

# WASHINGTON STATE DEPARTMENT OF Natural Resources

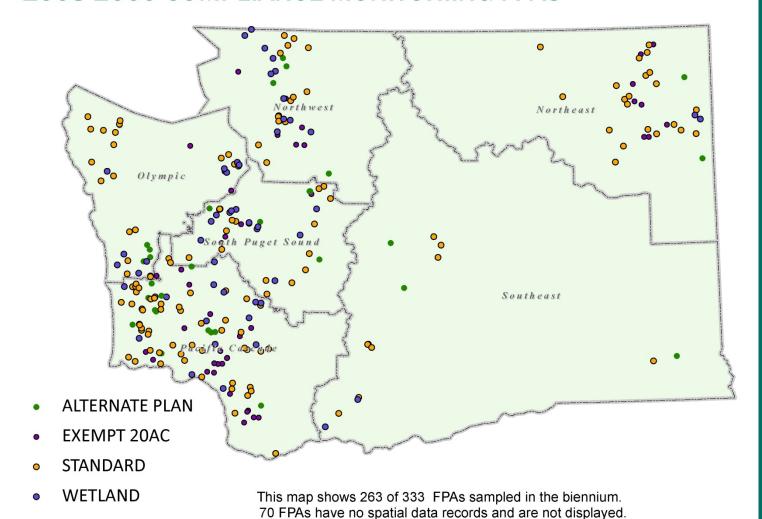
Peter Goldmark - Commissioner of Public Lands

# 2008-2009 Compliance Monitoring Results

With Analysis of Alternate Plan and 20 Acre Exempt Emphasis Samples Observed in 2007 and 2008



#### 2008-2009 COMPLIANCE MONITORIING FPAS





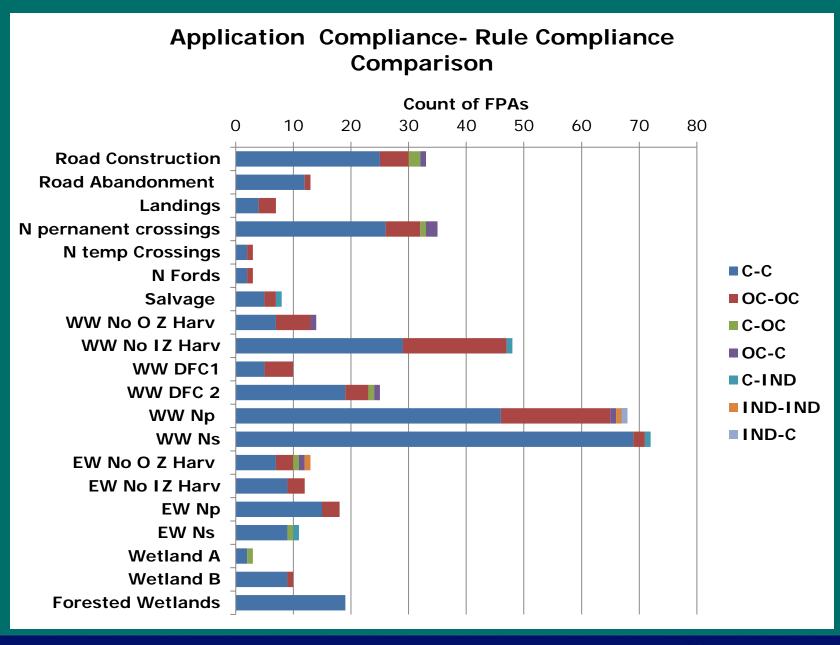
### FPA /Activity Relationship

- FPAs are the highest level population in the design and are randomly selected to form the sample population
- Activities are sub-populations clustered within each FPA comprised of the features and actions subject to forest practices rules
- The Compliance Monitoring Program sampled only activities which associated with riparian features or road activities
- Only one activity of each activity type is sampled from each FPA



# Rule and FPA compliance —they can be different

- The program records activity compliance with rule along with compliance with the approved FPA document
- Some activity types will have different totals between rule and FPA compliance because some observations were classed nonconsensus or indeterminate





# Results of 2008-2009 are similar to 2006-2007

- No significant statistical difference between biennia. The rolled up means varied by one percentage point
- The sample observed applications approved from July 2006 to August 2008
- The 2006-07 report was not published until after this period

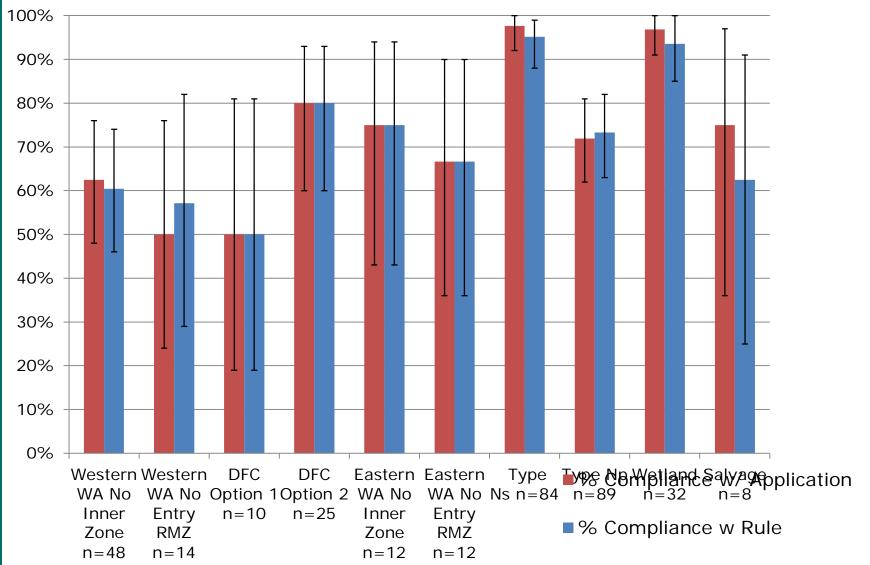


## Summary Table of FPA Compliance

	Statewide All Activities 2008/2009 Biennium						
	Status of						
	Compliance	Riparian	Road	Totals			
	Compliant	51	15	66			
	Out of Compliance	16	4	20			
	Percent Compliant	76%	79%	77%			
Small Forest Land-	95% CI	(66, 86)	(53, 100)	(67, 86)			
owners	Activity Totals	67	19	86			
	Compliant	211	59	270			
	Out of Compliance	56	16	72			
	Percent Compliant	79%	79%	79%			
Industrial Land-	95% CI	(74, 84)	(68, 89)	(74, 84)			
owners	Activity Totals	267	75	342			
	Compliant	262	74	336			
	Out of Compliance	72	20	92			
	Percent Compliant	78%	79%	79%			
All Land-owner	95% CI	(74, 83)	(69, 89)	(74, 83)			
Types	Grand Totals	334	94	428			

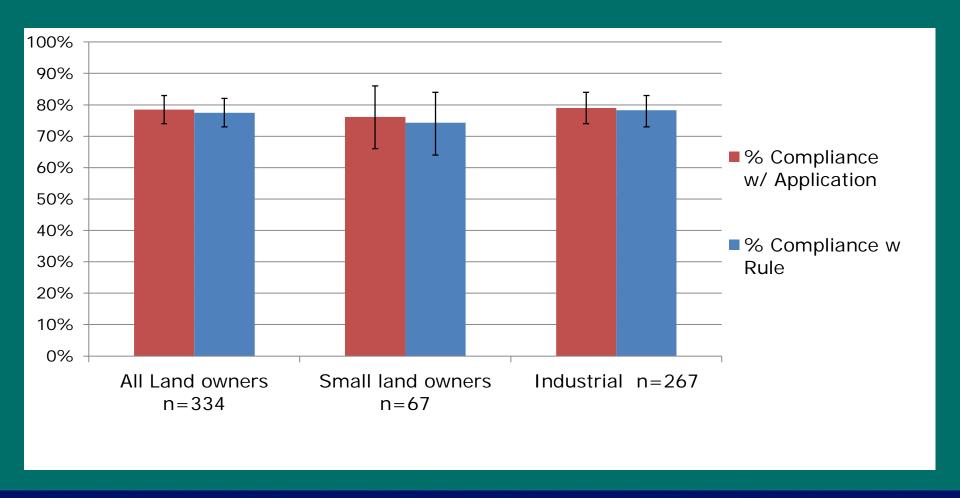


## Riparian Activities Comparison

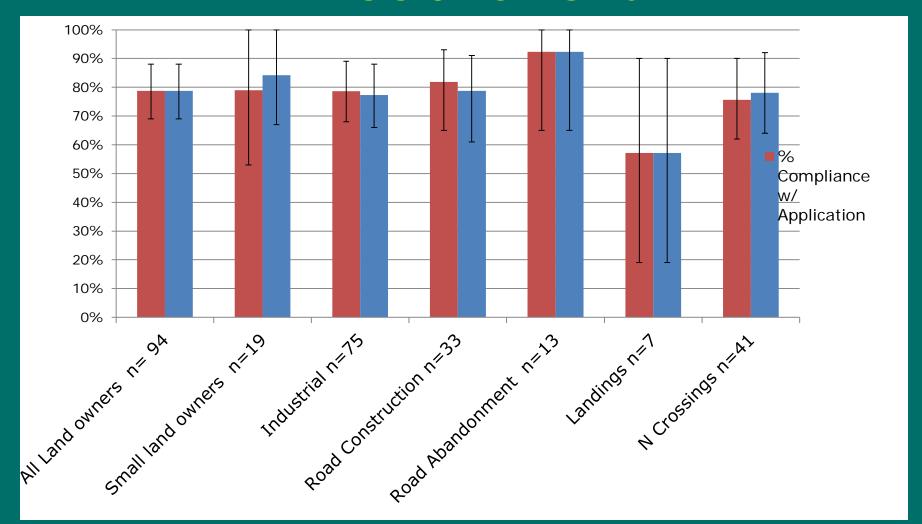




# Riparian Activities by Landowner Group



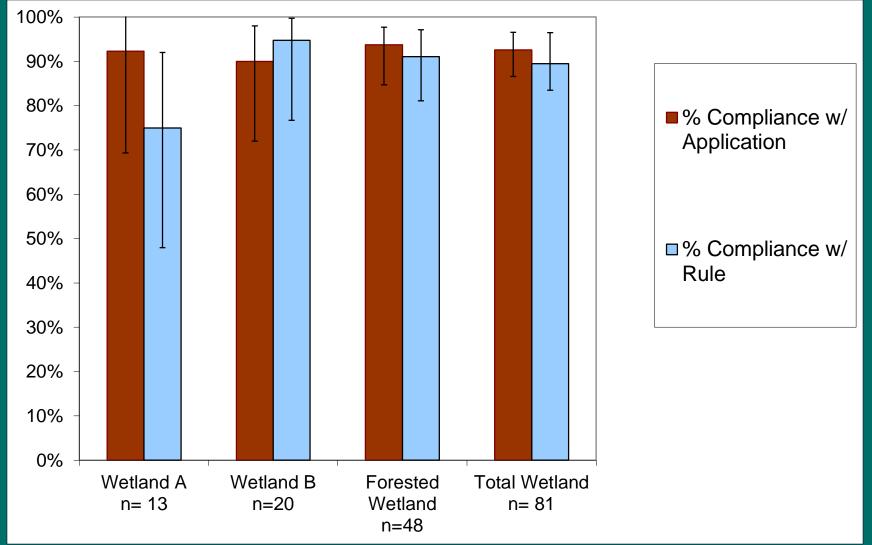
## Road Chart



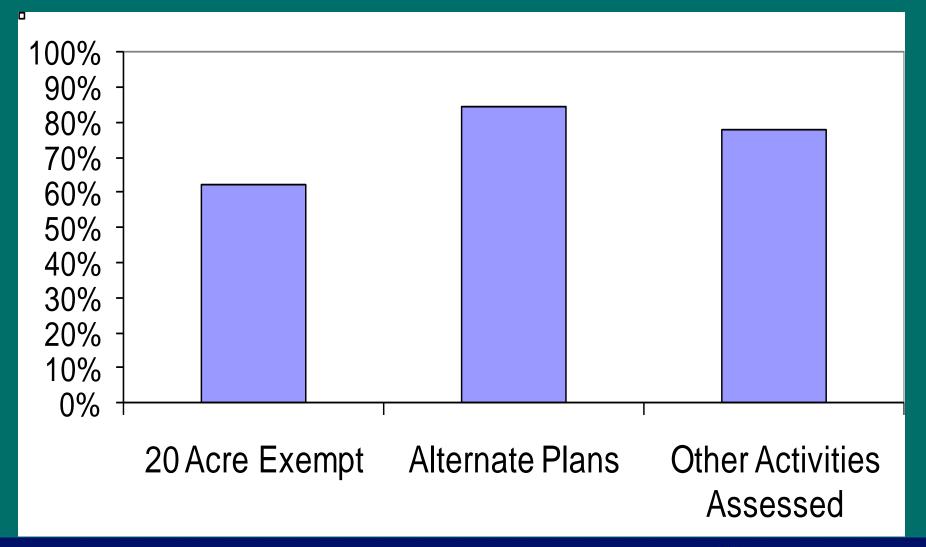
# Wetland, 20 Acre Exempt and Alternate Plans

Emphasis Activity	Population size (FPA'S)	Sample size (FPA'S)
Wetland	197	69
20 Acre Exempt	79	45
Alternate Plans	59	32

## Wetlands Emphasis Chart



## 20 Acre Exempt, Alternate Plans



## Supplemental Water Information Form

#### Ns features reviewed in Supplemental Water Information Forms (SWIF)

Total Ns in sample	Total Ns SWIF Reviewed	No Change	Ns to none	No Consensus	Ns Indeterminate	Ns to Np	Ns to F	Ns to B wetland
84	26	6	12	2	2	1	1	2

#### Np features reviewed in Supplemental Water Information Forms

Total Np in sample	Total Np SWIF Reviewed	No change	Np to None	Np to Ns	No Consensus	Np to Indeterminate	Np to F
89	30	5	1	1	1	1	21

#### F or S features reviewed in Supplemental Water Information Forms

Total F or S in sample	Total F or S SWIF Reviewed	F to Ns	F to Np	No Change
121	23	2	3	18



### Supplemental Water Information Form - continued

#### Unmapped features reviewed in Supplemental Water Information Forms

Total unmapped in sample	Total un mapped SWIF Reviewed	Unidentified to Ns	Unidentified to Np	Unidentified to F
0	12	7	3	2

#### Type F Bank Full Width Differences

Type F reviewed	Total Type F Bank full SWIF Reviewed	Increase in Threshold	CMZ omitted from bank full width	Width increases in small F streams
Undetermined*	11	8	1	2

<sup>\*</sup>Type F is not disaggregated from F or S grouping in the data

#### CMZ Differences

Total CMZs			
reviewed	Unreported CMZ	CMZ not in width	Indeterminate
6	2	3	1

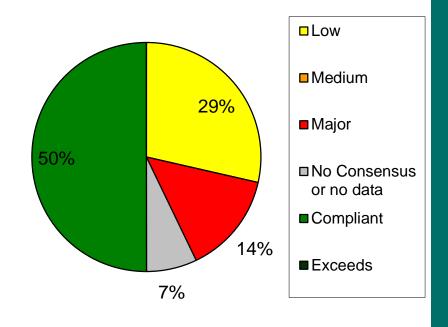
#### Water Type Break Differences

Grand Total	F -N break	F location	Includes pond
6	3	2	1

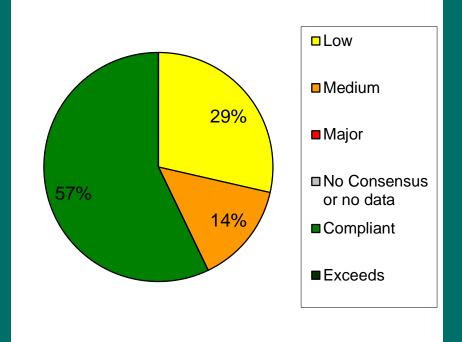


### Western Washington No Harvest RMZ





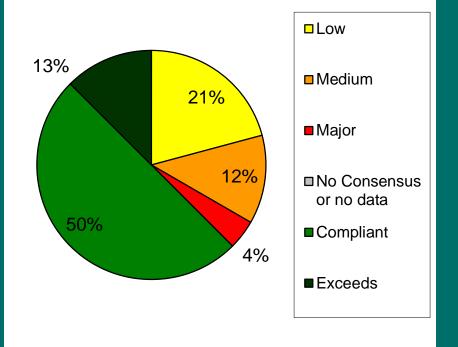
#### No RMZ Harvest Rule Compliance n=14



### Western Washington No Inner Zone Harvest

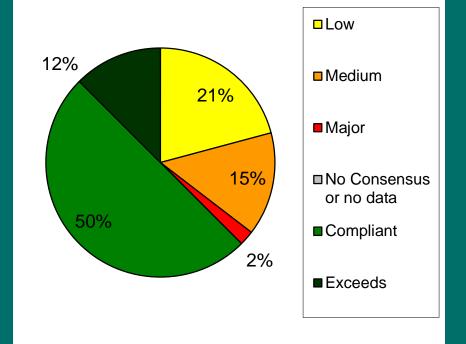
# No inner Zone Harvest FPA Compliance

n=48



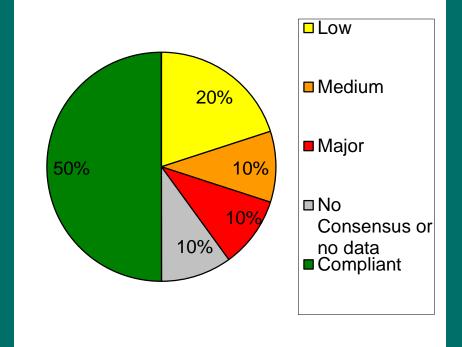
# No inner Zone Harvest Rule Compliance

n=47



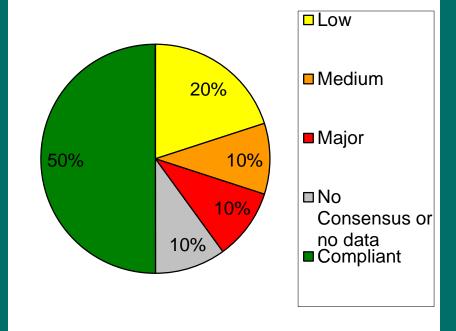
# Desired Future Condition Option 1 (Thin from Below)

# DFC Option 1 Harvest FPA Compliance n=10



# DFC Option 1 Harvest Rule Compliance

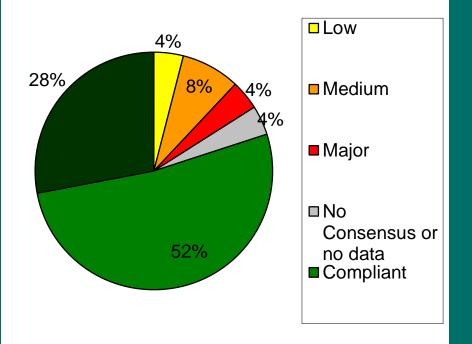
n=10



# Desired Future Condition Option 2 (Leaving trees closest to the water)

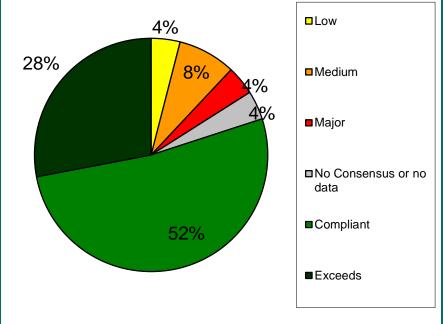
# DFC Option 2 Harvest FPA Compliance

n=25



# DFC Option 2 Harvest Rule Compliance

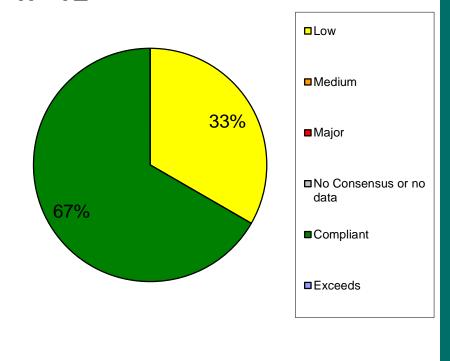
n=25



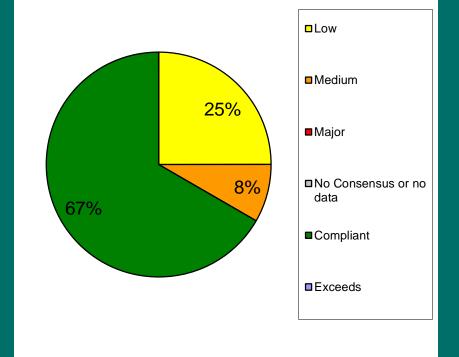
### Eastern Washington No Harvest RMZ

## **Eastern WA No Entry RMZ Harvest Compliance with FPA**

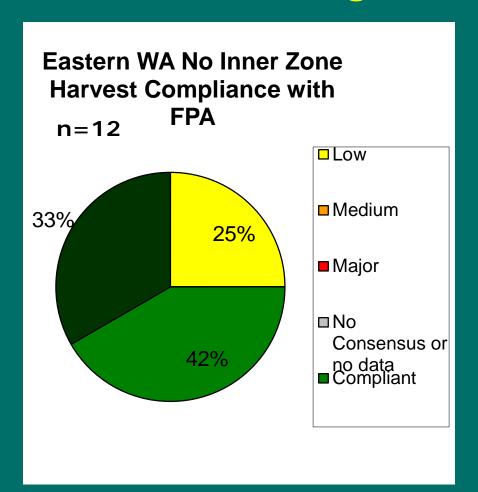
n=12

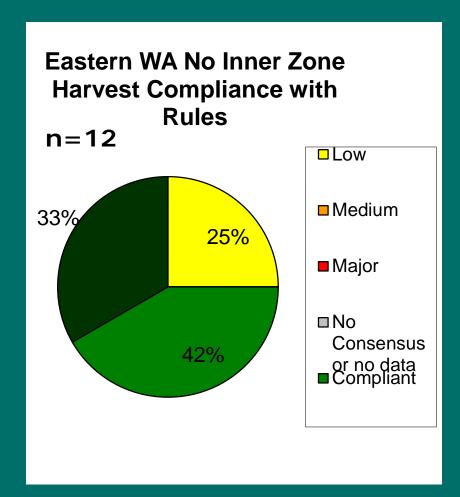


# Eastern WA No Entry RMZ Harvest Compliance with n=12 Rules

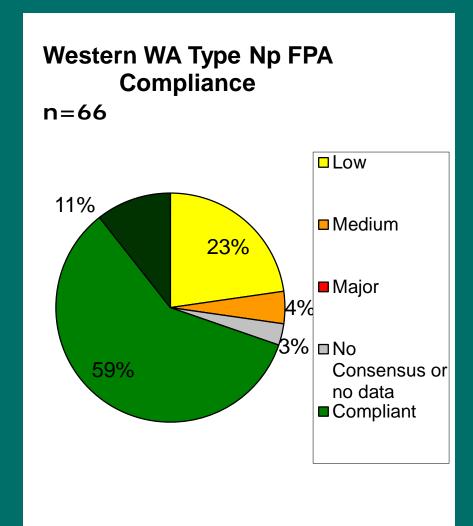


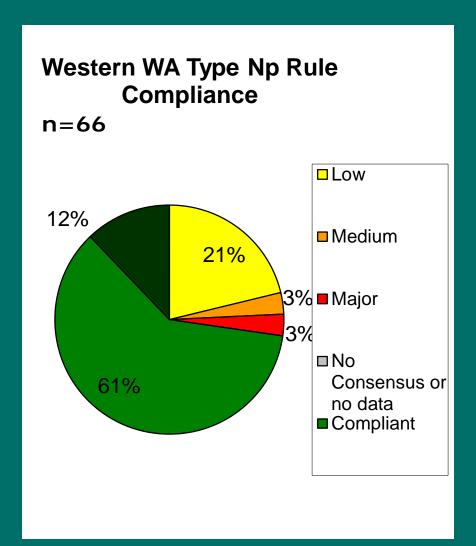
### Eastern Washington No Inner Zone Harvest



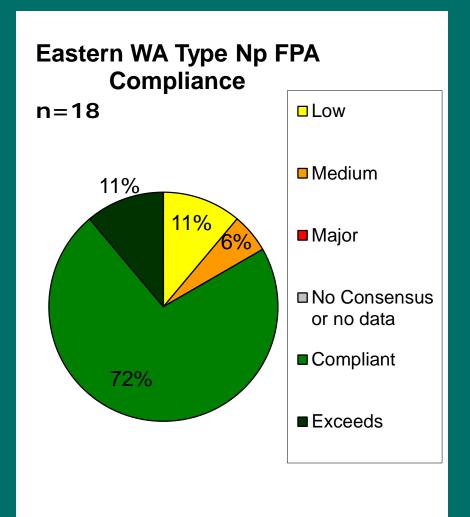


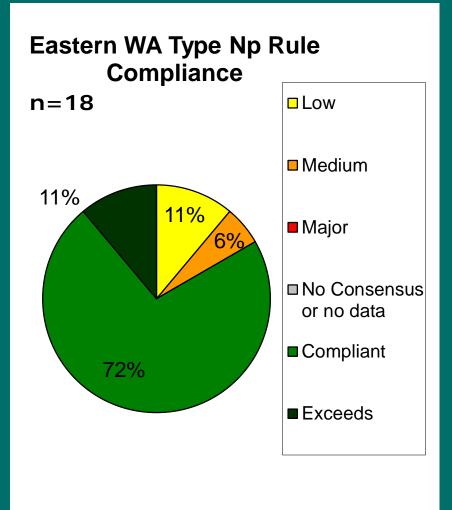
### Western WA Type Np Compliance





### Eastern WA Type Np Compliance





## Concluding Remarks

- There is no statistically significant change in Standard sample compliance rates compared to the previous biennium. 79% vs 80% previously
- Review of stream classification attributes indicates problems with water data as reported on the FPA
- Comparison of Rule and FPA compliance indicates they are largely consistent
- Much of the non compliance in riparian activities can be addressed with attention to area measurements affecting leave tree stocking

# Compliance Monitoring Considerations for the Future

- Address water typing by performing reviews of recently approved but not completed applications
- Design samples to focus on providing timely feedback on whether actions taken to address non-compliance are working

### Acknowledgements

I want to acknowledge the contribution of the DNR, WDFW and Ecology staff who work in the compliance monitoring program for their contributions in data review and report critique. I also thank the Compliance Monitoring Stakeholders Committee for their insightful edits and comments, all which has made this report vastly more meaningful than the first draft months ago.

Steve Bernowe-Meyer, Jane Chavey, Doug Couvalier, Darin Cramer, Craig Graber, Pete Heide, John Heimburg, Mark Hicks, Terry Jackson, Chad McCrea, Chris Mendoza, Julie Sackett, Jean Parodi, Nate Putnam, Nancy Sturhan, Curt Veldhuisen, Ritch Wood, Ned Wright





#### WASHINGTON STATE DEPARTMENT OF

## **Natural Resources**

Peter Goldmark - Commissioner of Public Lands