

The Lower CT River and Coastal Region Land Trust Exchange Natural Resource Based Strategic Conservation Plan, A GIS Overlay Analysis

Mission Statement: To develop a plan that will enable effective collaboration towards the creation of large connected natural areas to provide wildlife habitat, to protect water quality and quantity, and to protect working and scenic lands.

Regional Model - Map 1

1004 large natural areas associated with the RiverCOG/LTE Region, these data sets were classified by:

- Size (acreage);
- Percent Core Forest (any point in the forest 300' or more from any type of development); and
- Percent Surface Hydrology (water bodies, streams, intermittent streams, and wetland soils) with 300' intact buffer vegetation.

Primary Corridors (dark green on map) – 86 largest and/or most resource rich large natural areas:

- 68% of area of all large natural areas;
- 81% of all core forest area; and
- 69% of all surface hydrology with intact buffer.

Connecting Corridors (yellow on map) – next 63 largest and/or most resource rich large natural areas;

- 11% of area of all large natural areas;
- 10% of all core forest area; and
- 11% of all surface hydrology with intact buffer.

Primary and Connecting Corridors account for:

- 79% of area of all large natural areas;
- 91% of all core forest area; and
- 81% of all surface hydrology with intact buffer.

Critical Habitats and Natural Diversity areas are always important areas to consider for preservation and conservation through land owner outreach wherever they are located and are shown independently.

Local Model – Map 2

Allows for identification of areas where important natural resources coexist in the greatest densities within primary and connecting corridors. Data sets chosen for the local model consist of:

- Core Forest Areas;
- Early Successional Habitat Areas;
- Surface Hydrology;
- Critical Habitats twenty-five rare and specialized wildlife habitats; and
- Natural Diversity Database Areas State listed species and significant natural communities.

The local model weighted core forest areas, surface hydrology, and critical habitat areas as twice as important as early successional habitat and natural diversity database data sets. On the map areas with the lowest number of co-occurring resources within the primary and connecting corridors are pink, the next highest areas are light green, and areas with the greatest number of co-occurring resources are dark green and black.

