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 begin compiling and reviewing the datasets needed to update each metric in the 2011 Conservation Status as recommended by the steering committee. This included launching a collaborative process with Agency and Nature Conservancy staff in every state to revise and quality check their conservation lands data. We also met with Jon Kart, Cathy Hafner and Dee Blanton to strategies how to get all the work done on a much shorter timeline than originally envisioned so that the results are available earlier to other teams within the overarching project. The outcome of that meeting was to rethink and minimize our use of the steering committee. In particular, we will use the committee to approve the list of deliverables, review project milestones, and keep the project on track, but we will not engage them to review each dataset, discuss individual analysis or review draft results.

Were planned goals/objectives achieved last quarter?

Yes, we got the project moving on a new and faster track.

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

1) Conservation Lands: Launched a process to compile new Conservation Area data by identifying point people in every state both within the F&W agencies and within The Nature Conservancy (TNC) field offices. The latter TNC staff, in partnership with their respective agencies, are compiling revised data on conservation areas, reviewing their GAP status assignments, and submitting from the compiled state data to us in May 2022. Steering committee formed and kick-off meeting held

2) Forests and Wetlands: Reviewed the developing habitat lexicon and grouped our mapped habitats to match. Compiled datasets on forest type, land use change (LCMAP, LMAS, NLCD), forest loss and gain, conversion to development, insect outbreaks, NDVI (Forewarn2) temperature and moisture change, and fragmentation. Begin testing how we use these datasets to measure trends in condition.

3) Birds: Downloaded BBS survey data for 1991-2019 and assembled it into a file for querying change over the last 10 years

4) Rivers and Streams. Reviewed and upgraded the dam dataset for the Northeast and Mid-Atlantic. Merged NHD 2+ stream data with the dam dataset to identify and create functionally connected networks and derive stats on fragmentation. Compiled information on stream temperature classes, geology, base flow, and surface water.

Compiled Fathom data and use it to develop a 100-year floodplain database. Begin running models of water quality (N, P, Sediment). Explored ways to simplify the stream classification

5) Lakes: Compiled and revised Lake/pond dataset. Reviewed classification for ways to simplify. Assessed changes and revisions to the national lake assessments.

6) Unique habitats: No progress this quarter.

7) Climate Change: No progress this quarter.

Difficulties Encountered in Meeting Goals and Objectives:

The only difficulty was in getting the contract finalized and signed

Activities Anticipated Next Quarter:

1) Conservation Lands: Compile revisions into revised dataset and get review.

2) Forests and Wetlands: Continue to develop methods and data for condition and trend analysis. Calculate securement and conversion statistics.

3) Birds: Perform analysis of bird/state trends

4) Rivers and Streams. Continue to analysis data and develop robust condition statistics. Develop analysis of water quality, floodplain naturalness, overlay conservation land data and begin to develop other datasets for freshwater protection

5) Lakes: Run analysis of securement within Lake buffers. Explore cold lake viability criteria

6) Unique habitats: Overlay with conservation lands to assess securement and conversion.

7) Climate Change: Begin to explore climate resilience and refugia datasets.

Expected End Date:

The end of February 2023.

Costs:

Total life to date expenses (include this quarter): $ 10,177.14

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:  _____

Name: Mark Anderson _____

Title: Director, Center for Resilience Conservation Science

Date: 04/28/2022