

New Developments for Conjunctive Management in Idaho: Why Our Expanding Understanding of Science Should Expand How We Address the Doctrine Against Waste in Idaho Water Right Transfers



By Dylan R. Hedden-Nicely

## Terms

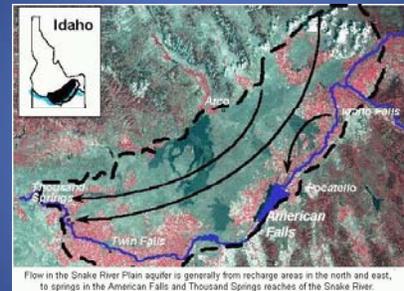
- Conjunctive Management – Managing surface and groundwater resources in conjunction with one another as a unitary source.
- Maximizing Efficiency – Ensuring that as much water is available for as many *uses* (ag, instream, etc.) as possible.

## Introduction

1. Introduce Eastern Snake Plain Aquifer (ESPA)
2. One Approach – Encouraging Efficiency Using Transfers
3. Laws of Transfers in a Conjunctively Managed Regime
4. The Concept – Broadening the Scope of “Efficiency” in a Conjunctively Managed System

## 1. Eastern Snake Plain Aquifer (ESPA)

Hydrology



Flow in the Snake River Plain aquifer is generally from recharge areas in the north and east, to springs in the American Falls and Thousand Springs reaches of the Snake River.

- Total Estimated Volume is Estimated to be 200-300 Million Acre Feet
- Aquifer Composition – Mix of basalt and inter-bedded Sediments

<http://www.8.uidaho.edu/~johnson/fhwrt/ar3/home.htm> Gary Johnson

## 2. One Approach

Use Water Transfers to Encourage Efficiency

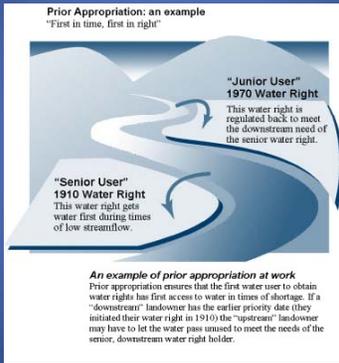


## 3. The Laws of Water Transfers in a Conjunctively Managed Regime



### 3. Transfer Laws

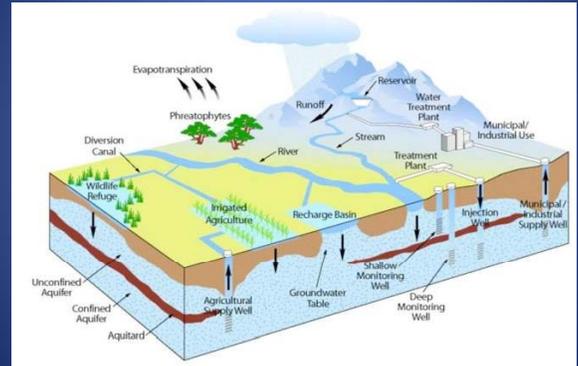
Prior Appropriation



[http://www.oregon.gov/OWRD/PUBS/aquabook\\_laws.shtml](http://www.oregon.gov/OWRD/PUBS/aquabook_laws.shtml)

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Prior Appropriation

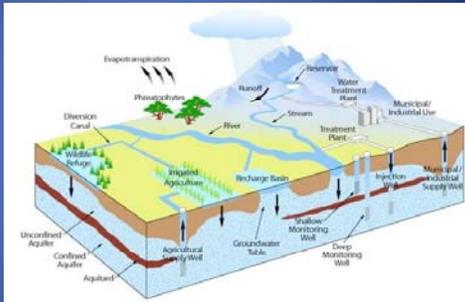


<http://www.ecy.wa.gov/programs/eap/groundwater/resources.html>

### 3. Transfer Laws

Prior Appropriation

- 1994 - Idaho recognizes the relationship between surface and groundwater. *Musser v. Higginson*, 871 P.2d 809 (1994).
- Idaho Supreme Court Ordered the Idaho Department of Water Resources (IDWR) to regulate the two sources together
- IDWR has retrofitted surface water rules for conjunctive management.



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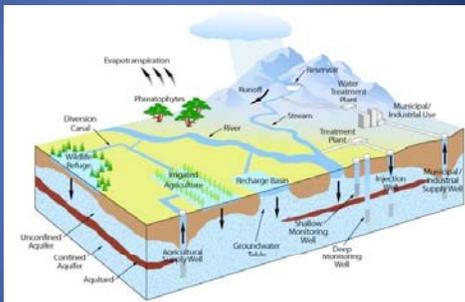
### Thousand Springs, ID



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### 3. Transfer Laws

No-injury



### 3. Transfer Laws

Waste



- Every water user has a duty to not *unreasonably* waste water through inefficient practices. *Stickney v. Hanrahan*, 63 P. 189, 191 (1900).
- “Reasonable” calls for an inventory of “. . . Better science, improving technology, and growing demands. . . .”

### 5. Broadening How We Define Waste



### Challenges to Overcome

- Our Perception - The common perception that each individual needs to be efficient in order for there to be maximum system efficiency.
- Technical – Determining whether a system is efficient is much more technically difficult than determining whether a user is being efficient. This issue should improve as time goes on.
- Costs – The status quo is simple to administer while managing from a system-based perspective would be much more costly.

Thank You!



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### Conclusion

- Increasing use and decreasing recharge is leading to a crisis in the ESPA.
- One method of addressing this is to encourage efficiency by allowing users to transfer excess water
- Under our current legal structure a senior user would be able to do this despite the no-injury rule because of precedent that trumps no-injury with the rule against waste.
- However, in order to maintain fairness while encouraging efficiency our concept of waste should be redefined to look at whether a system, not a user, is wasteful

### Water Law

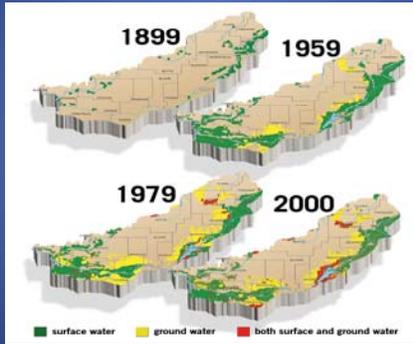
Will changing the law discourage efficiency?



- Our goal is overall system efficiency – Altering the rules will not create a deterrent for water transfers if the result will be an overall increase in system efficiency.
- It will cause a potential user to take pause and determine whether his increase in efficiency/transfer will lead to overall system efficiency before attempting to move forward

## 2. Eastern Snake Plain Aquifer (ESPA)

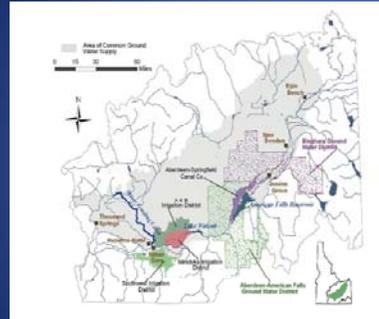
Water Use and Incidental Recharge



<http://www.idaho.edu/~johnson/fhwrr/sr3/home.html> Gary Johnson

## Alternatives to Encourage Efficiency

Comprehensive Aquifer Management Plan



- Increase aquifer levels
  - Managed aquifer recharge
  - Weather modification
- Decrease Aquifer Stress
  - Incentives to change cropping patterns
  - Ground to surface water conversions
  - Water right buyouts, buy-downs, and subordination agreements.
- Major issues
  - The end of prior appropriation?
  - Funding
  - Effects on agriculture in the region

Idaho Water Resources Board, ESPA Comprehensive Aquifer Management Plan (2009).

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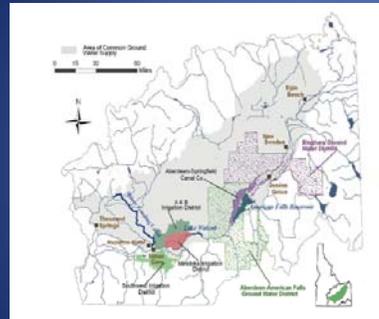


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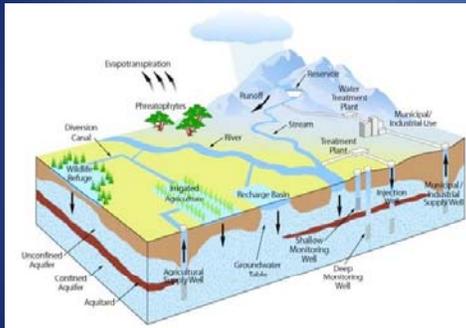


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## Alternatives to Encourage Efficiency

Groundwater Banking



- A user may bank his excess water in exchange for money or credits
- Types of deposits
  - Intentional infiltration
  - Incidental recharge
  - decrease in consumptive use.
- Banking systems range from highly regulated to free market models.
- Allow owner to maintain ownership of his water right.
- Issue - uncertainty in aquifer response to banking

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