



**Deschutes Ground Water
Mitigation Program**

**2013 Annual Review
11th Annual Review**

Dwight French

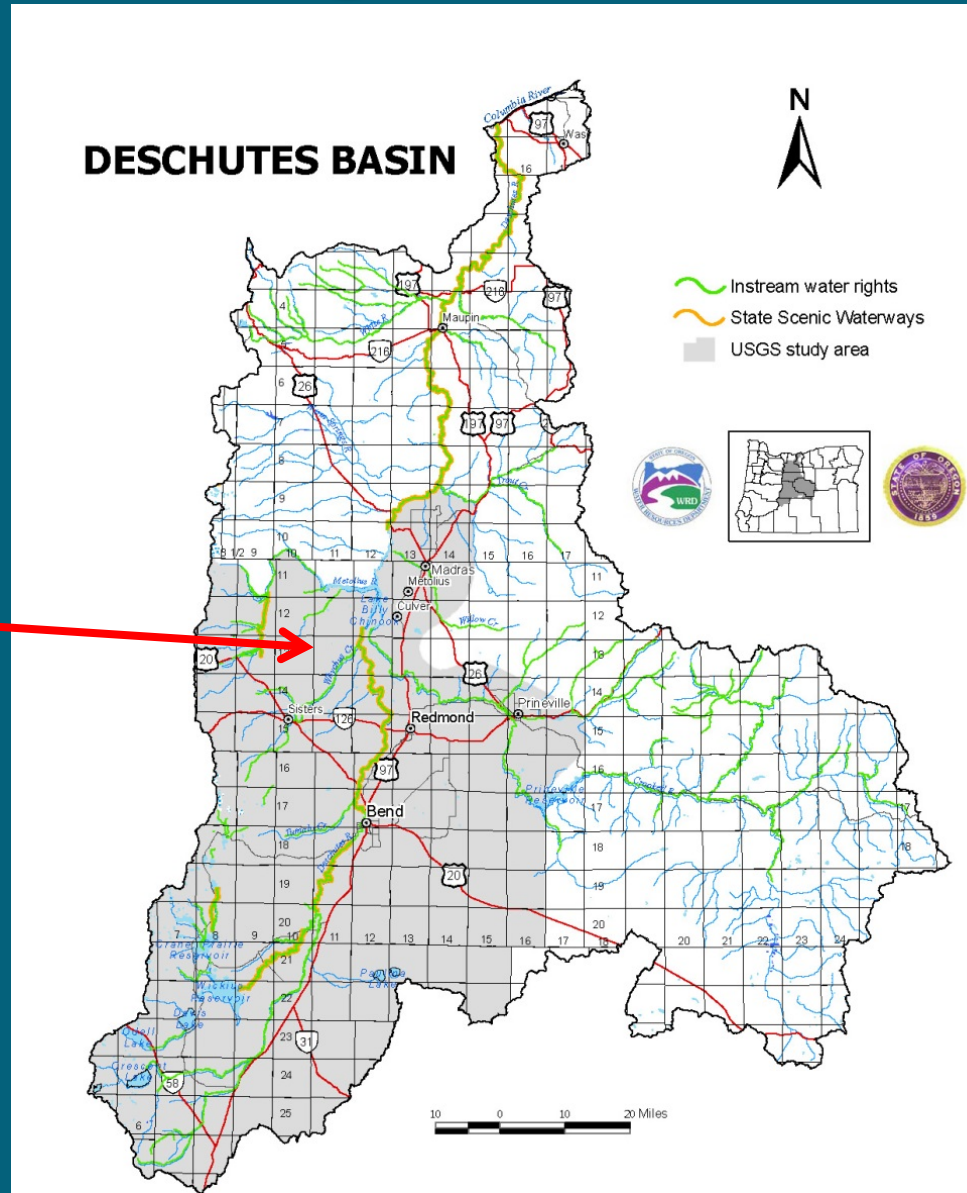
Elements of Mitigation Program

1. New ground water permits require mitigation
2. Identifies tools for providing mitigation
3. Establishes a system of mitigation credits
4. 200 Cubic Feet per Second (CFS) allocation cap
5. Provides for establishment of mitigation banks
6. Requires annual evaluations



History and Background

1. SWW & ISWR Protections
2. No SW Available
3. Deschutes Basin GW Study
4. Mitigation Program Developed



Annual Evaluation

1. Cooperation with other state agencies
2. Implementation of the rules
3. Ground water appropriations
4. Streamflow monitoring and evaluation
5. Mitigation Bank Review



Establishing New GW Uses

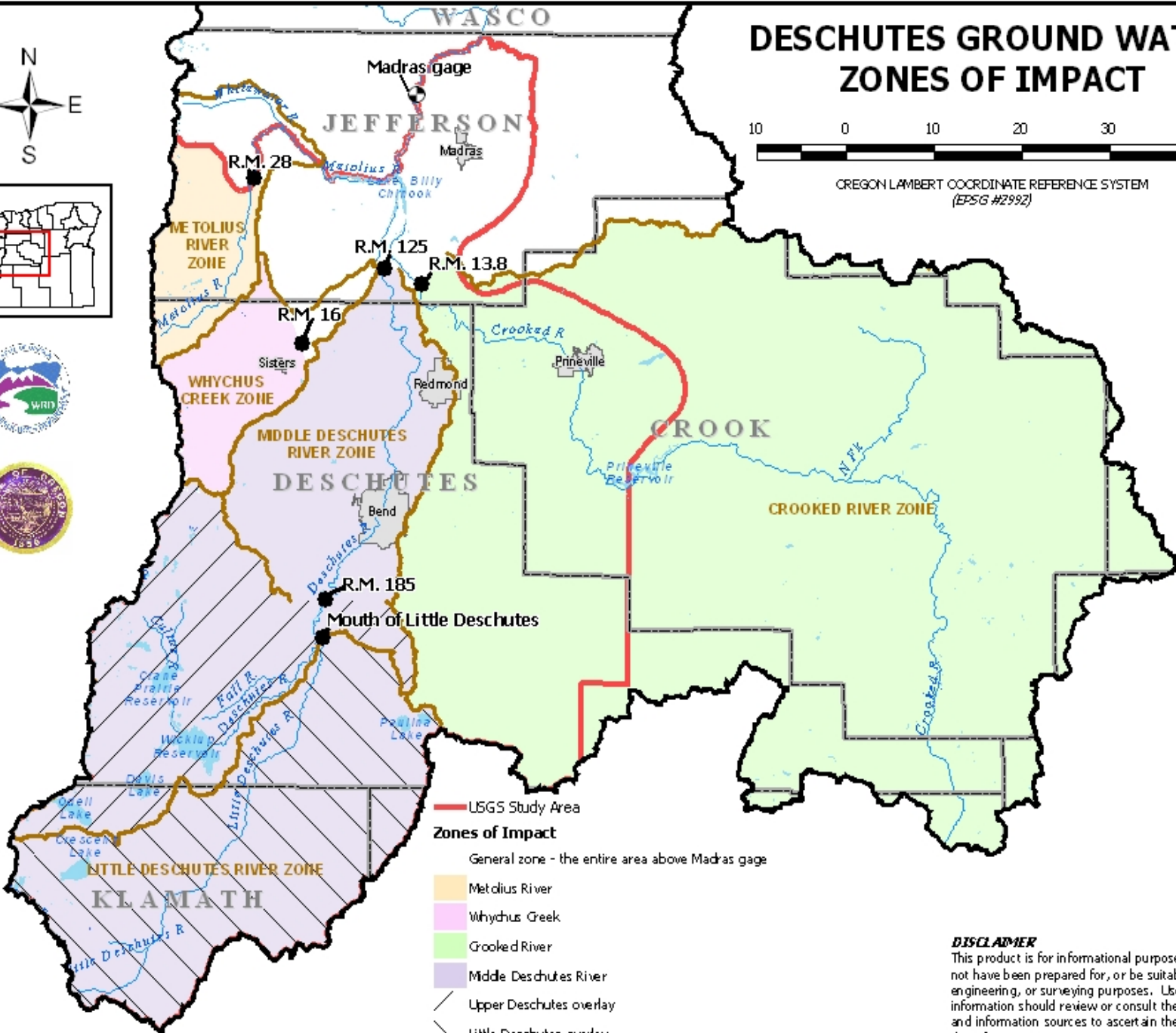
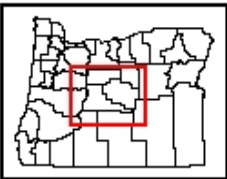
1. Application filed
2. Initial Review = Amount of mitigation and location (zone) required
3. Applicant agrees or withdraws
4. Proposed Final Order
5. Final Order (cap debited)
6. Mitigation secured
7. Permit



DESCHUTES GROUND WATER ZONES OF IMPACT



OREGON LAMBERT COORDINATE REFERENCE SYSTEM
(EPSG #2992)



- USGS Study Area
- Zones of Impact**
- General zone - the entire area above Madras gage
- Metolius River
- Whychus Creek
- Crooked River
- Middle Deschutes River
- Upper Deschutes overlay
- Little Deschutes overlay

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Program Highlights

- **101 Active permits and certificates**
- **135 CFS allocated under cap**
- **Majority of mitigation is permanent**
- **More mitigation available than used in each zone of impact**
- **Streamflows have improved**



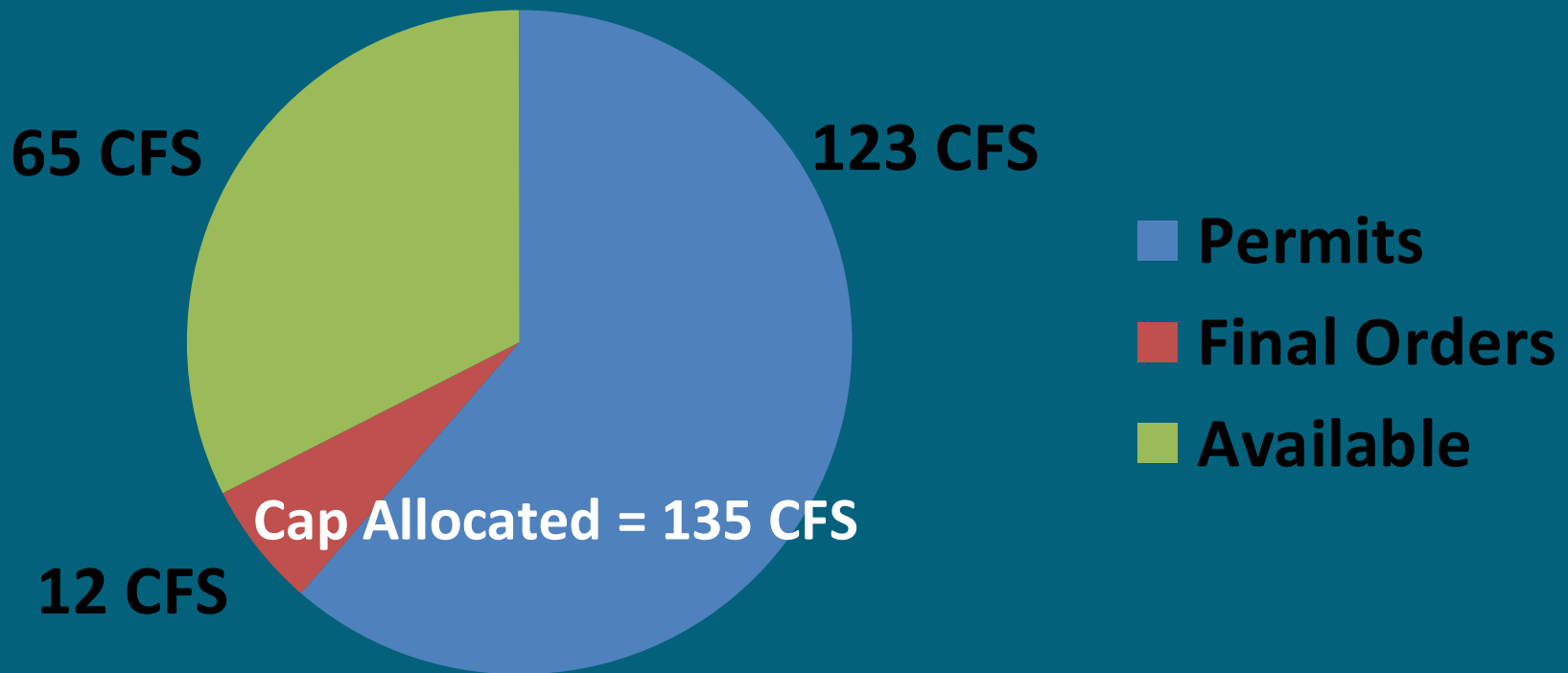
Mitigation Program Numbers

Groundwater Use

- 101 active groundwater permits and certificates
 - 13 with incremental development plans
- 14 at FO stage
- 135 CFS removed from Allocation Cap



Status of 200 CFS Cap



- Unofficial Cap Number: 24 CFS remaining
- Includes Pending Apps without FO (41 CFS)
- As of 12/31/2013

Reassignment of CFS to Cap and of Mitigation Credits

- Division 522 adopted June 4, 2010
- Allowed CFS to be added back upon permit cancellation
- Allowed mitigation credits to be reassigned upon permit cancellation
- Limited Cancellation to ORS 537.410
 - Did not include other cancellation statutes, including voluntary cancellation
- Rulemaking process underway

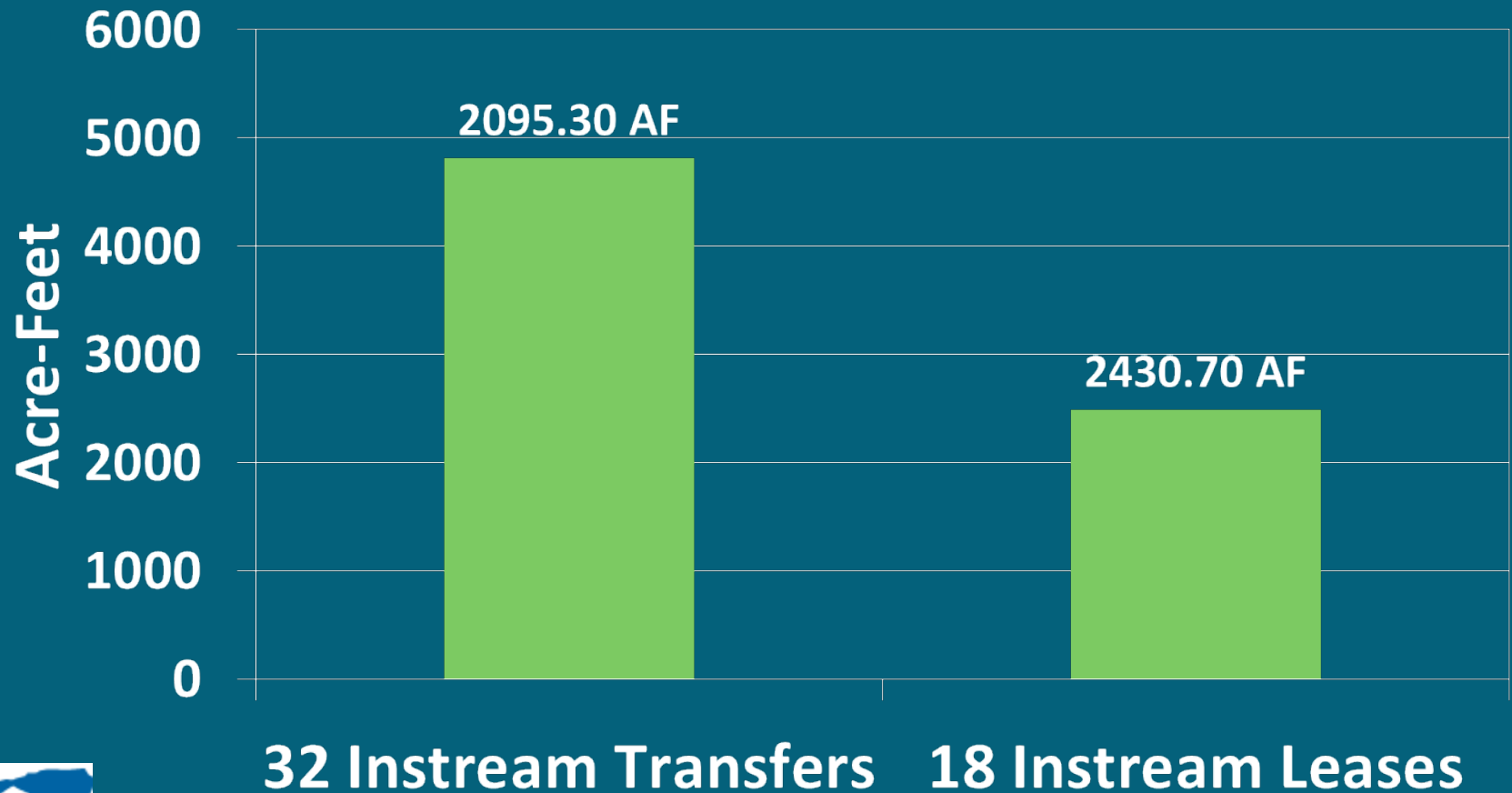


Mitigation Project Types

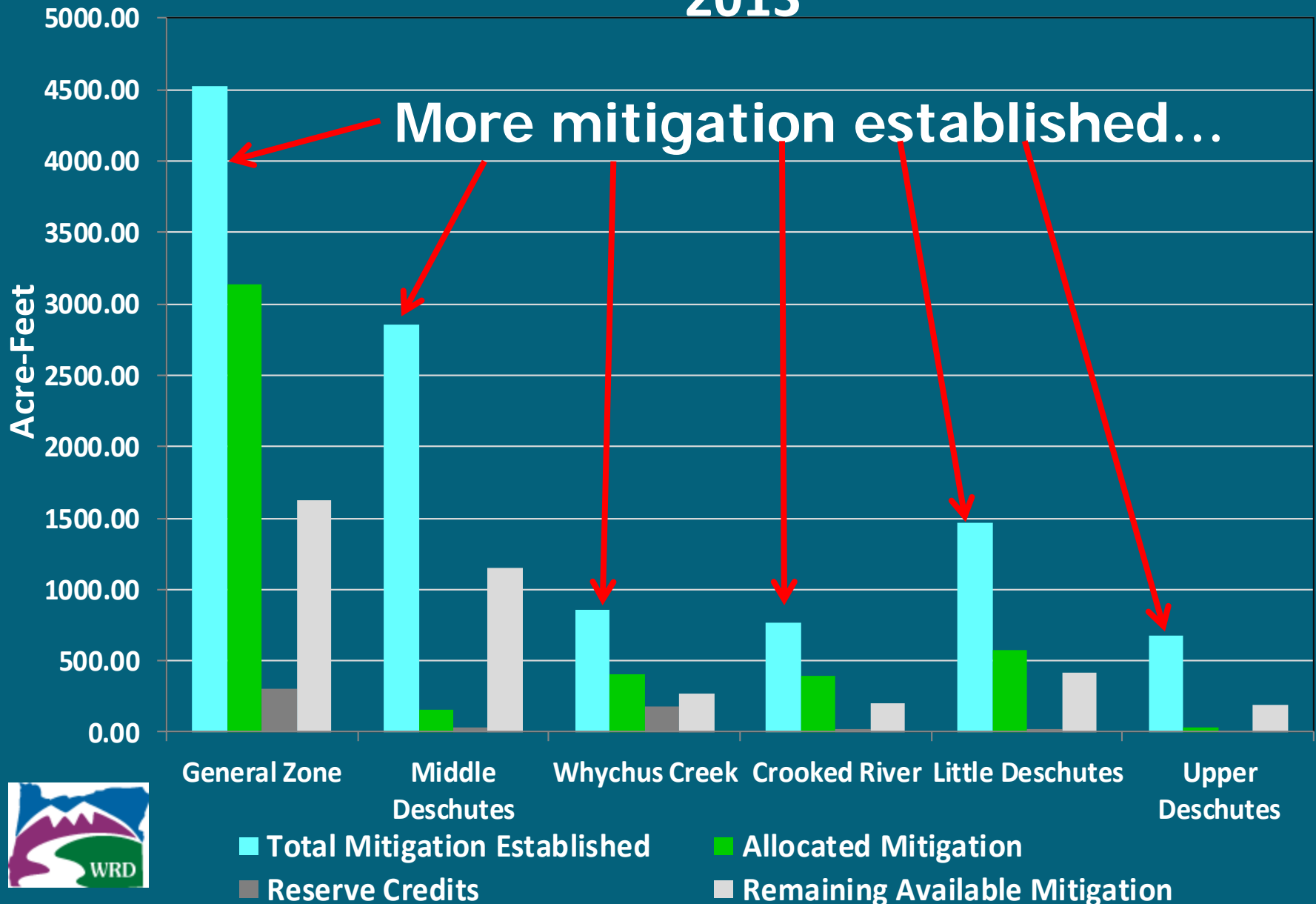
- Instream Lease
- Permanent Instream Transfer
- Time-Limited Instream Transfer
- Allocation of Conserved Water
- Aquifer Recharge
- Release of Stored Water



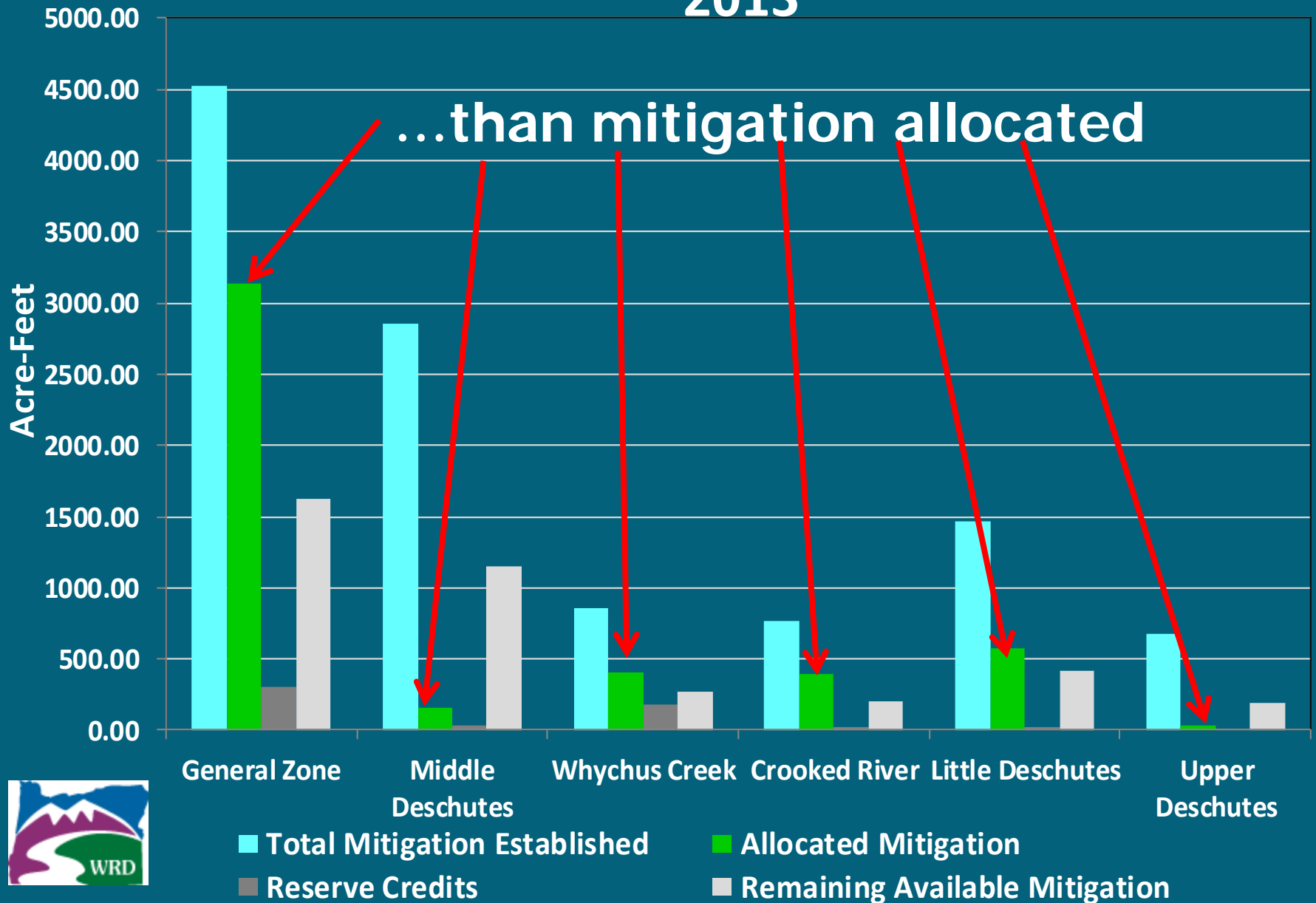
Mitigation Project Distribution



Mitigation Activity in the Deschutes Basin for 2013



Mitigation Activity in the Deschutes Basin for 2013



Instream Requirements

- **Assessing the Impact of Mitigation on Streamflow in the Deschutes Basin**
- **Results at sites based on Deschutes Mitigation Model**

Baseline = 1966 to 1995



Instream Results

- All changes are small
- Positive changes are larger than negative changes
- **Overall positive impact on flows**
 - Especially in summer months
- Instream requirements met as often or more frequently



Report Summary

- **Evaluation demonstrates program working:**
 - **101 active permits and certificates**
 - **Sufficient mitigation available**
 - **Model indicates instream requirements met more frequently as compared to baseline**



Thank You.

Questions?

