CTUIR Reserved Indian Rights
No Harm/Fulfillment of Existing Water Rights and Uses
WID off of River via Phase III or by Other means determined by Supply Study
Assured, Long-Term Water Supply
Replenishment of Groundwater Resources for Future Needs
Common Goals
Best Case Scenario: Col. River Water Use Classifications
Updated and Coordinated Basin Rules
Capacity Optimization Through Coordination and Formal Agreement
Infrastructure Development/Plan with dedicated financial base
Includes Restoration/Mitigation Bank
Includes contributions from all water impacts, including exempt wells
Funds O&M, Debt or Federal Match Obligation, and Monitoring and Maintenance of Water Supply and Water Supply Plans

Lessons Learned

- Counties can play a vital role in developing multi-beneficial water plans
- Transparent process is necessary to build trust (minimizes concern over special interests)
- If its our problem we need to take responsibility to fix
- There are only so many water sources (Three strikes and we have problems)
- AR/ASR ARE TOOLS, NOT THE SILVER BULLET!

STAYING INFORMED:

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TO VIEW THE PLAN:

http://www.co.umatilla.or.us/Groundwater.htm