

# Mitigation for New Water Rights – The Oregon Way

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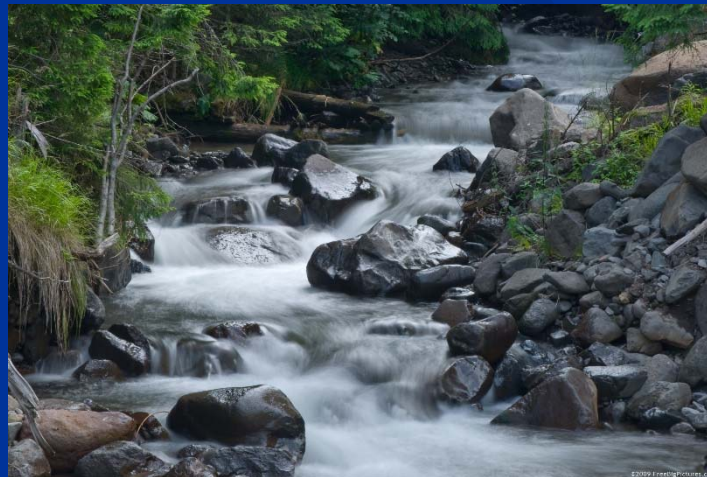
# Introduction

- Background - OWRD
- Ad Hoc Mitigation Examples – OWRD
- Mitigation in the Deschutes Basin - GSI
- Lesson Learned for Statewide Program - GSI
- The future – OWRD



# New Water Rights...

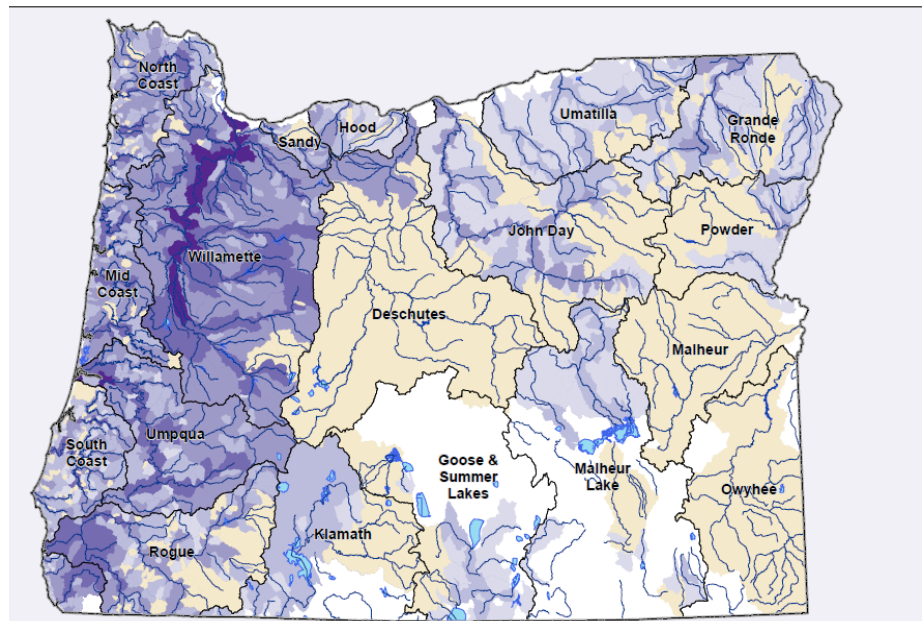
1. Harder to get new water rights.
2. Will only become tougher as time moves forward.
3. Sometimes transfers do not work.
4. Mitigation might be the answer.



# New Water Rights...

## Water availability for live flow allocation in August

## Water availability for storage in January



**August Available Streamflow**  
Calculated at 80% Exceedance

OWRD Hydrographs (cfs), 10/2015, Projection: Oregon Lambert NAD 83  
This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.

Surface Water Bodies  
Lakes  
Streams  
Administrative Boundaries  
OWRD Basins

Available Streamflow (CFS)  
No Data  
No Water Available  
0.1 - 10  
10.1 - 100

100.1 - 1000  
1000.1 - 10000  
>10000



**January Available Streamflow**  
Calculated at 50% Exceedance

OWRD Hydrographs (cfs), 10/2015, Projection: Oregon Lambert NAD 83  
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# New Water Rights...

## Legend

### First vs Last High Water Level (Nov-Apr)

- ≥100 ft decline
- 50 - 100 ft decline
- 10 - 50 ft decline
- <10 ft rise or decline
- 10 - 50 ft rise
- 50 - 100 ft rise
- >100 ft rise

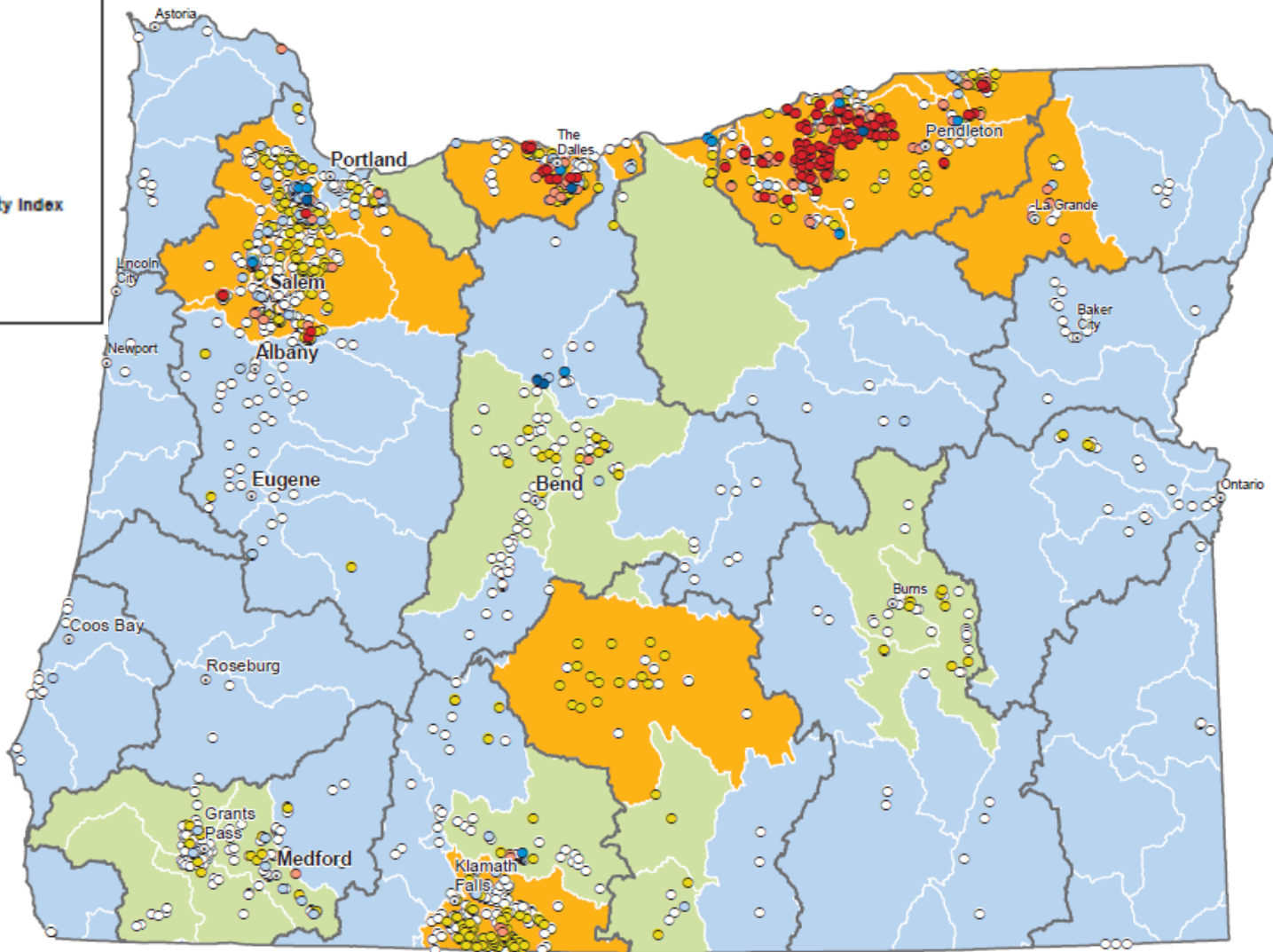
### OWRD Administrative Basins



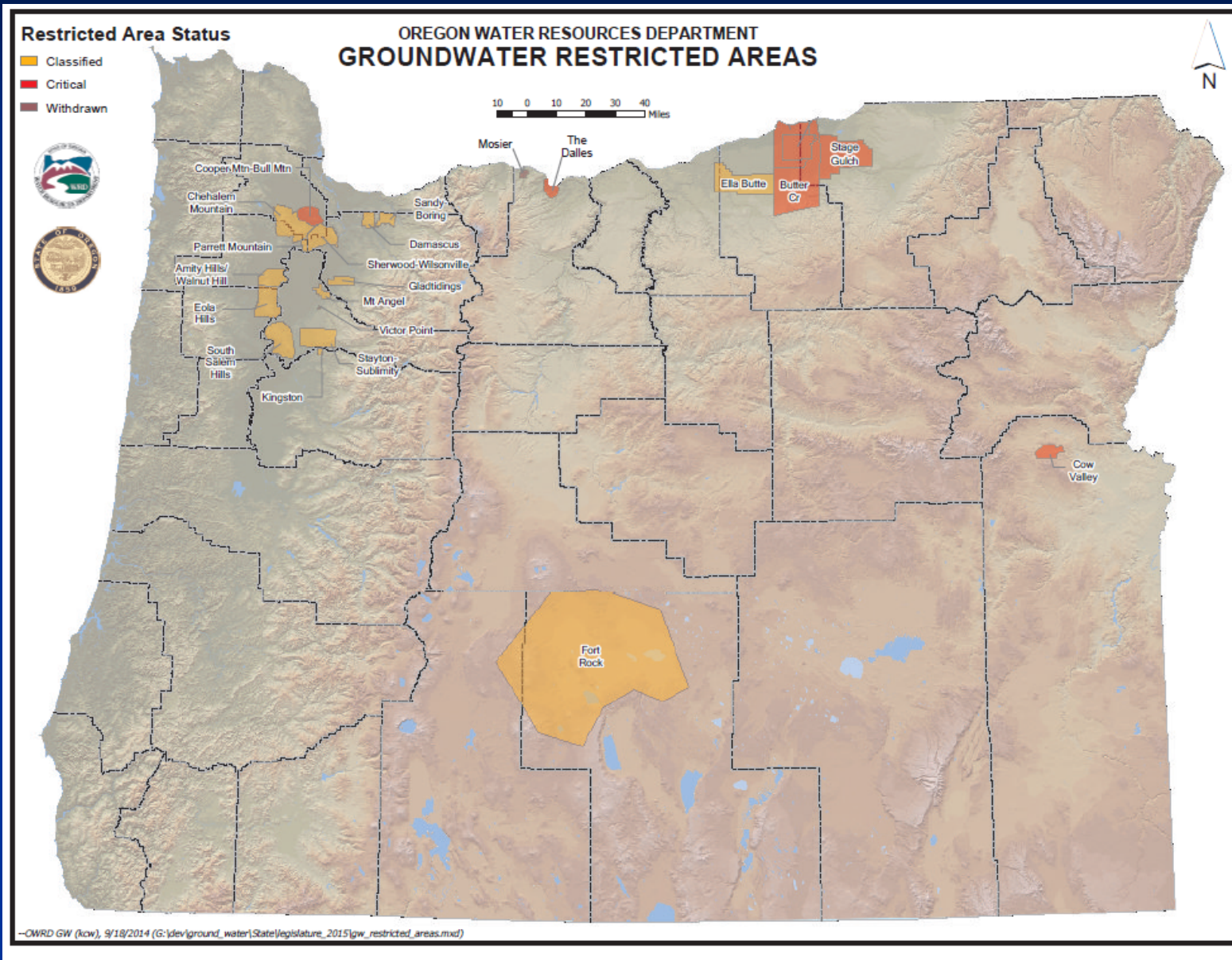
### Groundwater Vulnerability Index

- High (Orange)
- Medium (Light Green)
- Low (Light Blue)

## Groundwater-Level Changes in Oregon (Variable periods of record, 1907 wells)



# New Water Rights...

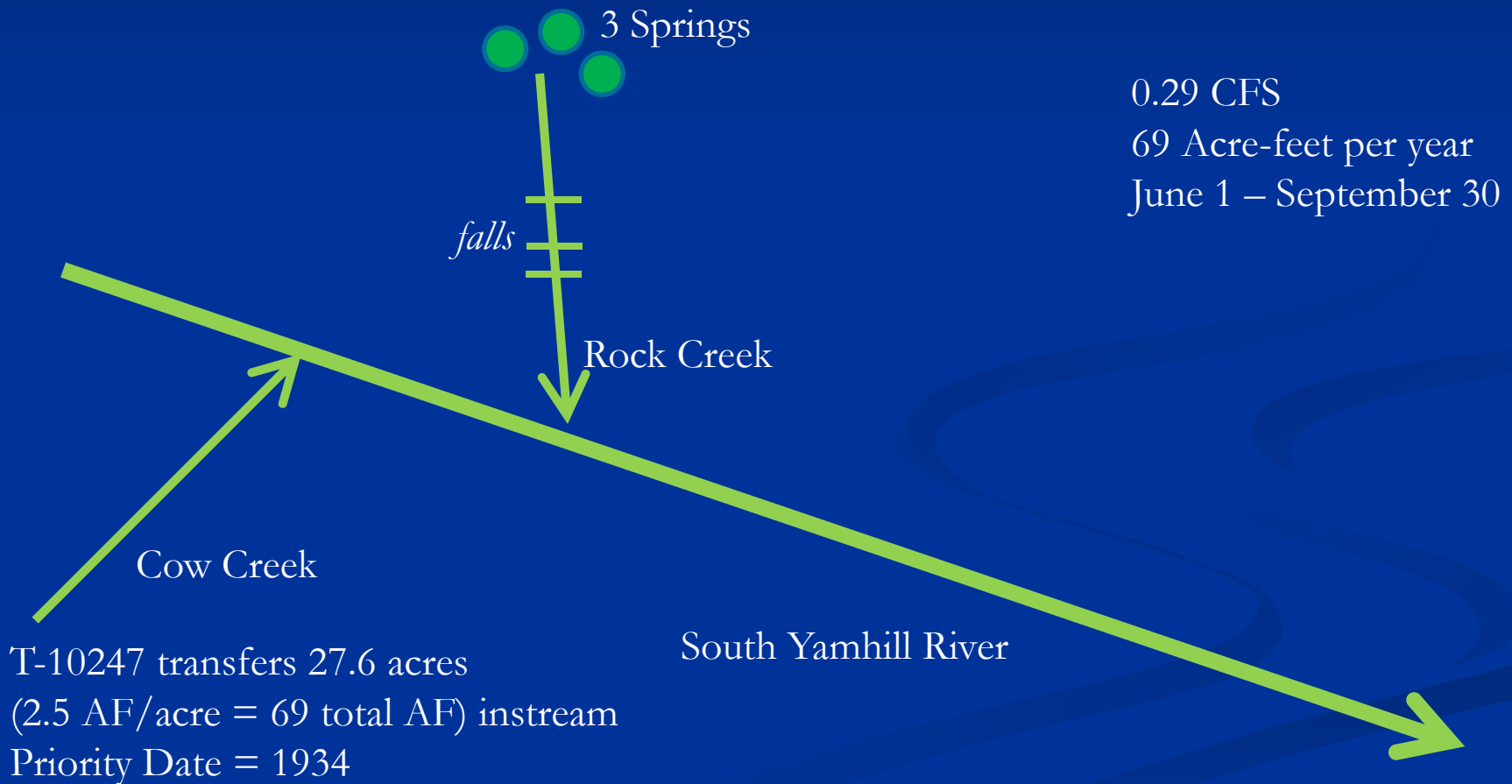


# Why is Mitigation Needed?

1. Surface Water Availability Problems:
  - a. Lack of surface water availability. Full year or partial year. (WA = flows – WR – ISWR/SWW)
  - b. Groundwater with connection to surface water with no WA. Full year or partial year.
  - c. Groundwater with connection to surface water with “triggered” scenic waterway.
2. Groundwater declines.
3. Surface water needed to support listed fish.

# New Water Rights...

GRCWA: Application File S-87207, Permit S-54818





# Mitigation in the Deschutes Basin

- Oregon's only "formal" mitigation program
- Deschutes Basin is unique but informative
- A controversial start:
  - 2002 administrative rules adopted
  - 2005 rules overturned by Court of Appeals
  - 2005 HB 3494 affirms rules
- Approx. 100 permits issued so far
- Program is working but many lessons learned

# Mitigation in the Deschutes Basin

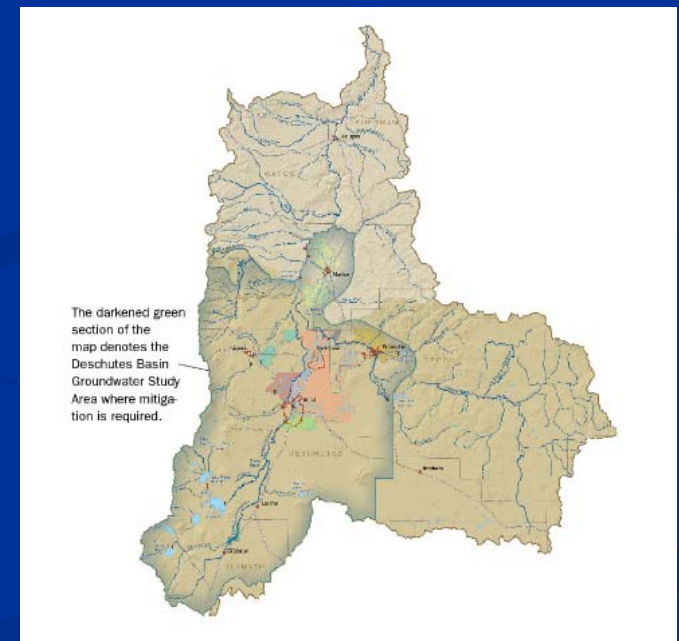
## How did we get here?

- Surface water spoken for
- Surface water protections/limitations:
  - scenic waterways
  - court decisions (*Diack v. City of Portland*)
  - instream water rights
- Reliance on abundant groundwater
- Hydraulic connection - SB 1033 (1995) 1% or 1 cfs

# Mitigation in the Deschutes Basin

## How did we get here?

- USGS – Groundwater and surface water are connected
- OWRD – Measurably reduced standard is triggered
- New permits require mitigation
- Rule framework:
  - annual volume
  - projects or credits
  - water protected instream
  - zones of impact
  - 200 cfs cap



# Mitigation in the Deschutes Basin Lessons Learned – The Good Stuff

- Clear direction on the path forward
- Flexibility – project vs. credits
- Offset as a means of mitigation
- 5 years to provide mitigation
- Incremental mitigation
- A bank for temporary credits (good for some)
- Mitigation is restoration

# Mitigation is Restoration

## Middle Deschutes River – Below Bend

45 cfs vs. 160 cfs

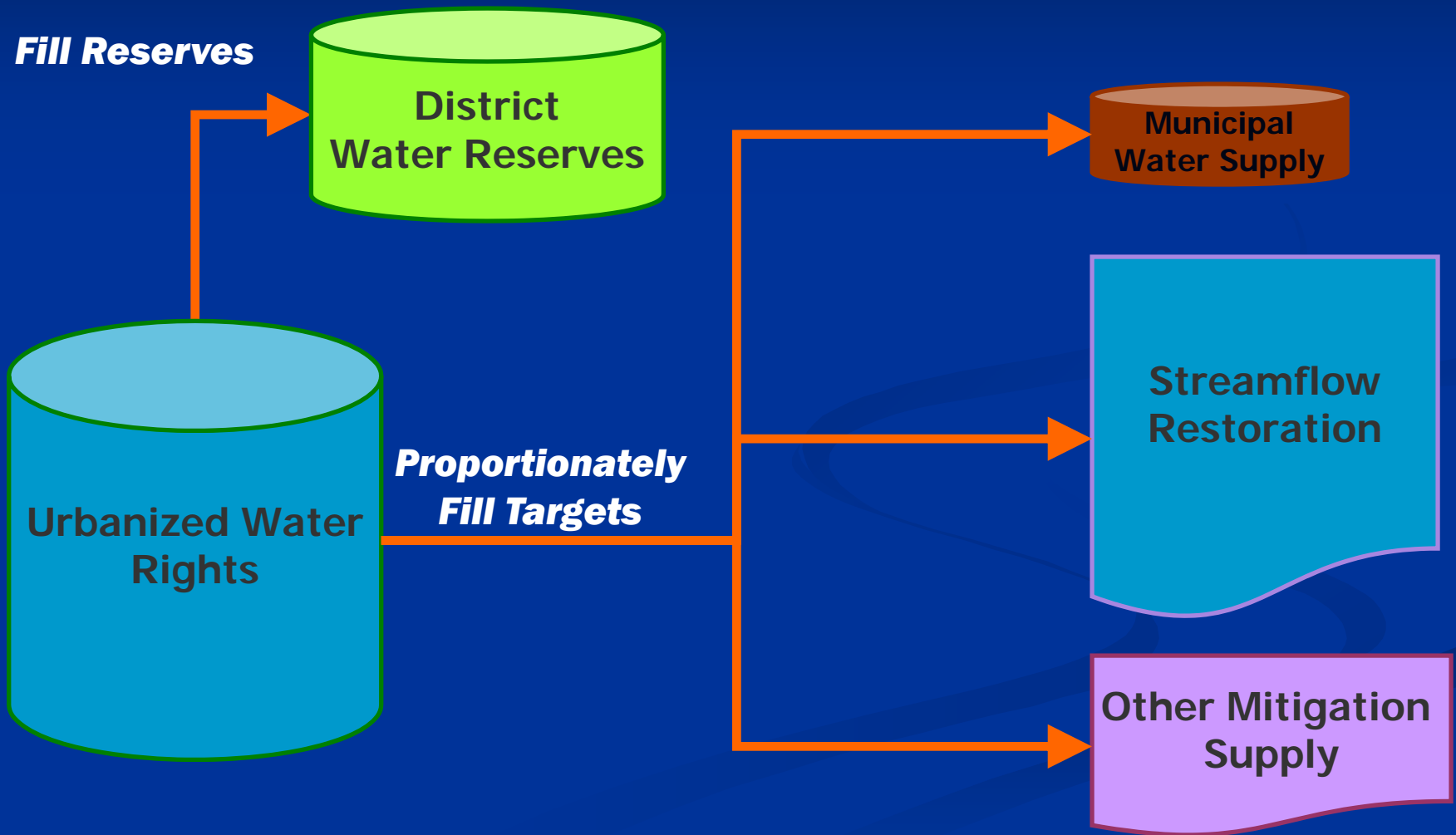


# Mitigation in the Deschutes Basin

## Lessons Learned – Not So Good Stuff

- At the time of implementation the perfect storm for success was brewing:
  - economy was booming
  - urbanizing agricultural lands = mitigation credits
  - Deschutes Water Alliance “allocation structure”
  - Grassroots effort to provide institutional capacity
  - DWA members had day jobs too!
  - the honeymoon is over
  - new players, policies, approaches

# DWA Water Bank



# Mitigation in the Deschutes Basin

## Lessons Learned – Not So Good Stuff

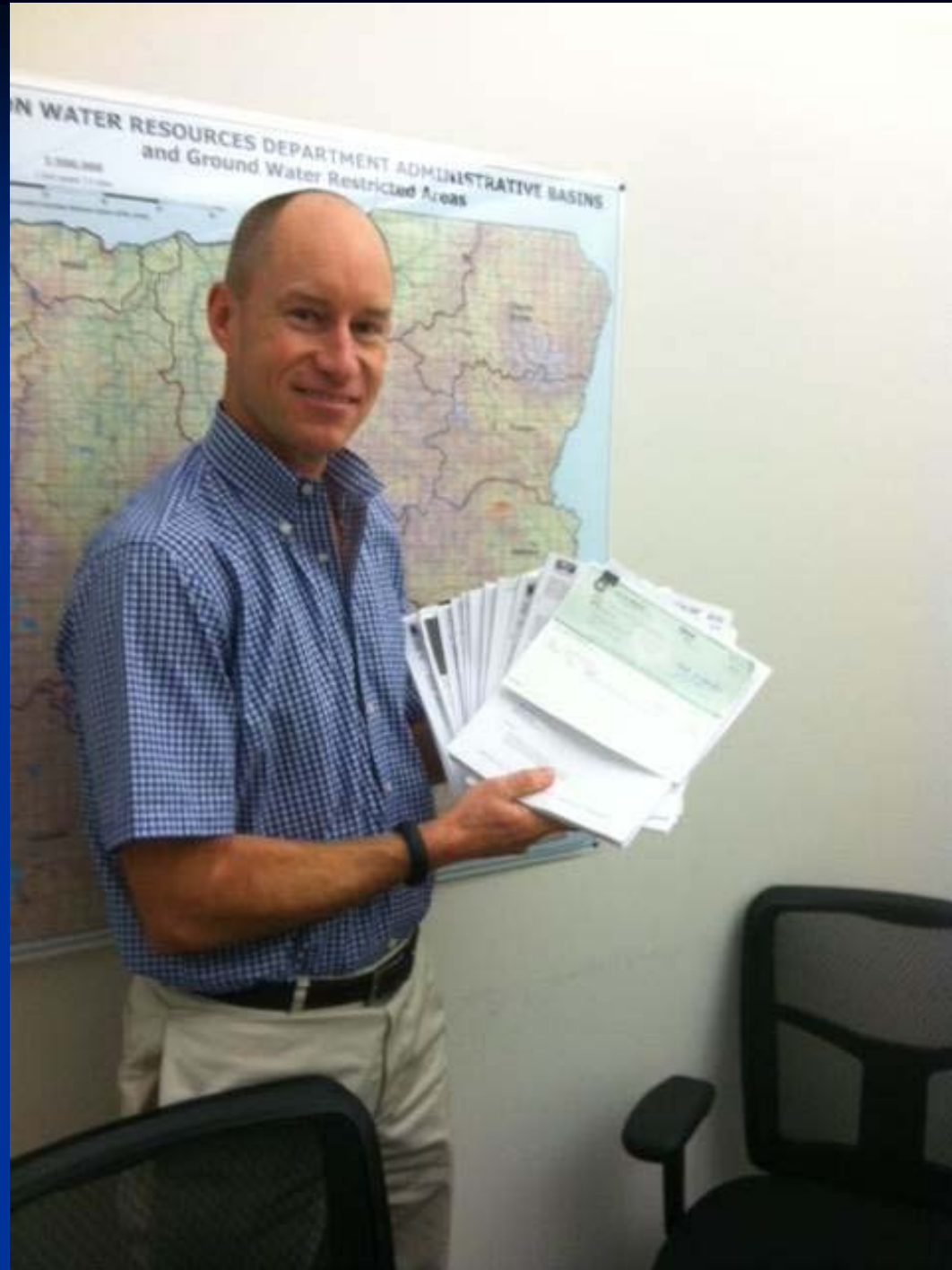
- Lack of permanent mitigation “structure” and well-developed marketplace leads to:
  - uncertain supply and price
  - speculation and hoarding
  - difficult planning and financing
  - supply insecurity
  - geographic inequities



# Mitigation in the Deschutes Basin

## Lessons Learned – Not So Good Stuff

- **Burdensome administrative process**
  - one-off water rights transfers required
  - processing time of 5 to 6 years not uncommon
  - complex, inefficient and costly for all
  - not practical for planning and financing
- **Temporary mitigation credits**
  - permanent credits needed for large investments
  - approx. 50% of mitigation supply from leases
  - OWRD should not be complacent



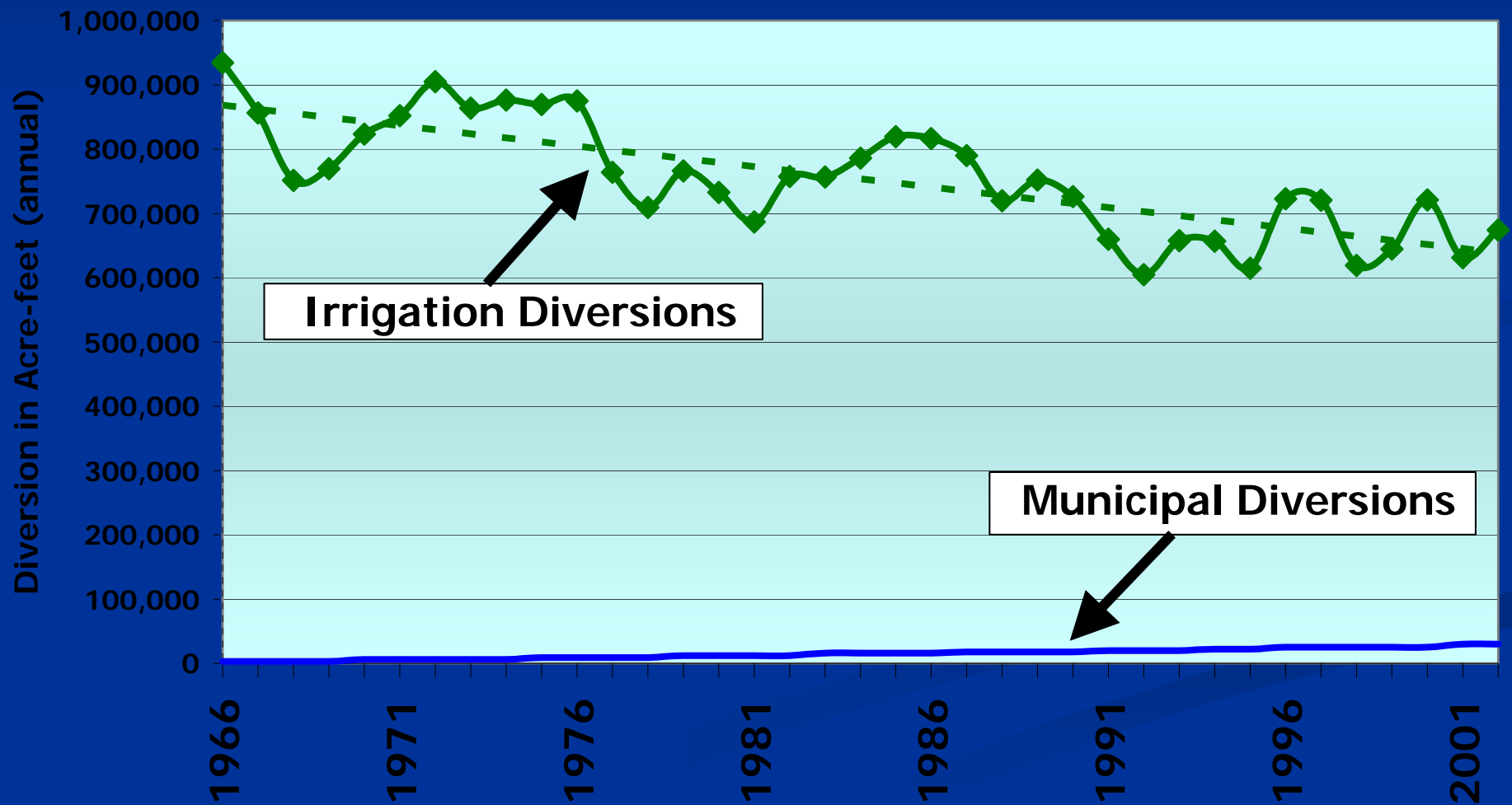
# Mitigation in the Deschutes Basin

## Lessons Learned - Changes needed

- State supported/staffed structure for permanent mitigation credits is needed:
  - clearinghouse for permanent credits
  - match groundwater applicants with credits
  - reduce speculation
  - efficient, predictable and cost-effective mitigation
  - leveraging of multiple projects
  - good public policy

# Deschutes Basin Irrigation and Municipal Diversions

Annual totals in Acre Feet 1966-2002



# Mitigation in the Deschutes Basin

## Lessons Learned for Statewide Application

- Cherry pick the good stuff
- State funding, staffing, institutional capacity
- Predictable, efficient and cost-effective

# What is next state-wide?

1. Statewide rules would provide certainty:
  - a. Quantity
  - b. Location
  - c. Timing
  - d. Process
  - e. Banking
  - f. Exceptions
2. Area specific needs could be address through further rulemaking.
3. A statutory change might be needed to allow banks in other areas or a “state bank”.

# What's next?

1. Oregon will need a critical mass of entities who need and want progress in this area for a discussion on rulemaking to be successful.
2. Stay tuned.

Questions?

