

CT River Watershed (CRW) Pilot Project – Terrestrial Team Meeting – April 22, 2014

Summary of Key Outcomes and Issues Needing More Discussion

- 1) Reviewed the Northeast Terrestrial Habitat Classification System as the basis for developing habitat models for surrogate species and assessing ecological integrity.

OUTCOME: Gained an understanding of the hierarchical nature of the classification system and that we will be focusing on the Formation and Macrogroup levels of the classification for most of the pilot project work.

- 2) Reviewed the process and criteria used to identify Representative Species in the Northeast and the initial set of 13 species for which habitat models are being developed by the Designing Sustainable Landscapes project.

OUTCOME: General consent that these 13 species are an acceptable group to use as the representative species for the CRW pilot project.

ISSUE FOR DISCUSSION: It was noted that the initial set of 13 species does not include many species with limited dispersal. There was interest in seeing more of these kinds of species included in the landscape conservation design process for the pilot project.

- 3) Reviewed species and habitats potentially not-well represented in the CRW. Rachel Cliche did some analyses of habitat needs of SGCN compared with habitat types covered by proposed representative species and found some gaps for some of the less common habitat types and associated species.

OUTCOME: Bat hibernacula (caves), cliff and cobblestone river shoreline are rare habitat types not mapped in the terrestrial habitat classification system but support listed and high conservation concern species. Suggestion to include existing known locations/distributions for these habitat types and associated species in the landscape conservation design process. However, note that there is significant concern regarding data security and how locations of species of concern might be represented in products available for public use.

ISSUE FOR DISCUSSION: Peatlands are rare but mapped in the CRW and are not covered by a representative species, yet are used by some rare and unique species. Should this habitat type receive some emphasis in the landscape conservation design?

ISSUE FOR DISCUSSION: Pine barren habitats are represented by Prairie Warbler, but this is not one of the first 13 species being modeled and is not specifically tied to pine barrens. Many unique species and species of concern, especially invertebrates, are associated with these barrens. There was interest in giving emphasis to pine barrens in the landscape conservation

design process, either through a species that better represents pine barrens or by specifically mapping pine barren habitat in the CRW.

ISSUE FOR DISCUSSION: How much should this effort focus on being a pilot for just the CRW versus producing processes and products that could be easily transferable to other locations in the Northeast (e.g., not much coastal or pine barren habitat in the CRW but these would be highly transferable to other locations in the Northeast)? There is interest in including pine barren habitat and one or two coastal representative species in the landscape conservation design for the CRW. It was also mentioned that advocating for modeling salt marsh sparrow as part of this pilot would create an immediate and transferable linkage to work in the Long Island Sound and other estuarine systems.

ISSUE FOR DISCUSSION: Should the process for incorporating rare species/habitats into the landscape conservation design be a “before” or “after” approach relative to the representative species? A suggestion was made to run the landscape design analyses first with the representative species and see how well the rare species are covered, but there seemed to be more support for a more inclusive approach of using the rare species/habitats along with the representative species from the start in the landscape design analyses.

- 4) Reviewed the basic concepts behind the Index of Ecological Integrity (IEI) and how it is intended to be used in the landscape conservation design process. IEI is scaled from 1 – 100 for each habitat type (i.e., mostly macrogroup-level classifications). The landscape design will incorporate the areas with the highest scores (e.g., top 25%) for each habitat type into a combined map of areas of high ecological integrity, but habitat types can be weighted/ranked to give more emphasis to habitats of greater interest/value and the top x% of IEI score to include in the landscape design can be adjusted to incorporate more or less of the overall landscape into the core areas of high ecological integrity.

ISSUE FOR DISCUSSION: Decisions need to be made on how to weight/rank habitat types and on what % of the IEI scores to include in the landscape design for identifying core areas of high ecological integrity. We intend to discuss this topic in more detail during the last part of the Core Team meeting on April 25.

- 5) Discussed population objectives within the CRW for the 13 representative species for which habitat models are currently being developed. Reviewed existing population objectives for these species at continental, regional, and state levels, as well as population trend information. A proposal was presented for setting population objectives (within the time frame of 2030) of maintaining the current abundance and distribution for most of the representative species, but setting a goal of increasing populations for species that have significantly declined, including American Woodcock, Eastern Meadowlark, and Wood Thrush.

OUTCOME: General agreement that the proposal for population objectives of increasing Woodcock, Meadowlark and Wood Thrush while maintaining current populations of the other 10 representative species was acceptable.

ISSUE FOR DISCUSSION: Further discussion on the amount of an increase at which to set the population objectives for Woodcock, Meadowlark, and Wood Thrush is needed. There was some support for following the BCR-level objectives set by the bird plans, which would essentially be a 50% increase for all three of these species. However there was recognition that this level of increase might not be realistic for all three species given that these species represent habitat types that are somewhat mutually exclusive and given other land use pressures. There was also discussion of whether it would be appropriate to have different population objectives for different parts of the CRW. For example, a 50% increase in meadowlark might be more feasible in CT/MA where there is enough agricultural land for reaching such a goal, but that high of an increase might not be realistic for NH/VT.

ISSUE FOR DISCUSSION: How do these population objectives inform and fit in with a place-based landscape conservation design? The Terrestrial Team was generally supportive of these population objectives, but it is not yet clear to everyone how they will be used in the overall landscape design process.