Managing for Diversity

National Forests in North Carolina - Nantahala and Pisgah National Forests - July 10, 2014

Wildlife Habitat: What We Heard

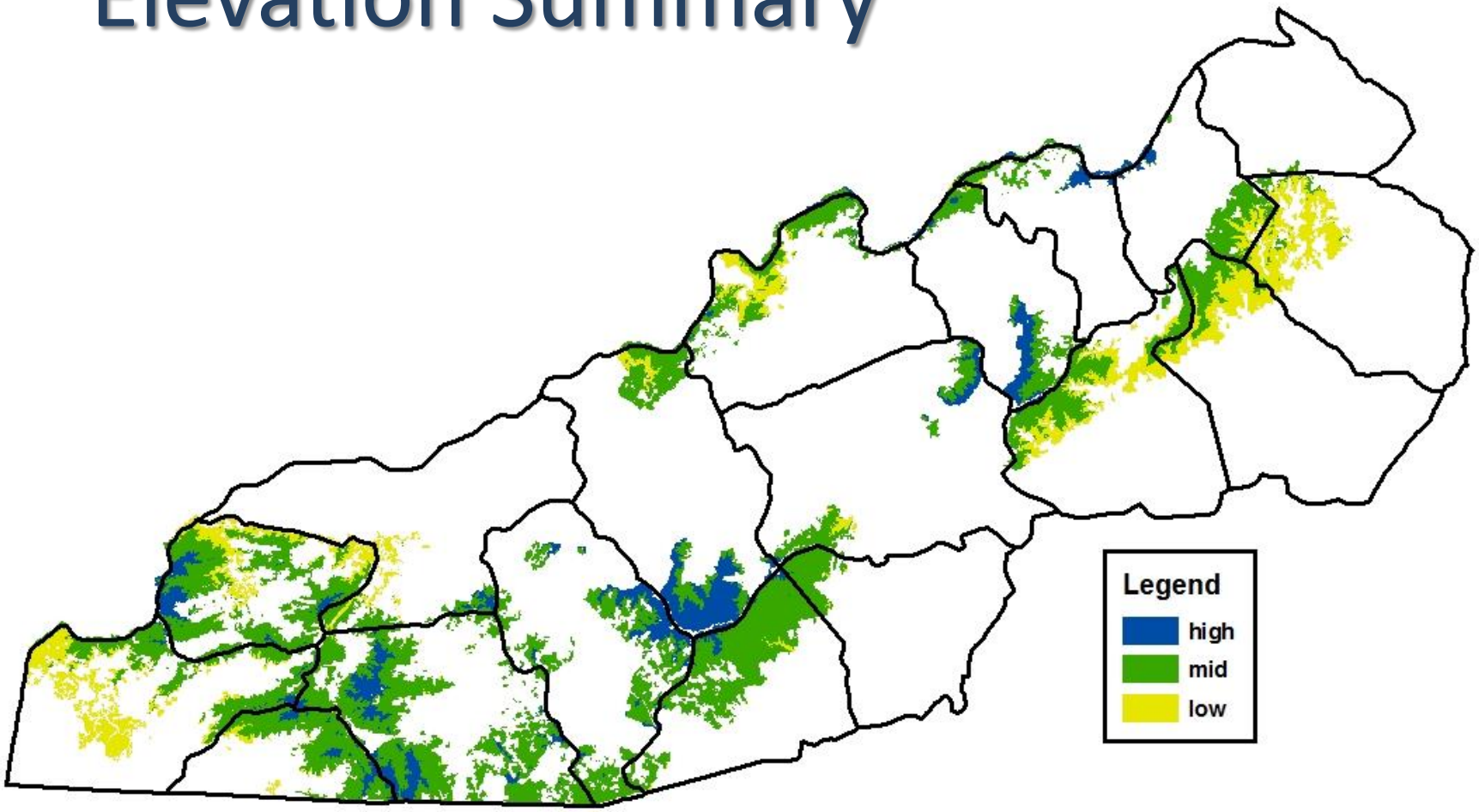
- Structural Diversity:
  - ➡ Increase the amount of early successional habitat/young forest
  - ➡ Provide a mix of age classes
  - – Increase the amount of open forest habitats
  - – Protect interior forest habitats
  - – Maintain older forest conditions
- Compositional Diversity:
  - – Enhance/restore hard and soft mast production
  - – Restore oak and fire-adapted communities
  - – Protect rare species, communities, and features
  - – Maintain/restore high elevation open areas and open grassy areas
  - – Protect/restore riparian and aquatic areas

Specifically:

- Ruffed grouse
- White-tailed deer
- Black bear
- Wild turkey
- Elk
- Bobwhite quail
- Rabbits
- Woodcock
- Hawks/eagles/owls
- Songbirds/migratory birds
- Bats
- Snakes
- Turtles
- Butterflies
- Salamanders
- Trout/brook trout

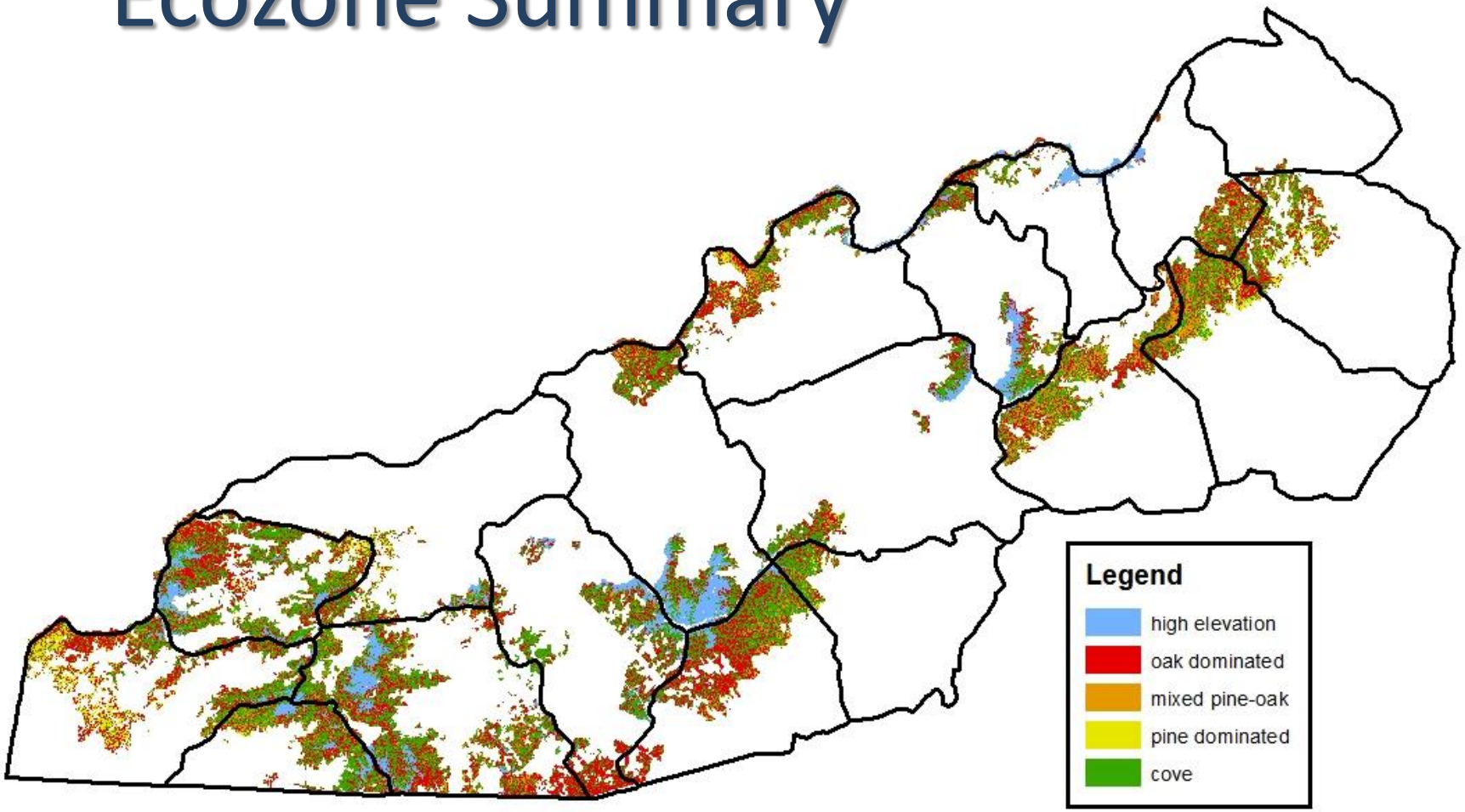
What pieces of, or places on, this landscape are most important to you?

Elevation Summary



All data draft and subject to change. Map created June 15, 2014.

Ecozone Summary



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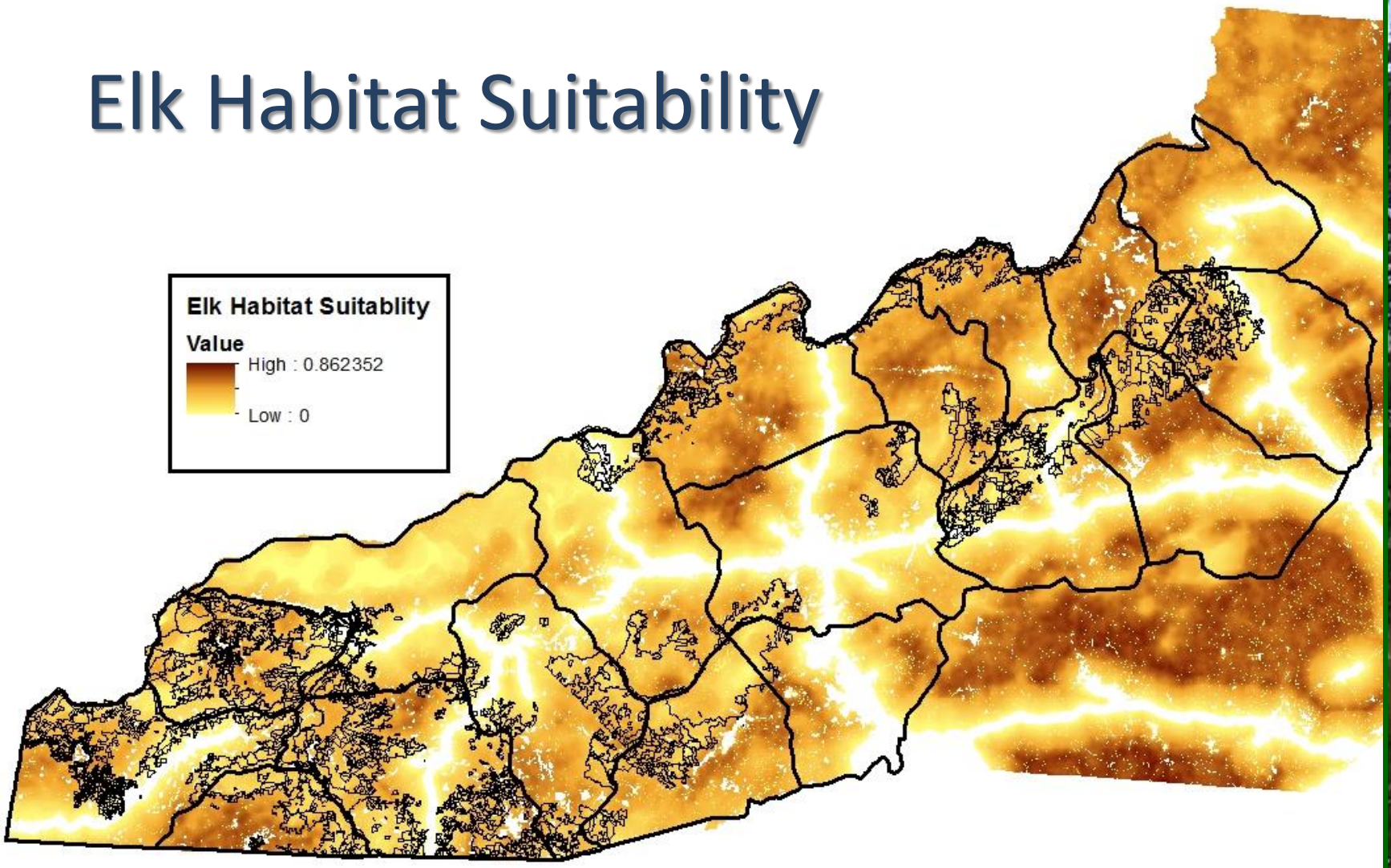
Elk Habitat Suitability



Data courtesy of the NCWRC. Map created June 15, 2014.

Early Successional Habitat: What we could expect to see

	PNV	gap/natural			gap/natural + management			
	acres FS	2%	3%	4%	5%	10%	15%	20%
spruce-fir	16,604	332	498	664	830	1,660	2,491	3,321
northern hardwood	53,924	1,078	1,618	2,157	2,696	5,392	8,089	10,785
high elevation red oak	38,637	773	1,159	1,545	1,932	3,864	5,796	7,727
acidic cove	240,938	4,819	7,228	9,638	12,047	24,094	36,141	48,188
rich cove	189,143	3,783	5,674	7,566	9,457	18,914	28,371	37,829
mesic oak	186,131	3,723	5,584	7,445	9,307	18,613	27,920	37,226
dry-mesic oak	105,991	2,120	3,180	4,240	5,300	10,599	15,899	21,198
dry oak	59,677	1,194	1,790	2,387	2,984	5,968	8,952	11,935
pine-oak heath	101,275	2,026	3,038	4,051	5,064	10,128	15,191	20,255
shortleaf pine	44,541	891	1,336	1,782	2,227	4,454	6,681	8,908
floodplain	2,640	53	79	106	132	264	396	528

Early Successional Habitat: Restoration Potential

(PNV = 189,143)	gap/natural			gap/natural + management			
	2%	3%	4%	5%	10%	15%	20%
rich cove	3,783	5,674	7,566	9,457	18,914	28,371	37,829
mean gap/natural	5,674	**5,674**	5,674	5,674	5,674	5,674	5,674
existing young forest (<20 yrs)	4,428	4,428	4,428	4,428	4,428	4,428	4,428
natural + created*	10,102	10,102	10,102	10,102	10,102	10,102	10,102
restoration potential*	0	0	0	**-645**	**8,812**	18,269	27,727

*does not take into account acres growing out of <20 year age class

Early Successional Habitat: Restoration Potential = 49,423 acres

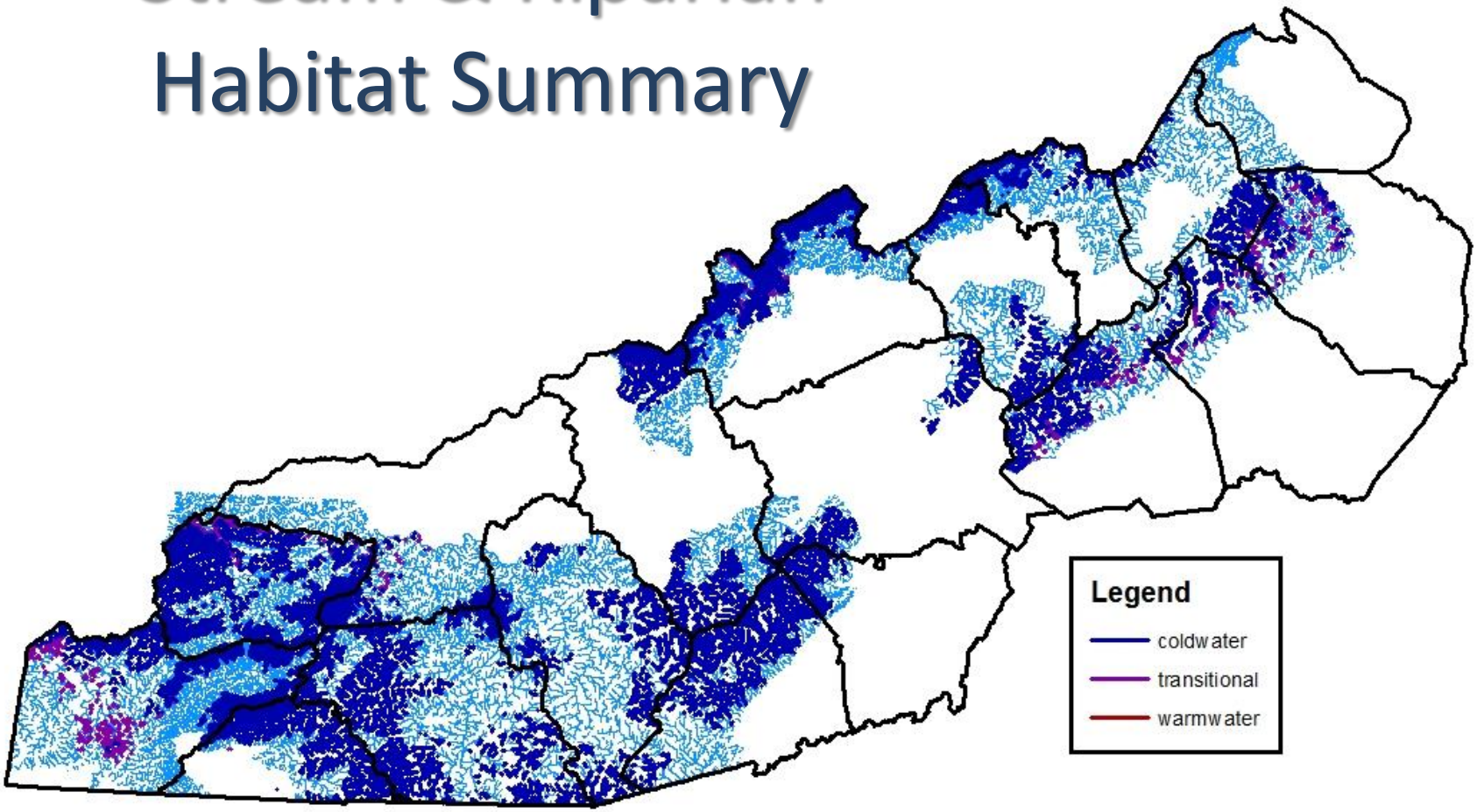
restoration potential	8%	9%	10%	11%	12%	other	notes
spruce-fir	886	1,052	1,218	1,384	1,550	498	gap/natural (3%)
northern hardwood	2,433	2,972	3,511	4,051	4,590		restore spruce-fir interface
high elevation red oak	1,707	2,093	2,480	2,866	3,252		
acidic cove	9,025	11,434	13,844	16,253	18,663		gap/natural (3%); HWA (hemlock/rhodo) restoration
rich cove	5,029	6,921	8,812	10,704	12,595		decrease yellow poplar stands
mesic oak	6,357	8,219	10,080	11,941	13,803		emphasize mast production; decrease yellow poplar
dry-mesic oak	2,693	3,753	4,813	5,873	6,933		emphasize mast production
dry oak	1,974	2,571	3,168	3,764	4,361		emphasize mast production
pine-oak heath	3,537	4,550	5,563	6,575	7,588		emphasize mast production
shortleaf pine	294	740	1,185	1,631	2,076		
floodplain	55	82	108	134	161	79	gap/natural (3%); likely much higher naturally; CANEBRAKE

Assuming 20 year plan life: 2,471 acres/year of early successional habitat restoration

mean annual ESH restoration (potential)	
spruce-fir	25
northern hardwood	122
high elevation red oak	85
acidic cove	451
rich cove	251
mesic oak	690
dry-mesic oak	347
dry oak	158
pine-oak heath	278
shortleaf pine	59
floodplain	4

Same type of analysis can be done for restoration potential of other characteristics

Stream & Riparian Habitat Summary



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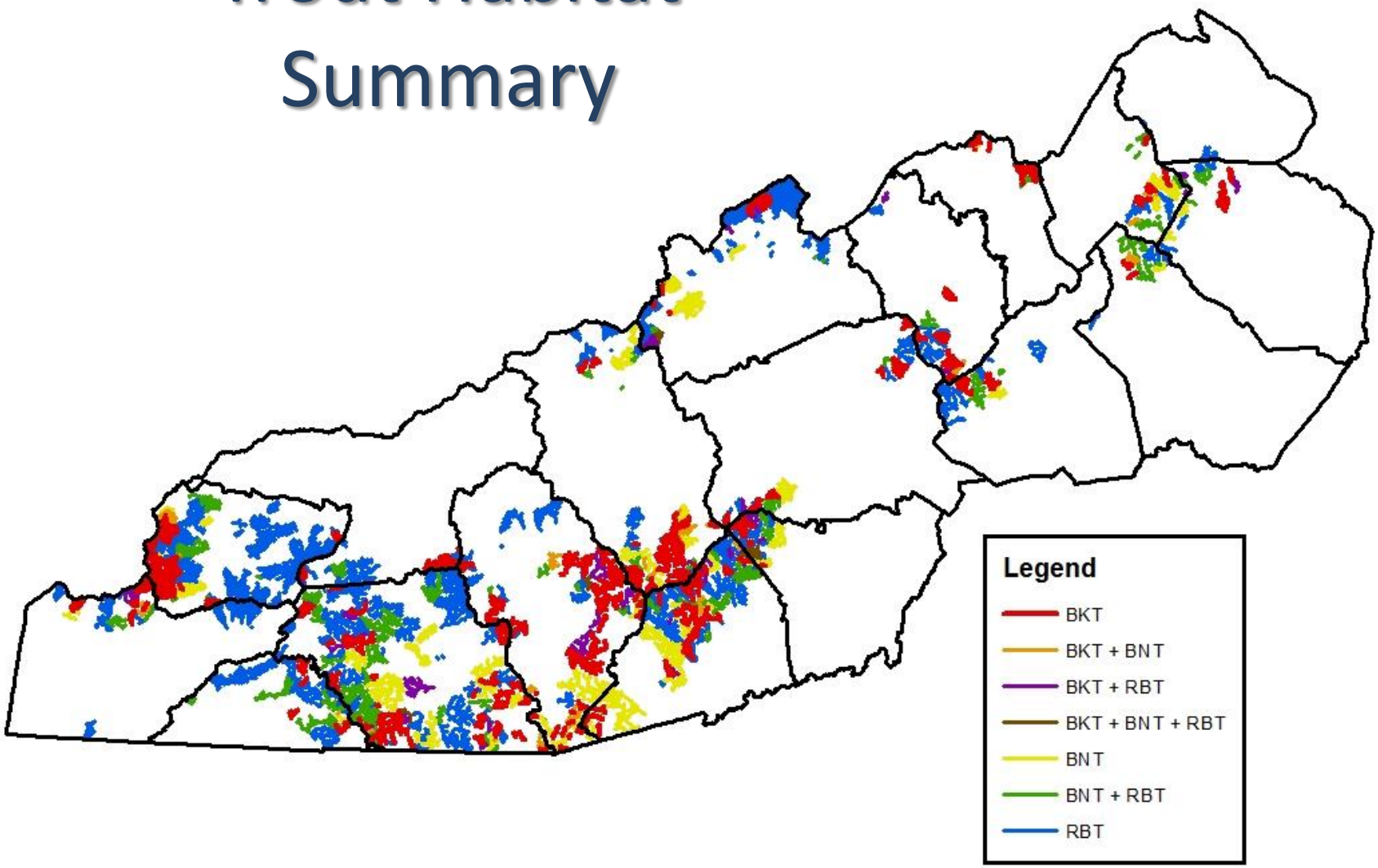
Trout Habitat Summary



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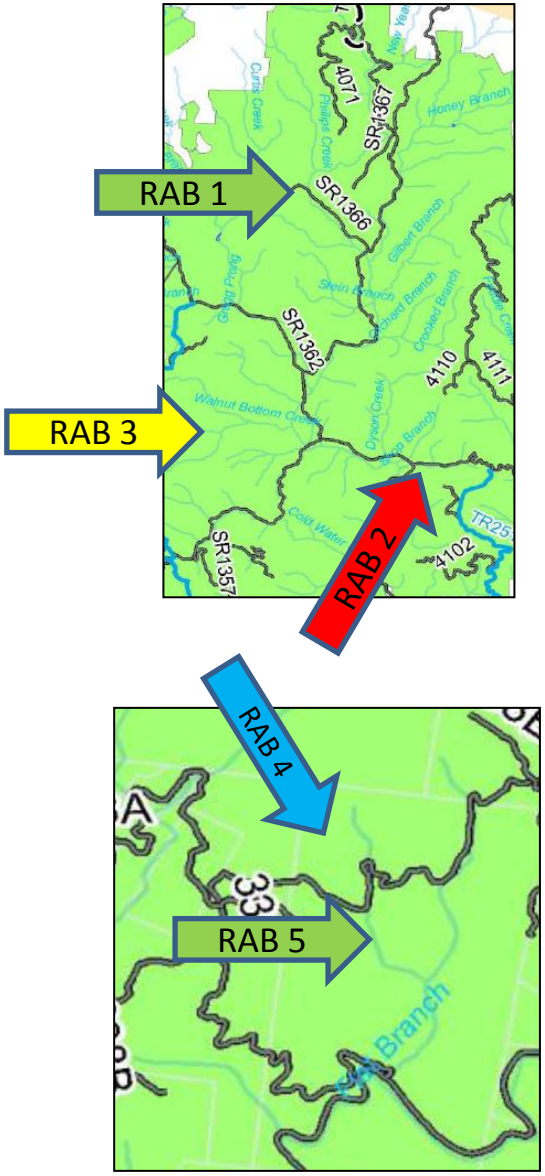
Identify places on the maps that are important to you or that you think should be highlighted for specific management or species.



Wildlife Habitat Exercise

1. Write your initials and a number on an Arrow PostIt
2. Place arrow on map with point on the specific location
3. Fill out 4x6 PostIt with your initials, the number, and what's there

Identifier	Species or Habitat
RAB 1	Migratory songbirds in spring
RAB 2	Deer and Turkey need ESH here
RAB 3	High diversity of salamanders
RAB 4	Connect old growth patches
RAB 5	Lots of darters in creek

4. Complete a separate 4x6 PostIt for each district where you leave an arrow

Use up to five (5) arrows per person