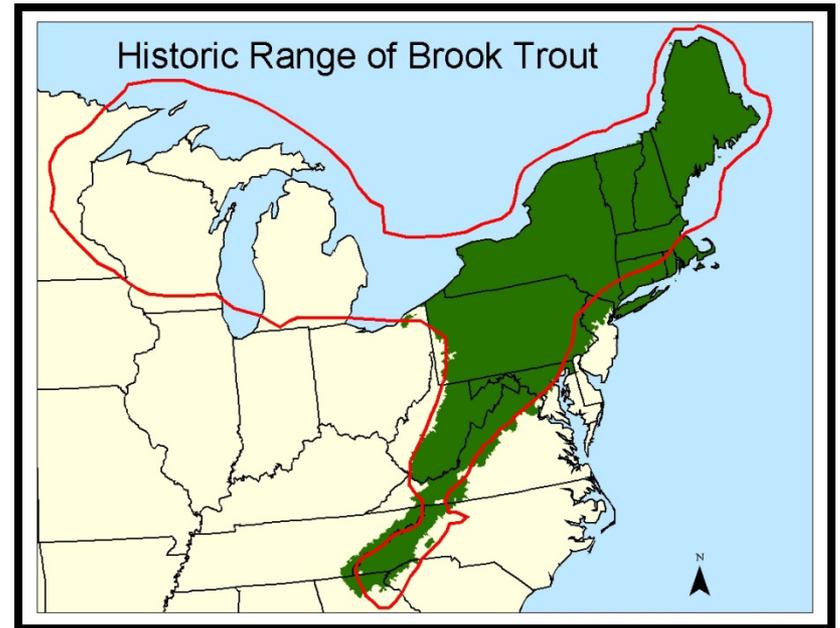
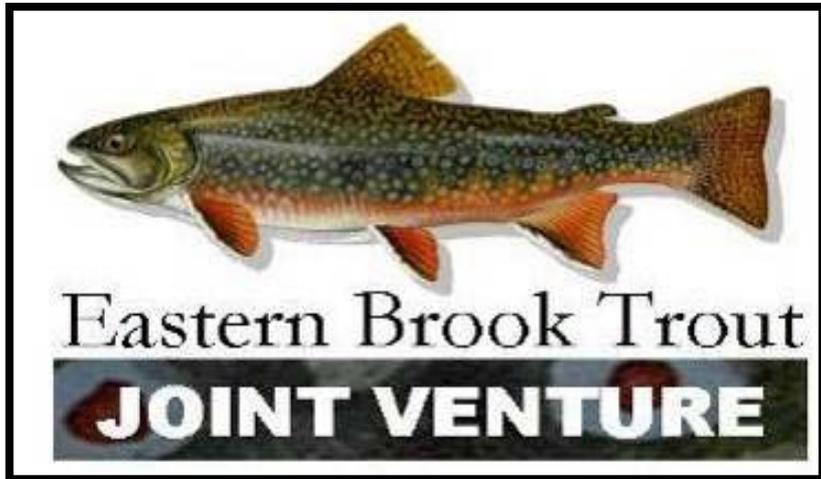
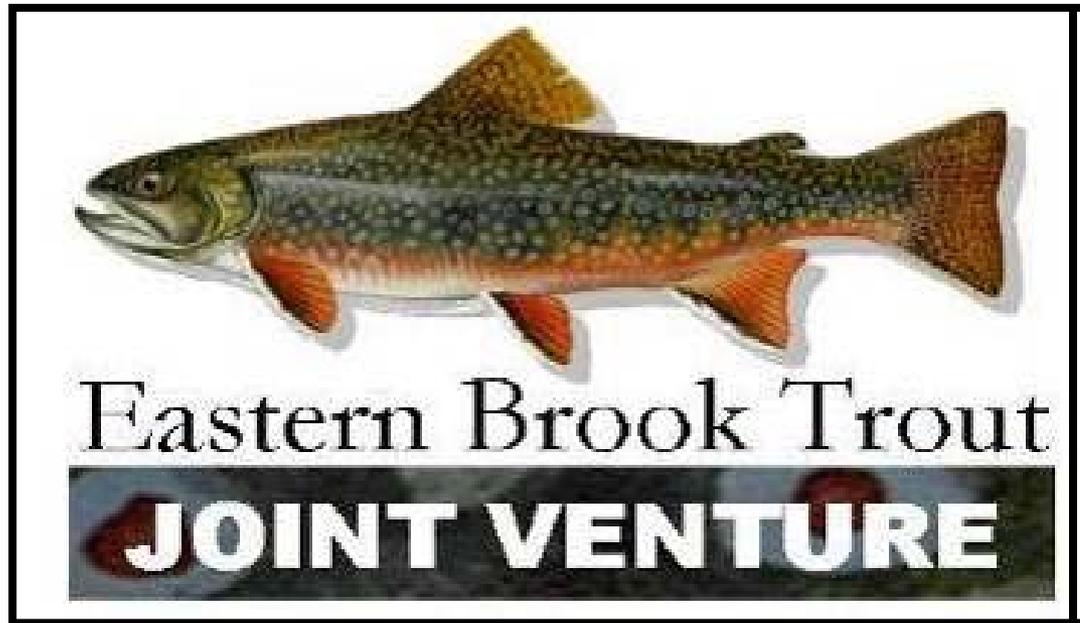


# Eastern Brook Trout Joint Venture (EBTJV)





EBTJV is partner based so it relates well to the LLC's.

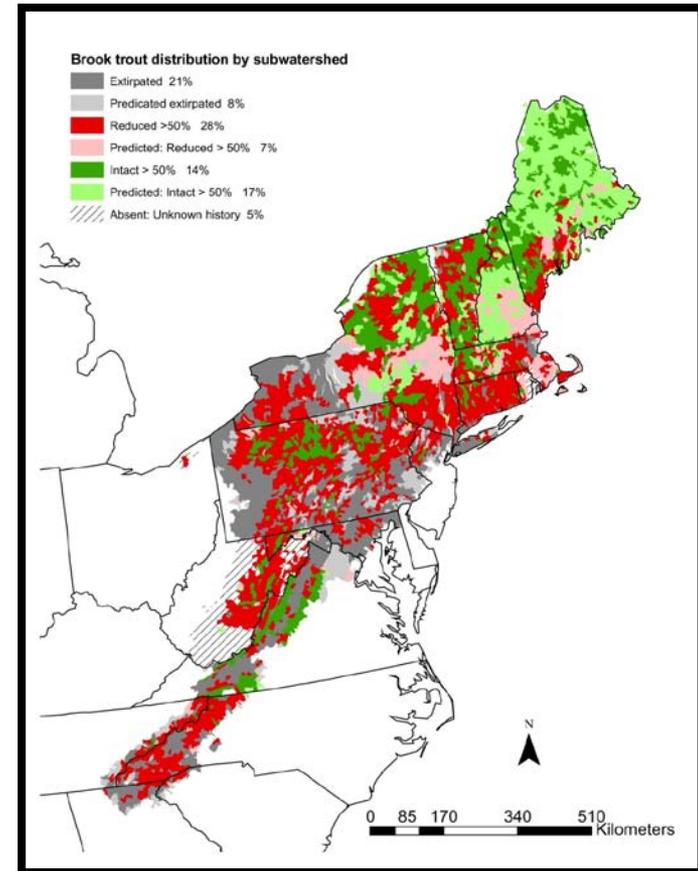


# EBTJV: An Active Partnership



# EBTJV is science based so it relates well to the SHC process

- Assess the status
- Identify the threats
- Determine the gaps in knowledge



# EBTJV

## Strategic Priorities

1. Protect the “best of the best”
2. Strengthen what we have
3. Re-establish what's been lost

# Prioritizing EBTJV Projects

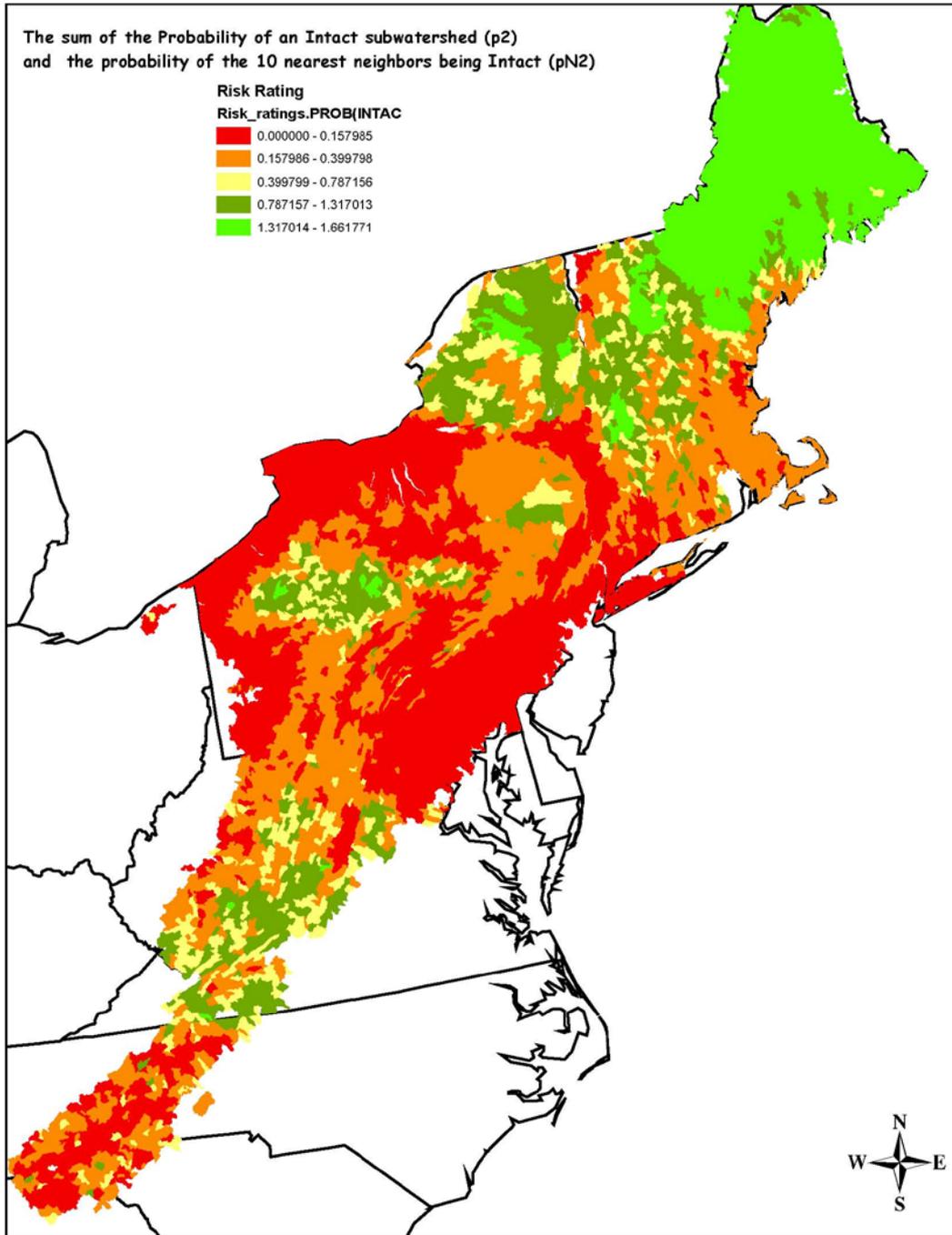
- Proposals are scored by project review teams
- EBTJV Steering Committee ranks and recommends projects for funding

The sum of the Probability of an Intact subwatershed ( $p_2$ )  
and the probability of the 10 nearest neighbors being Intact ( $p_{N2}$ )

**Risk Rating**

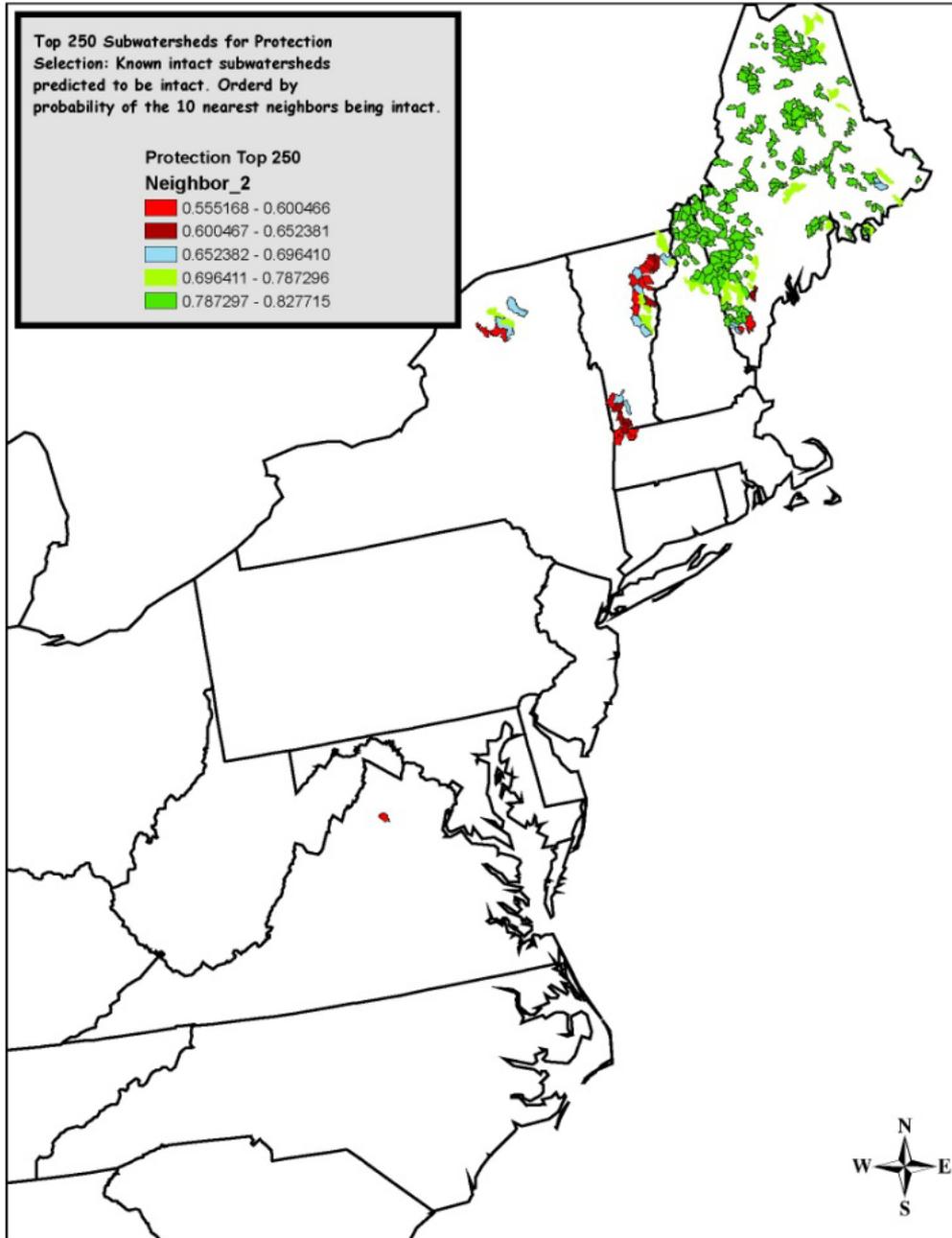
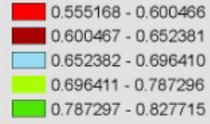
**Risk\_ratings.PROB(INTAC**

- 0.000000 - 0.157985
- 0.157986 - 0.399798
- 0.399799 - 0.787156
- 0.787157 - 1.317013
- 1.317014 - 1.661771



Top 250 Subwatersheds for Protection  
Selection: Known intact subwatersheds  
predicted to be intact. Ordered by  
probability of the 10 nearest neighbors being intact.

Protection Top 250  
Neighbor\_2

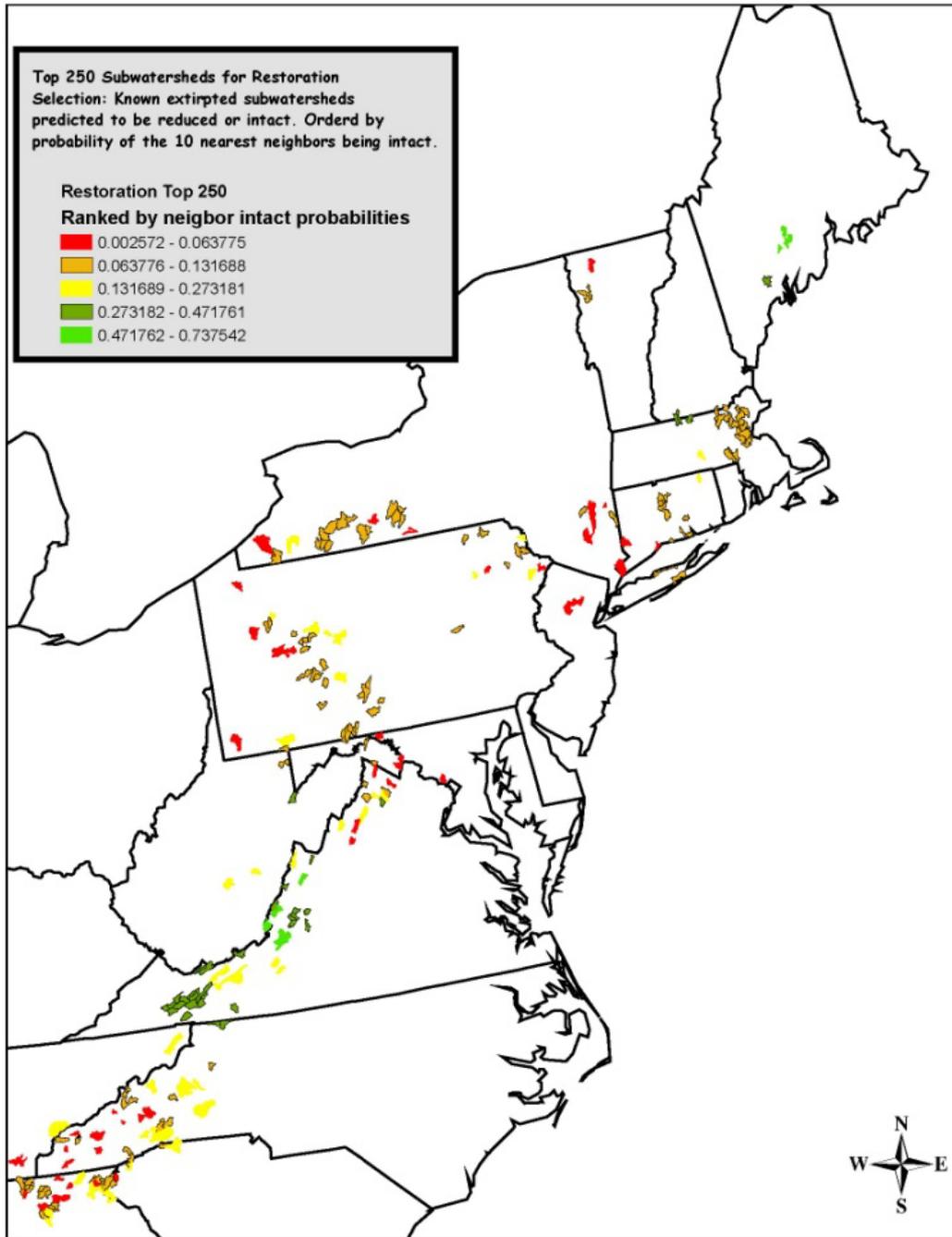


Top 250 Subwatersheds for Restoration  
Selection: Known extirpated subwatersheds  
predicted to be reduced or intact. Ordered by  
probability of the 10 nearest neighbors being intact.

Restoration Top 250

Ranked by neighbor intact probabilities

- 0.002572 - 0.063775
- 0.063776 - 0.131688
- 0.131689 - 0.273181
- 0.273182 - 0.471761
- 0.471762 - 0.737542

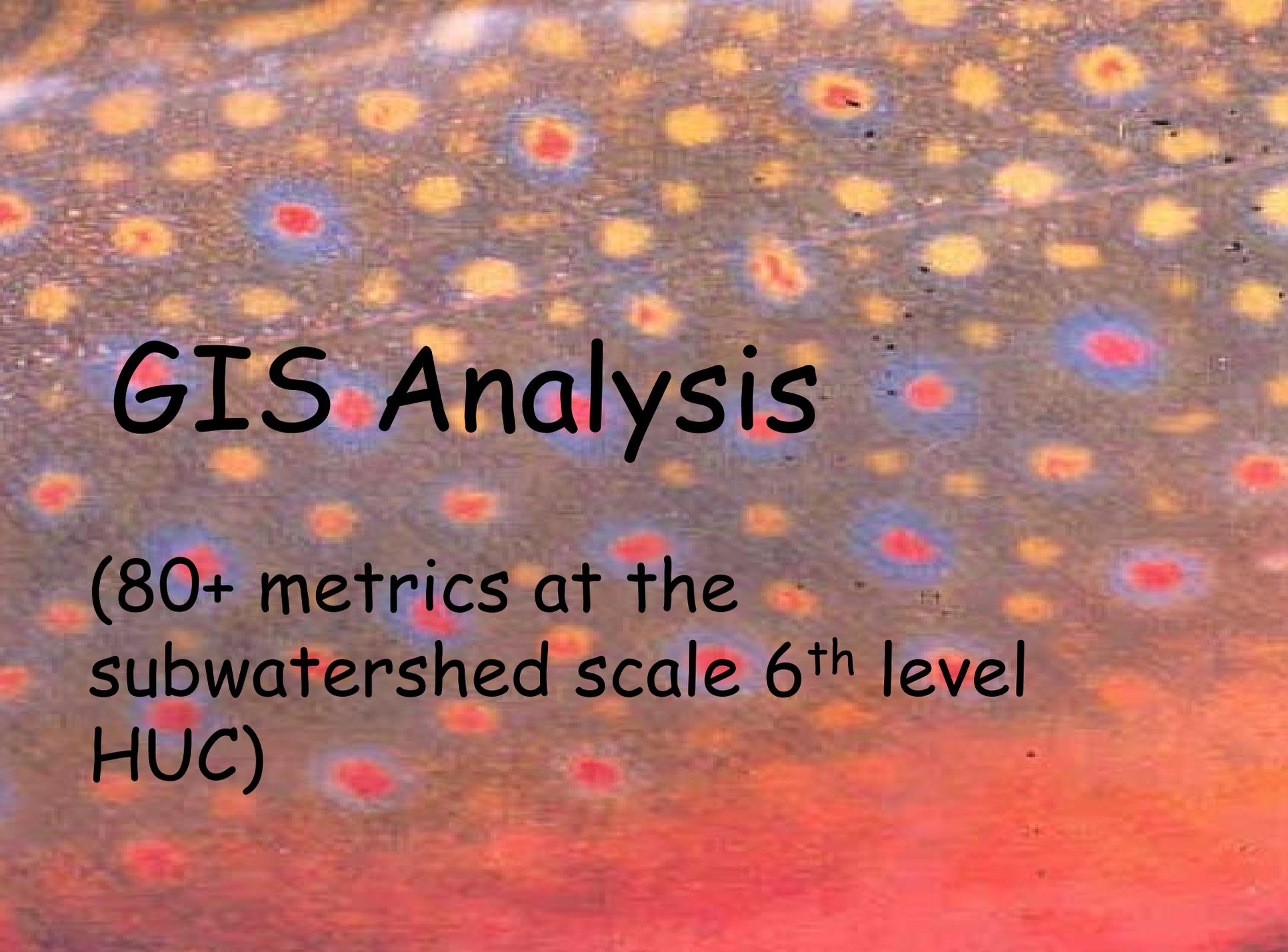


# Inventory & Monitoring

- Evaluate conservation actions against short- and long-term benchmarks
- Instituting adaptive management as a core process

# Predictive Model





# GIS Analysis

(80+ metrics at the  
subwatershed scale 6<sup>th</sup> level  
HUC)

# Subwatershed metrics



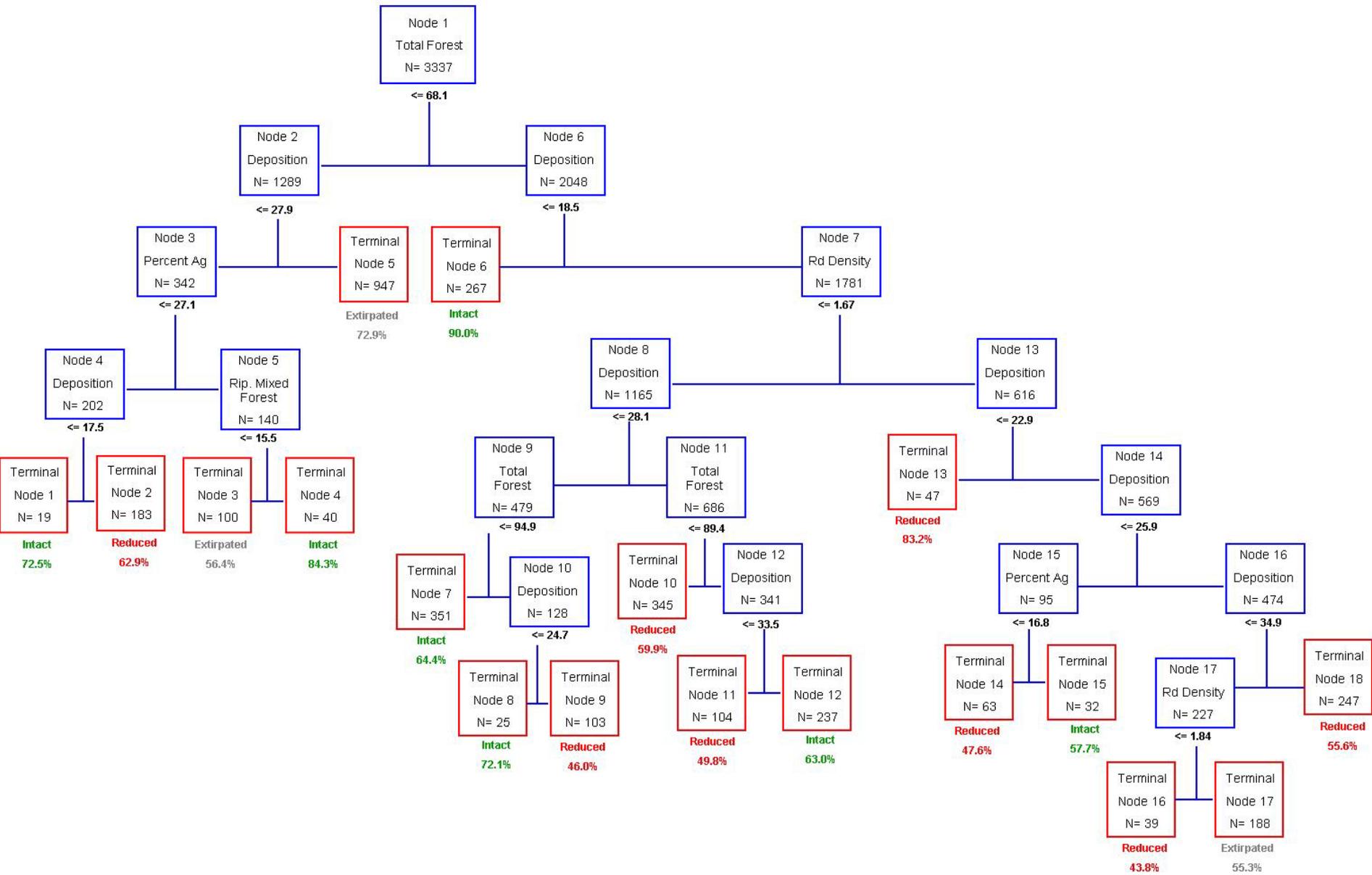
Extirpated

Reduced

Intact

Land use metrics at the subwatershed level are useful predictors of brook trout for land managers





# Final CART Model

71 % correct overall

76% Extirpated

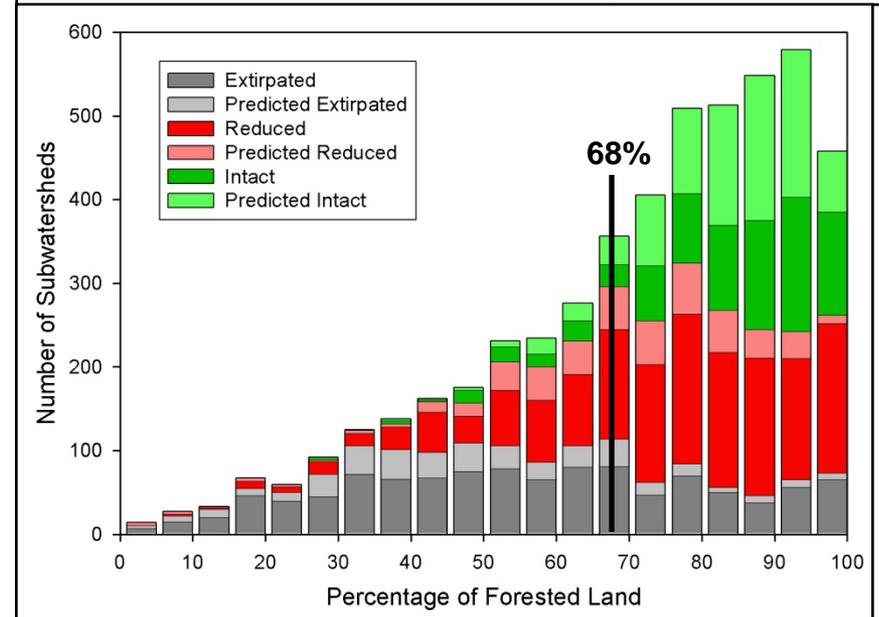
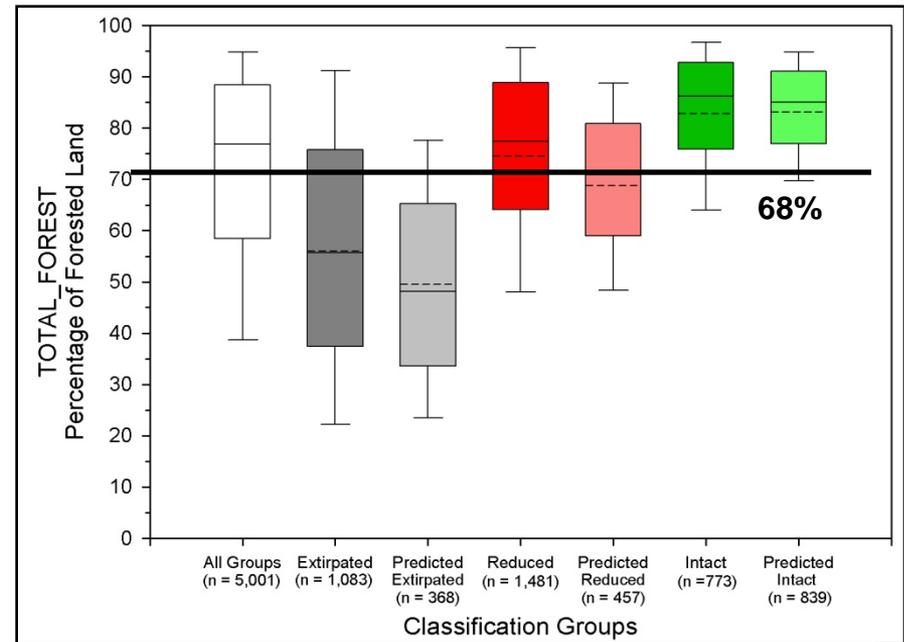
64% Reduced

79% Intact

- ❑ % Forest < 68%
- ❑ Deposition < 28 kg/ha
- ❑ Deposition < 19 kg/ha
- ❑ % Agriculture < 27%
- ❑ Road Density < 1.67 km/km<sup>2</sup>
- ❑ Deposition < 18 kg/ha

# Core Metric: % Forest

- ❑ Subwatershed threshold  
68% forested land
- ❑ Only 6% of Intact subwatersheds have less than 68% Total Forest.
- ❑ 85% of Extirpated subwatersheds < 68% Total Forest





# Issues with Scale

# Assessment Scales

Sub-basins (4<sup>th</sup> HUC; 8 digit)

53 (avg size= 254,172 ha)

Watersheds (5<sup>th</sup> HUC;

10 digit)

690 (avg size = 41,201 ha)

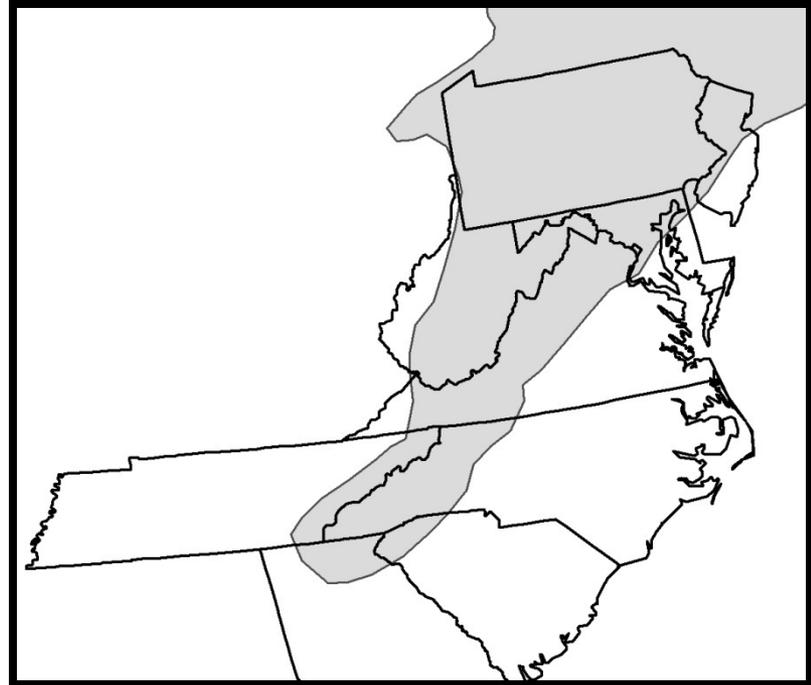
Subwatersheds (6<sup>th</sup> HUC;

12 digit)

3,079 (avg size = 8,879 ha)

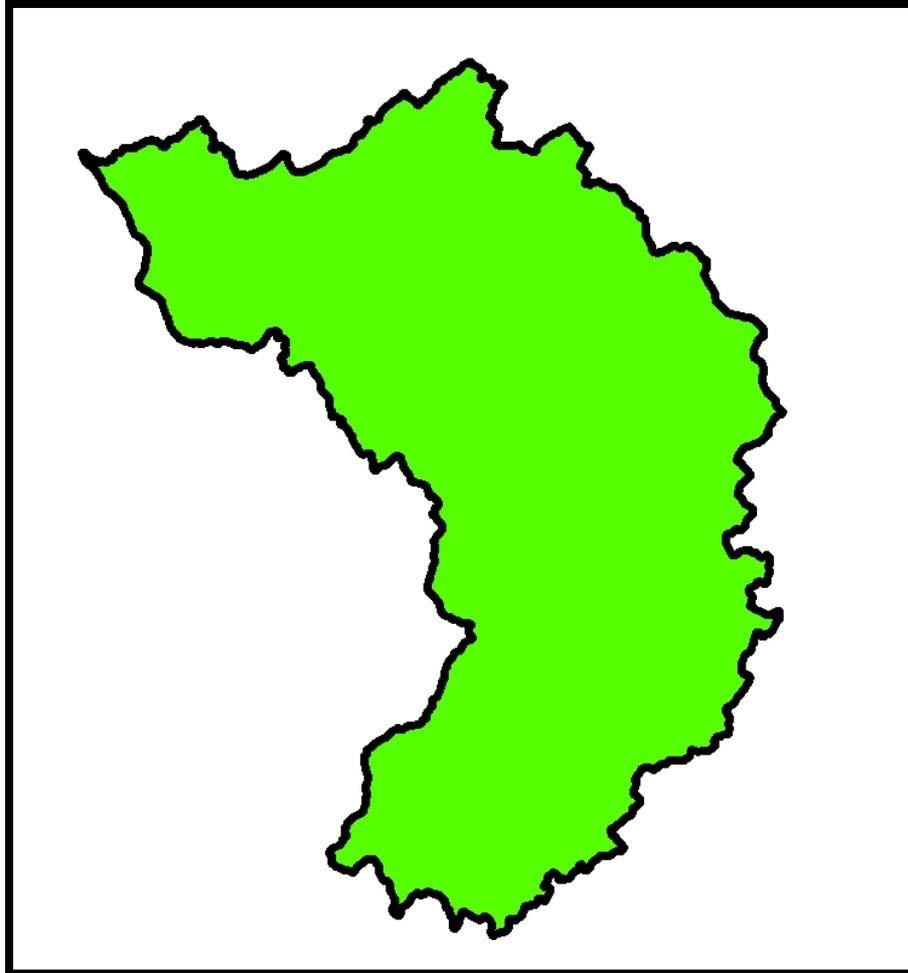
Catchments (14 digit ?)

124,688 (avg size = 237 ha)



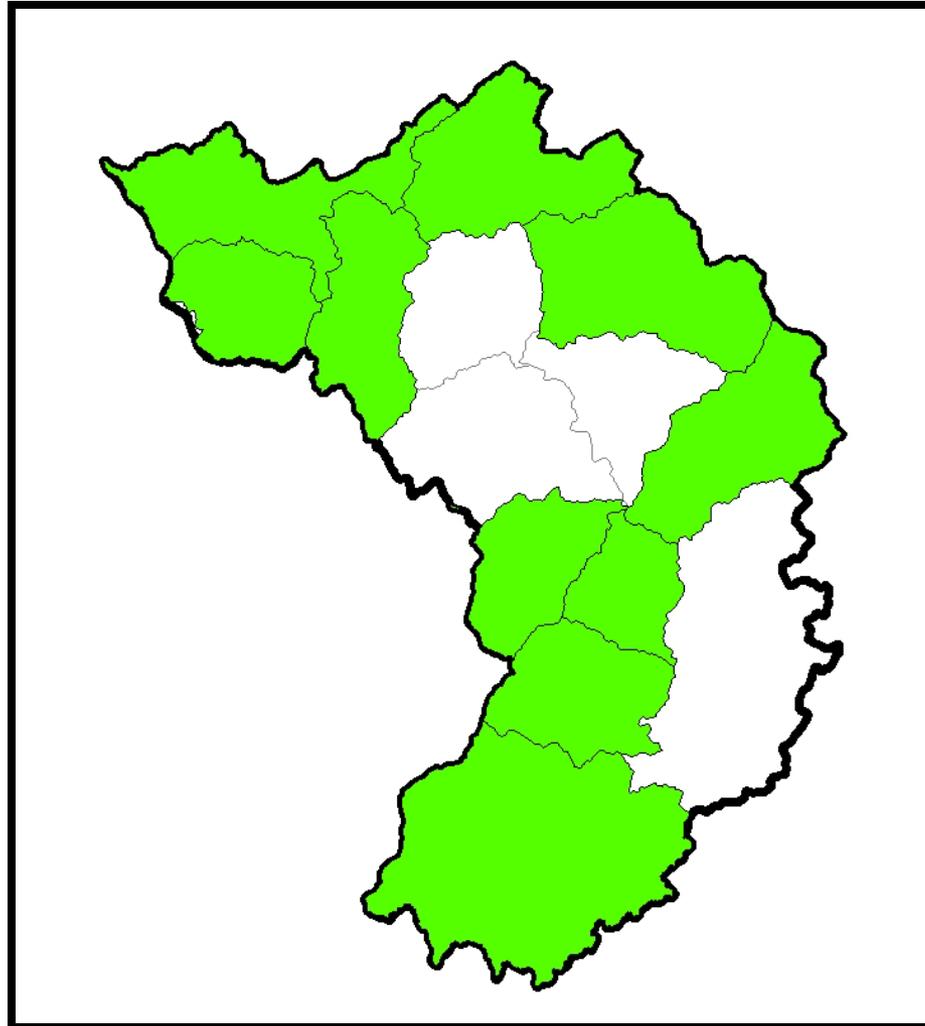


# Sub-basins (4<sup>th</sup> HUC) 100%



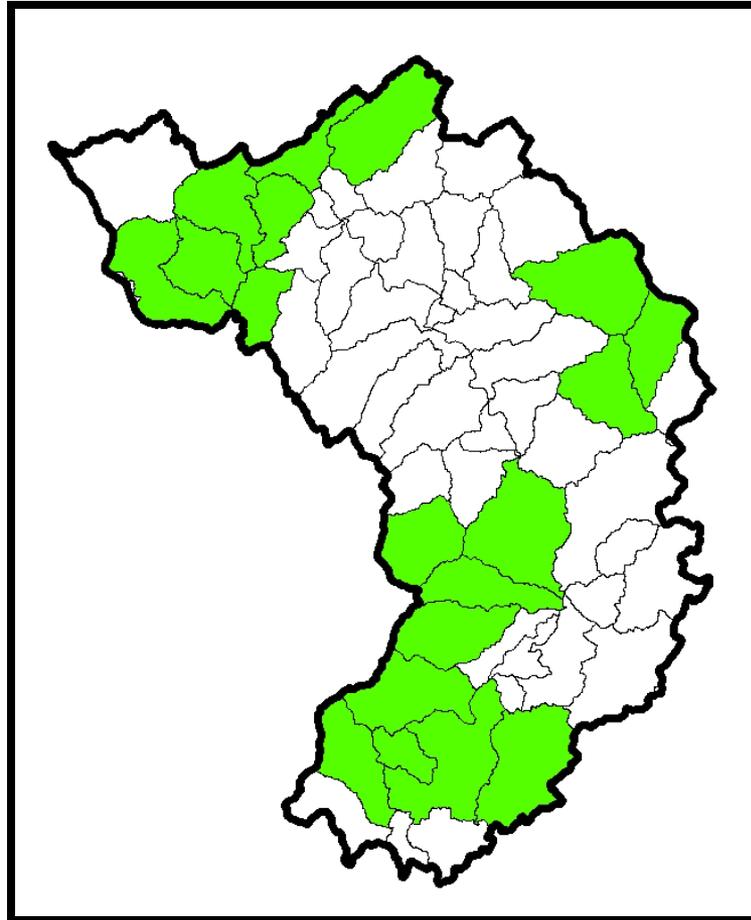
# Watersheds (5<sup>th</sup> HUC)

76%



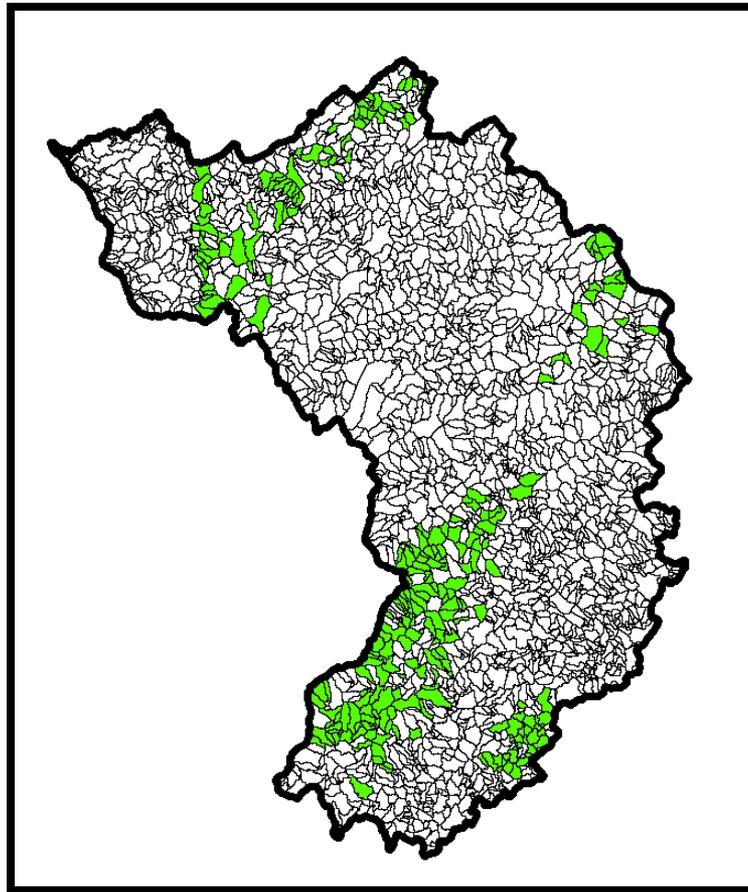
# Subwatersheds (6<sup>th</sup> HUC)

33%



# Catchments

11%





# Issues?

## EBTJV vs LLC's

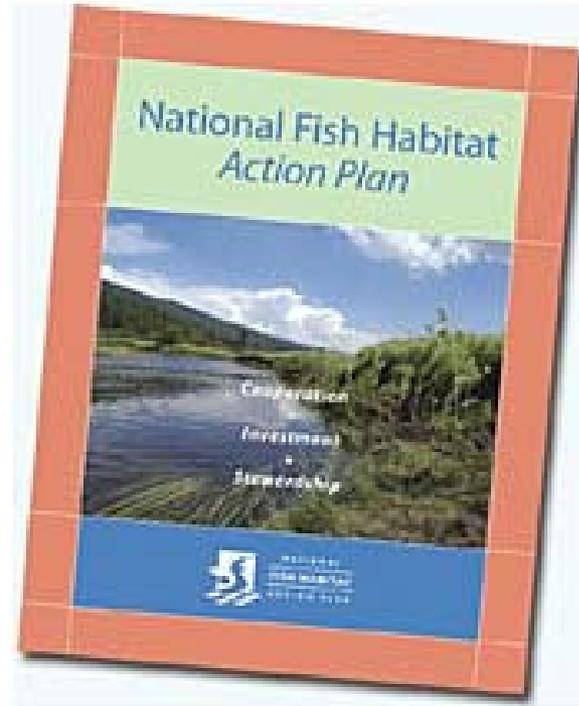
1. Partner priority vs LLC priorities
2. Watershed approach vs landscape ??
3. State based vs ??????
4. Non-regulatory approach vs ??????
5. LLC boundaries (multiple LLC's; bird based?)
6. Existing governance vs ??
7. Value added ?

# Thanks to the EBTJV Partners!



Eastern Brook Trout

**JOINT VENTURE**



WHENEVER YOU TALK,  
I THINK ABOUT MY  
FISHING LURES UNTIL  
THE NOISE STOPS.

