FOREST PRACTICES COMPLIANCE MONITORING 2022-2023 BIENNIAL REPORT RESULTS

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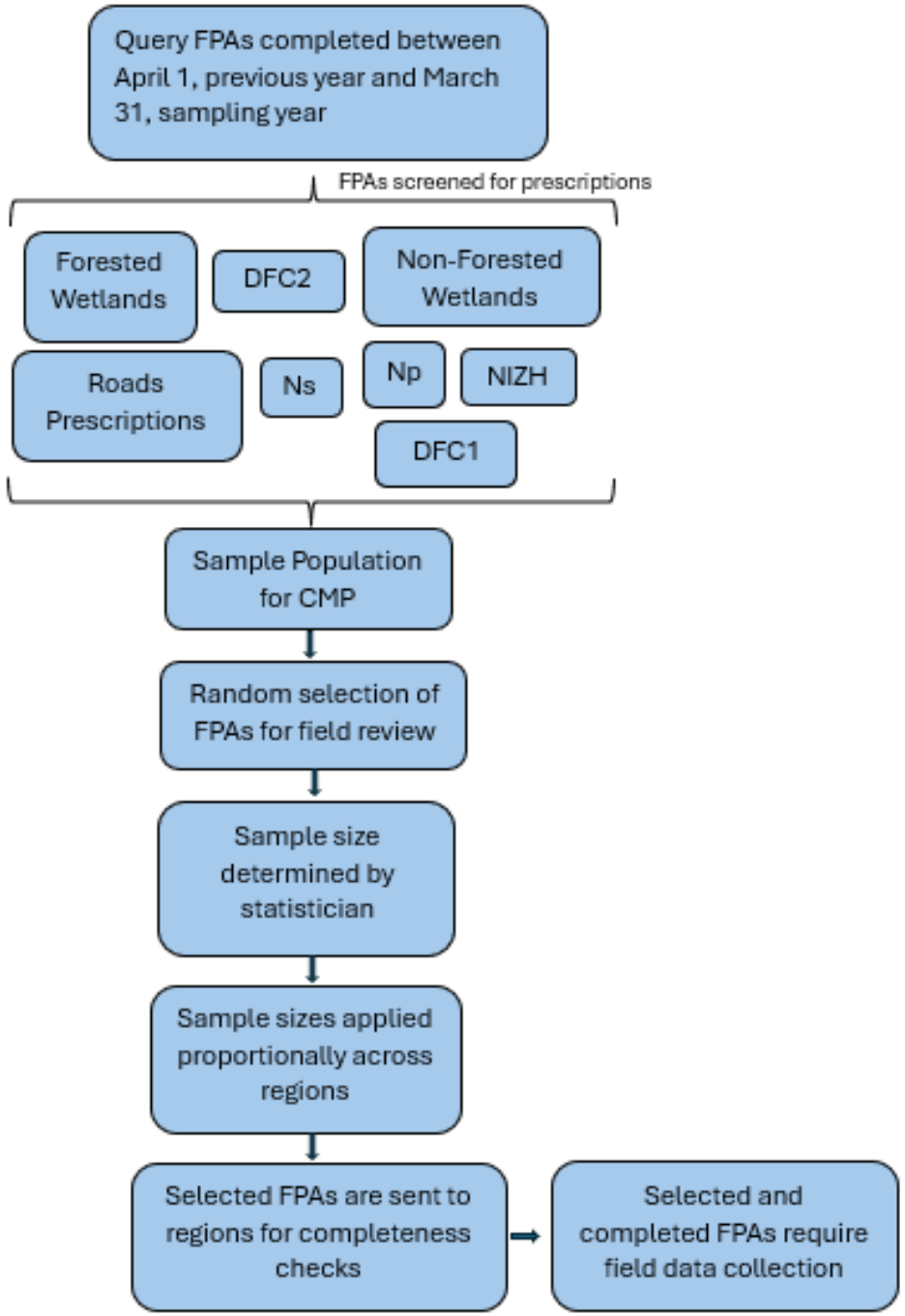
INTRODUCTION

- WAC 222-08-160(4): Are Forest Practices being conducted in compliance with the rules?
- Goal: Quantify the compliance rates of Forest Practices rules
- The 2022-2023 report involved field teams across the state consisting of Forest Practices staff, WDFW staff, Ecology staff and tribal biologist

STUDY DESIGN



STUDY DESIGN

- We randomly select FPA/N across the state which contain sets of rules implementations, also known as prescriptions
- Compliance rates calculated by dividing total compliant rules by total rules evaluated for each prescription (48 compliant rules out of 50 yields 96%)

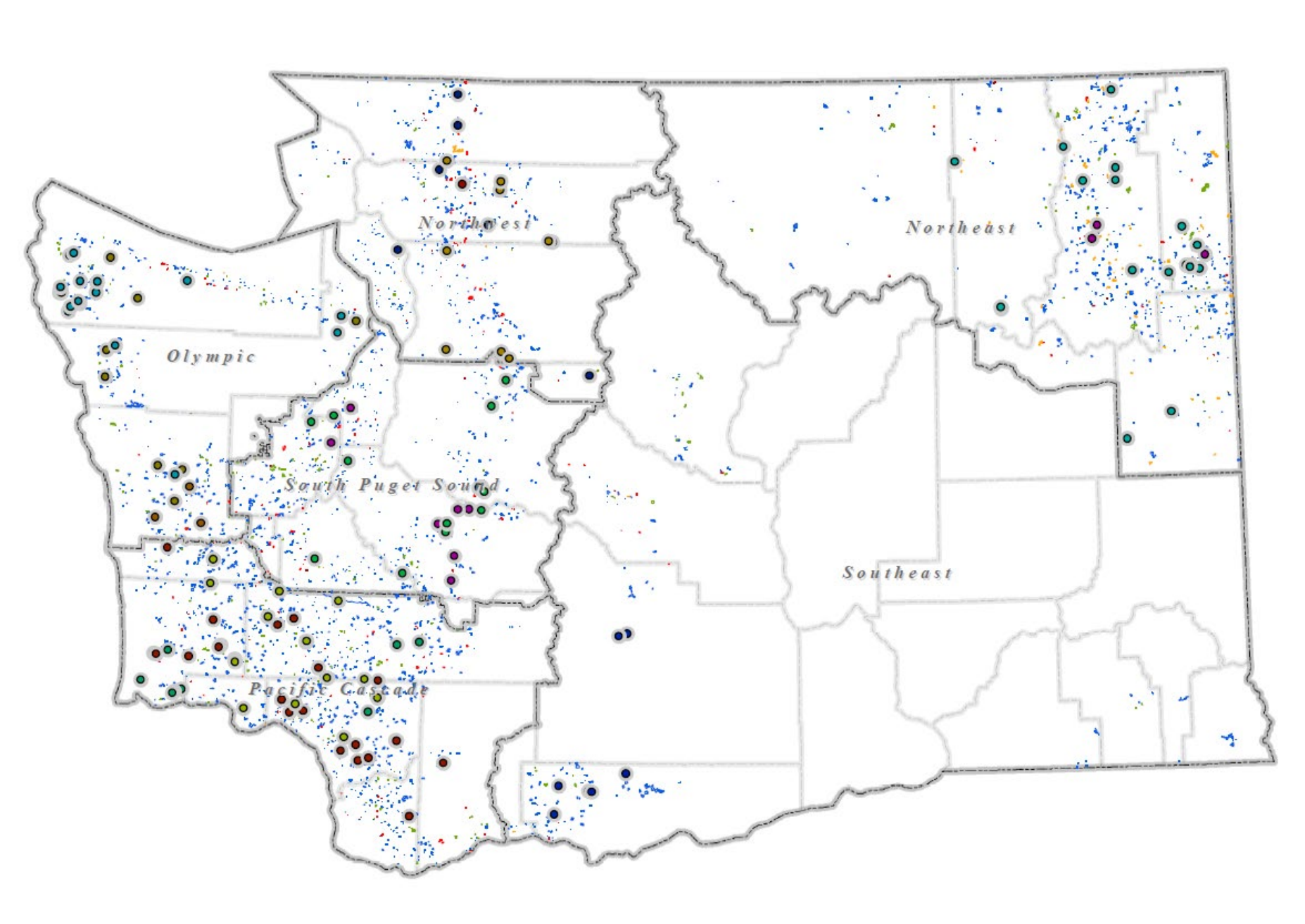
STANDARD SAMPLE PRESCRIPTIONS

- Desired Future Condition Option 1
- Desired Future Condition Option 2
- No Inner Zone Harvest
- Non-fish bearing Perennial streams
- Non-fish bearing Seasonal streams
- Type A & B Wetlands
- Forested Wetlands
- Roads
- Haul Routes for Sediment Delivery

2022-2023 PERIODIC SAMPLES

- Potentially Unstable Slopes
- Aerial Spray

Dispersal of 2022-2023 field sites and FPAs



2022-2023 STATEWIDE SAMPLE OVERVIEW

Prescription Type	Sites Assessed	FPA Population
Desired Future Condition Option 1 (DFC1)	11	51
Desired Future Condition Option 2 (DFC2)	9	332
No Inner Zone Harvest (NIZH)	19	1,788
Non-Fish Bearing Perennial Waters (Np)	33	1,998
Non-Fish Bearing Seasonal Waters (Ns)	33	2,050
Non-Forested (Type A and B) Wetlands	37	498
Forested Wetlands	27	436
Roads (construction/abandonment)	16	2,494
Haul Routes for sediment delivery	15	NA
Potentially Unstable Slopes	26	355

REPORT HIGHLIGHTS

- The highest rates of Rule compliance were found in non-forested wetlands (97.3%), roads (99.5%), and non-fish perennial stream (98.4%) prescriptions
- The highest rates of FPA compliance were non-forested wetlands (99.1%), non-fish seasonal streams (100%), and roads (100%)
- Trend analysis found evidence of increasing compliance trends for DFC1, DFC2, and No Harvest Inner Zone (NIZH) prescriptions

OVERVIEW 2022-2023 COMPLIANCE COMPARISON BY PRESCRIPTION

	RMZ Prescription	Rule Compliance Rate(%)	FPA Compliance Rate(%)
Statewide	No Inner Zone Harvest	96.8	94.7
	Type Np Prescriptions	98.4	96.6
	Type Ns Prescriptions	94.3	100.0
	Non-Forested Wetlands	97.3	99.1
	Forested Wetlands	98.3	97.0
	Roads	99.5	100.0
Western WA only	Inner Zone Harvest DFC1	96.7	95.0
	Inner Zone Harvest DFC2	93.8	89.2

ROADS

Status of Compliance	Road Activities Rule Compliance
Total Number of Rules Sampled	187
Number Compliant Rules	186
Number Rules with Deviation	1.0
Bias-Corrected Compliance Percentage (%)	99.5

HAUL ROUTES

Compliant		Deviation		
99% (98-100%)		0.77% (0-1.8%)		
No Delivery	De Minimis	Low	Medium	High
96%	2.7%	0.60%	0.18%	0.36%

Primary Cause	Mileage	Percentage of Deviation (%)
Seep into ditches	0.19	33
Inadequate erosion control measures	0.16	29
Sediment from stream-adjacent parallel roads	0.13	22
Driven on/squashed berm	0.08	13
Stream/spring intercepted water	0.01	3
TOTAL	0.57	

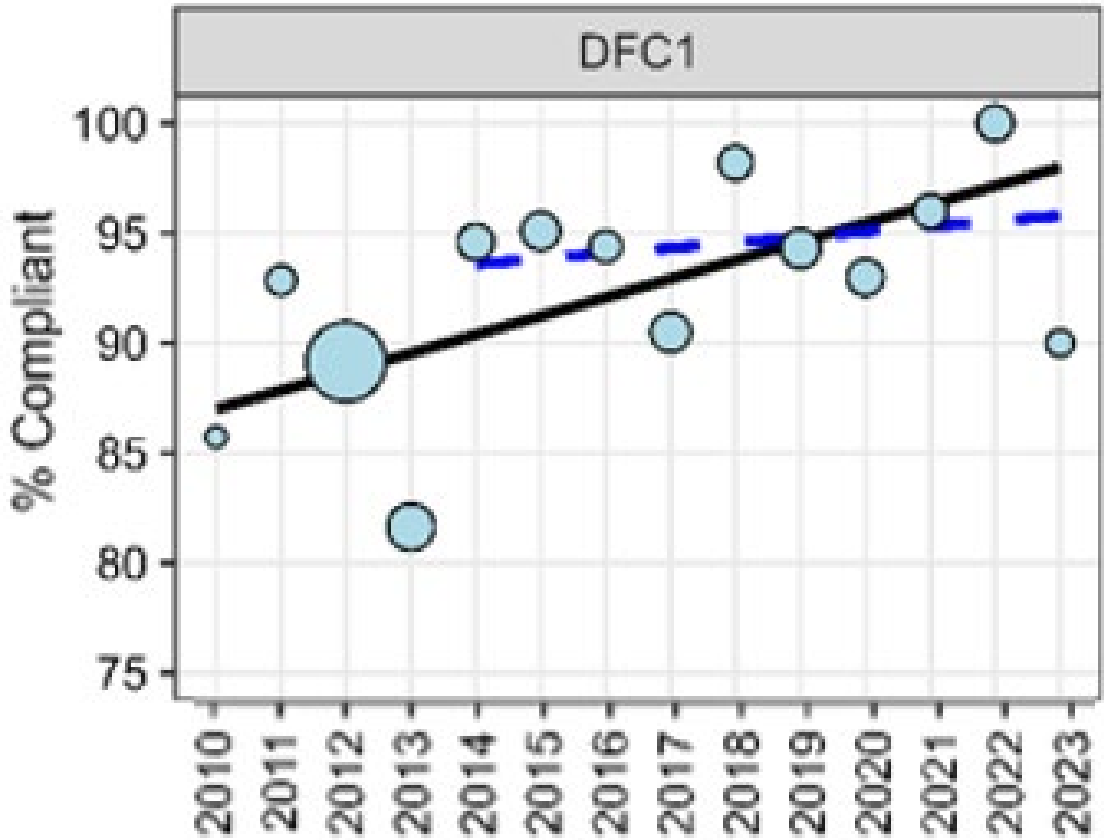
POTENTIALLY UNSTABLE SLOPES

Potentially Unstable Slopes Prescription Totals	Results
Total FPAs Assessed	26
FPA Compliant Questions	73
FPA Deviation	3
Total Questions Assessed	76
Bias-Corrected Compliance Percentage (%)	96.1

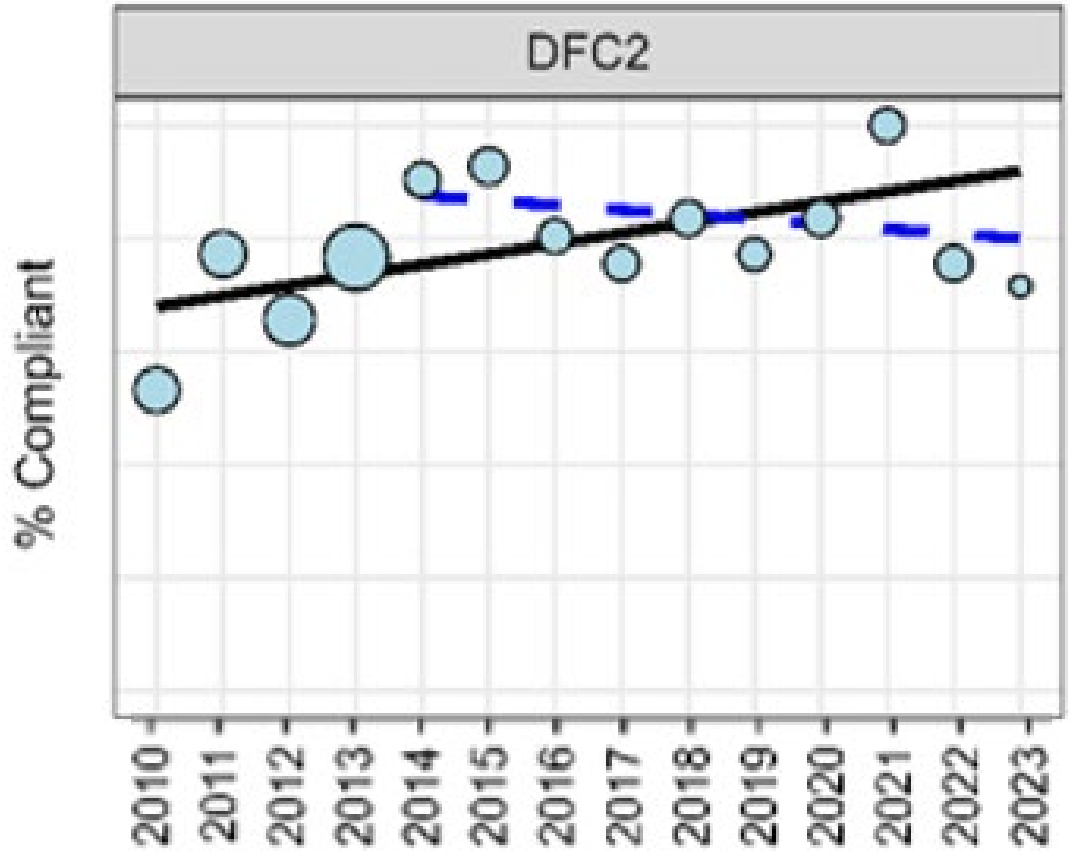
TREND ANALYSIS

- There is evidence of increasing compliance trends in DFC1, DFC2 and NIZH prescriptions, with estimated average increases in compliance rates from **0.4 to 0.9% per year** over the 2010-2023 period.
- There has been no significant decrease in rates of compliance with FP rules

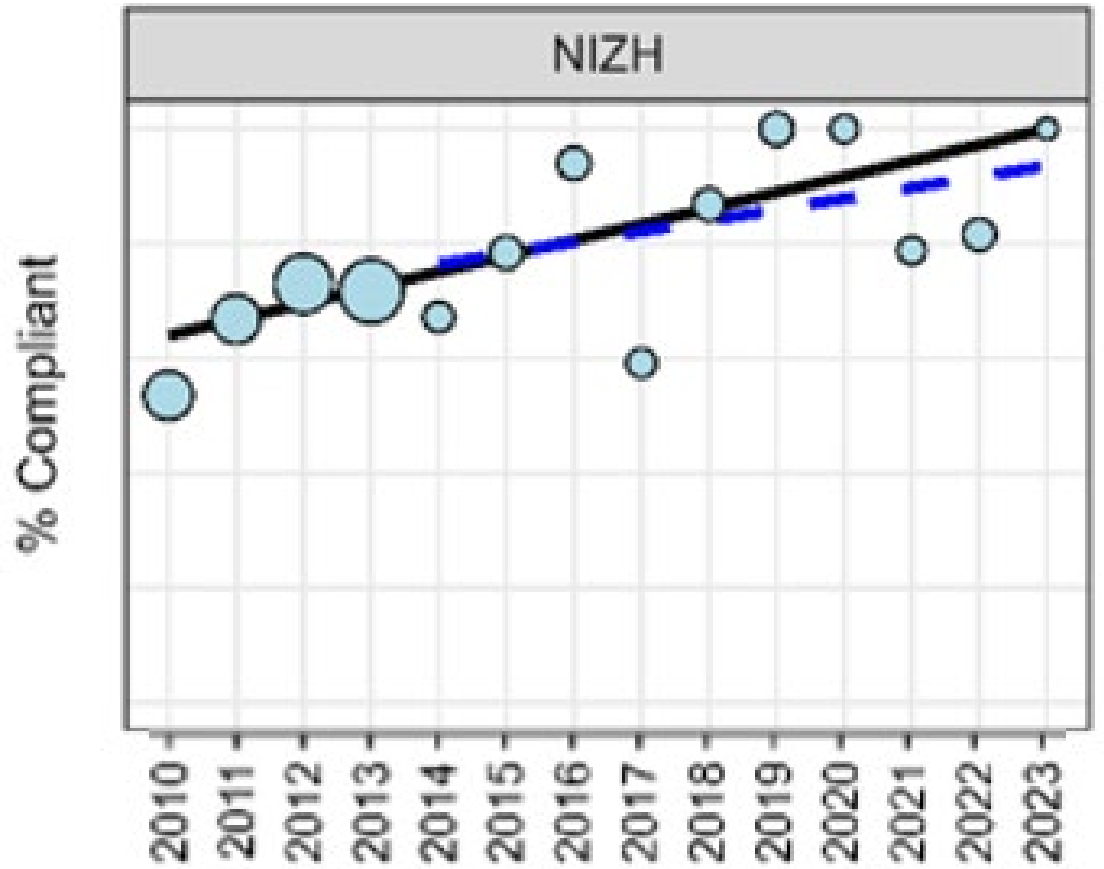
DFC1


DFC1
% Compliant
100
95
90
85
80
75
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023

DFC2


DFC2
% Compliant
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023

NIZH


NIZH
% Compliant
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023

FOREST PRACTICES OPERATIONS USE OF THE RESULTS

- High compliance rates on rules
- Rule implementation and enforcement is working
- Operations productively and deliberately continue to make improvements

RECOMMENDATIONS

- Provide learning opportunities for landowners and DNR staff about fish-associated wetlands
- Changes to Appendix G: Type Np RMZ Worksheet
- Inclusion of periodic samples in spring sampling
- Development of potentially unstable slopes sampling protocols by FP Science Team LEGs
- Comparative visitation to non-fish seasonal streams and wetlands in different seasons
- Sample a larger proportion of wetlands