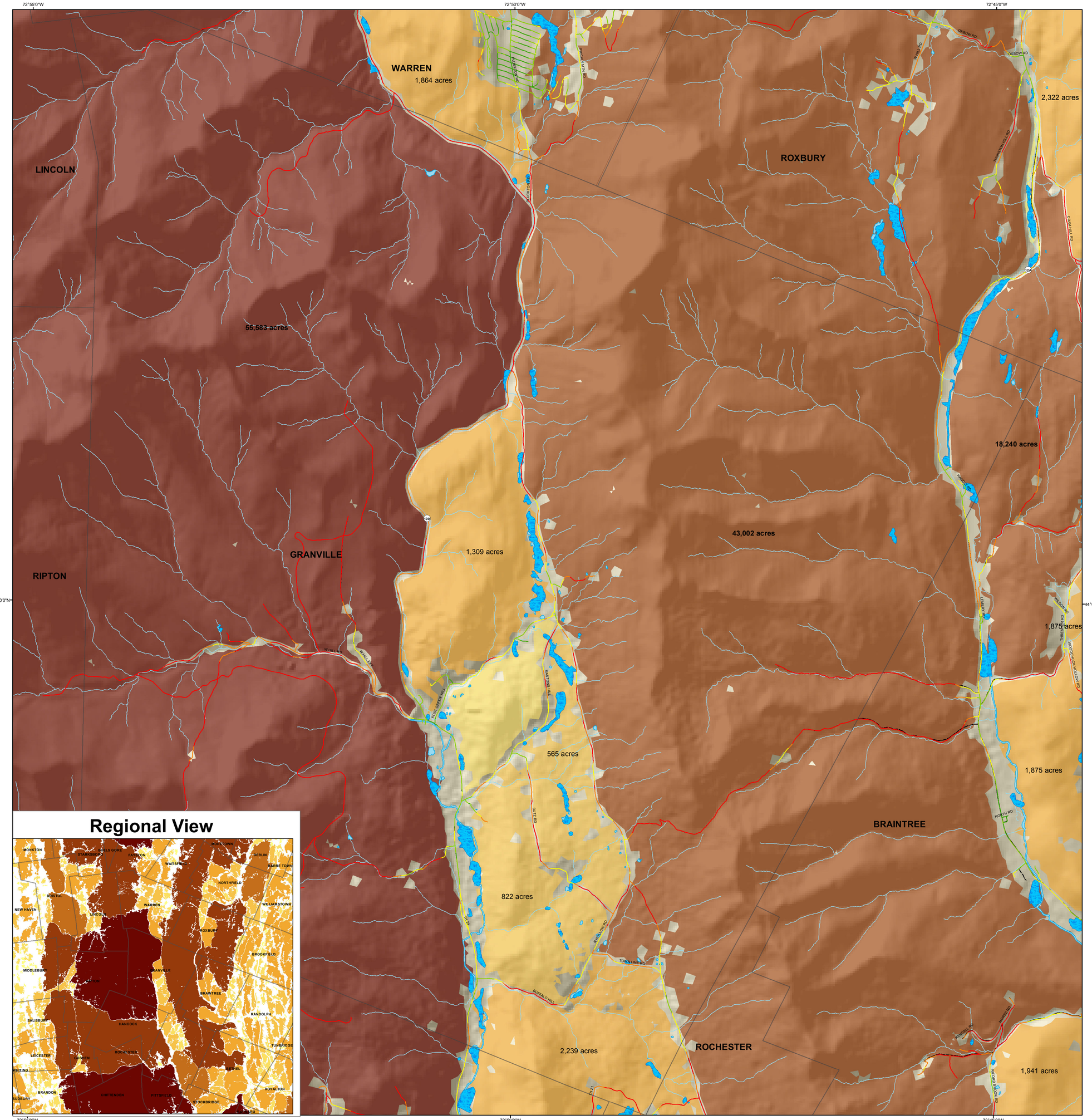
Map 4:
Wildlife Resources at a Town Scale
Granville, VT



Regional View

Habitat Blocks by acreage

- 20 - 100
- 101 - 500
- 501 - 1,000
- 1,001 - 5,000
- 5,001 - 10,000
- 10,001 - 50,000
- 50,001 - 154,564
- Town Boundaries
- Interstate
- Primary & Secondary Roads
- Lakes
- Streams
- Wetlands

Wildlife Road Crossing Linkage Ratings

- 1 (less important)
- 2
- 3
- 4
- 5 (more important)

Data Sources; Vermont Center for Geographic Information, Vermont Fish and Wildlife Department
Vermont State Plane Projection
NAD1983 Datum
Map by Jens Hilke
January, 2014

0 0.45 0.9 1.8 Kilometers

0 0.45 0.9 1.8 Miles

This map shows data most appropriately viewed on the town scale or regional scale, but probably aren't appropriate at the scale of a small parcel or individual property. These data were made to show patterns across large areas and can be used effectively by towns to see the patterns in habitat quality across a town, and how those patterns continue beyond town boundaries.

The two prominent datasets in this map are Habitat Blocks (the background color) and Wildlife Road Crossings (the highlight color on certain road sections.) Together these give a picture of where the biggest blocks of contiguous habitat are as well as where wildlife are likely to cross roads when moving between these blocks. Habitat blocks show contiguous natural cover – including forests, woodlands, wetlands, old fields, and meadows – bounded by roads, development, and agriculture. Conservation biology tells us that larger blocks of contiguous habitat contain greater biological diversity (with all else being equal) than smaller blocks of habitat. So, addressing the largest areas of habitat first is key in any conservation plan.

The pattern in Vermont of where large blocks of contiguous habitat remain adds an interesting twist to the concept we describe above. Our largest areas of contiguous habitat tend to be in upland areas and high elevation areas, or areas where soils are unsuitable for agriculture or development. These areas have experienced less fragmentation than the fertile and developable lowlands and valleys. We've farmed and built many of our roads and houses along streamsides in the valleys, but it is often our valley bottoms where we have the greatest biological diversity. So, as we begin identifying the largest areas of contiguous habitat in our towns, keep in mind that we may be biased towards the uplands and will likely need to include more lowland areas in conservation planning.

Large blocks of habitat are getting increasingly smaller because of development pressure. Species such as far ranging mammals are increasingly utilizing several blocks rather than a single block to get what they need for food, water, shelter and access to mates. So the concept of habitat connectivity comes into play. Wildlife Road Crossings are one way of looking at connectivity for terrestrial species on the move. Certainly there is a lot of wildlife movement that isn't captured by this computer model (such as amphibian crossing areas and aquatic organism passage) but it does offer a first step in addressing the pattern of wildlife movement across your town.