QUARTERLY PROGRESS REPORT

Quarter: (circle one)　　　2022 1st　　　2022 2nd　　　（2022 3rd）　　　2022 4th

Grant Program, Number and Title: RCN GSA 00151

Contractor: The Nature Conservancy. Center for Resilient Conservation Science

Project Leader: Mark Anderson

Abstract:

This quarter we finished compiling and reviewing the datasets needed to update the set of metrics agreed on by the steering committee – a big step. The committee met once and we updated them on the proposed process we developed with Jon Kart, Cathy Hafner and Dee Blanton shorter timeline than originally envisioned. The committee made key decisions on the habitat classification scale, the ecoregions (EPE), and states-subregion-region as our reporting units. They approved and supported the decision to keep-our-heads-down and focus on getting the metrics and results calculated so that they are available as soon as possible to teams. Towards that end we are now assembling the secured lands dataset, working with the Global Forest Watch and LC-MAP datasets, and rerunning the bird analysis, with a goal of having a draft Forest Chapter to the committee in September for review and discussion.   We are also exploring the use of Tableau (data display tools and software) as a potential alternative to producing hundreds of tables and charts.

Were planned goals/objectives achieved last quarter?

Yes, we have all the data compiled and are working on producing a draft of the forest chapter for review and discussion.

Progress Achieved: (For each Goal/Objective, list Planned and Actual Accomplishments)

1) Conservation Lands: Yes, all states have submitted their data, although it took until the end of June for some. We are not assembling it into a regional dataset and will then review and circulate it for Q.C.

2) Forests and Wetlands: Yes, our focus has been on creating these chapters which we hope to release in September. We developed and tested methods for measuring changes in forest condition using LC-MAP, Global Forest Watch, and NLCD 40-year change data and have been pleased with the results for forest loss and gain, conversion to development, temperature and moisture change, and fragmentation. Now we are calculating each of these metrics by forest type (using the approved lexicon), ecoregion, state, subregion, and region. We are exploring new ways for displaying all this information that might be more versatile than our standard maps, charts, and tables. For example, the software Tableau can link those three elements dynamically and visually to let users explore the analysis is more detail. We are also looking into other sources of data for insect outbreaks such as USFS Treemap.

3) Birds: We have assembled the BBS survey data going back to 1991 and matched it with the table we had created in 2011. We have tagged the birds with their preferential habitat type and are working on the analysis of recent and long-term trends for forest bird preferential to Pine-Oak, Northern Hardwood and Spruce-Fir. Next step is to look at these trends by state, subregion, and region.

4) Rivers and Streams. The base data (streams, lakes, dams, functionally connected network, floodplain, temperature classes, geology, water quality and surface water) are all compiled and run. We are just beginning to analyze the data by habitat type, state, and region. A lot to do on this. Explored ways to simplify the stream classification

5) Lakes: Lake data set is ready to run awaiting revised secured lands and loon data.

6) Unique habitats: Geology and habitat map datasets are ready to run, awaiting the revised secured lands data.

7) Climate Change: No progress this quarter – this needs attention.

Difficulties Encountered in Meeting Goals and Objectives:

The only difficulty was that the TNC Boston office has closed and is reopening in September as a much small hub. Two of us were hit with COVID. Thus, our team is working remotely when we had hoped for much for face time

Activities Anticipated Next Quarter:

1) Conservation Lands: Released for review and applied to the other datasets.

2) Forests and Wetlands: Both chapters completed, circulated to the steering committee, and finalized.

3) Birds: Analysis complete for all habitats and birds.

4) Rivers and Streams. Analysis underway and chapter partially drafted.

5) Lakes: Analysis underway and chapter partially drafted.

6) Unique habitats: Chapter drafted for review.

7) Climate Change: Analysis of climate resilience/refugia and trends underway.

Expected End Date:

The end of February 2023.

Costs:

Total life to date expenses (include this quarter): $38,603.08

Total Approved Budgeted Funds: $80,000

Are you within the approved budget plan and categories? Yes

The foregoing information is accurate as of the date set forth below.

THE NATURE CONSERVANCY – CENTER FOR RESILIENT CONSERVATION SCIENCE

By: _Mark Anderson_ _____

Name: Mark Anderson _____

Title: Director, Center for Resilience Conservation Science

Date: 07/28/2022