

NC Conservation Benefits Calculator – Reporting Template

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Instructions

This template provides language to describe the results for a particular parcel or area of land from the [NC Conservation Benefits Calculator](#). We recommend copying and pasting relevant text into a new Word document. Then, fill in blanks in the text with values from the table that appears after you run the tool, matching the letters in the example table to the letters in each blank.

Attribute	Values
Area of AOI (acres)	A
Avg carbon (tons/acre)	B
Avg carbon seq (kg/acre/yr)	C
Area meeting equity criteria (acres)	D
Natural area conversion (acres)	E
Working land conversion (acres)	F
Average biodiversity value	G
Pollinator-dependent cropland (acres)	H
Pollinator habitat near cropland (acres)	I
TNC connected land (acres)	J
TNC resilient land (acres)	K

You can use the following text to cite results from the benefits calculator: This information was obtained from the [NC Conservation Benefits Calculator](#) (Duke University & Conservation Trust for North Carolina, 2023).

Reporting template

Area and conversion risk

This parcel has a total area of A acres, of which E acres are natural lands at risk of conversion to development by 2050 and F acres are working lands at risk of conversion to development by 2050, based on projections from the EPA’s Integrated Climate and Land-use Scenarios. In total, $(E+F)/A$ % of this parcel is projected to be developed by 2050. In comparison, about 3.3% of all land in North Carolina is natural or working land at risk of conversion by 2050.

Biodiversity and resilience

This parcel has a mean score of G on the NC Natural Heritage Program’s biodiversity and wildlife habitat assessment, which incorporates rarity and distinctiveness of habitats, ecosystem function, and data accuracy. Scores range from 1-10, with 10 representing the highest value for biodiversity. The mean biodiversity and wildlife habitat assessment score for the state is 2.6.

This parcel contains K acres of land identified as climate resilient by The Nature Conservancy. This climate-resilient land is expected to maintain its species diversity and ecosystem function as the climate changes, due to its landscape diversity and local connectedness. In total, 33.6% of all land in North Carolina is classified as resilient by The Nature Conservancy.

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This parcel also contains J acres of land identified as a connected flow area by The Nature Conservancy. These areas are places where wildlife can move across the landscape, which will become even more important as species move in response to climate change. 17.4% of all land in North Carolina is classified as connected by The Nature Conservancy.

Carbon storage & sequestration

This parcel has an average of B tons of carbon per acre stored in its forests, based on 2018 data from the US Forest Service. This includes carbon in live trees and the understory (aboveground and belowground), dead trees (down and standing), litter, and soil organic carbon. This number does not include carbon stored in habitats other than forests, which may be significant in certain areas. The mean forest carbon stock for North Carolina is 2.1 tons of carbon per acre.

Forests in this parcel are expected to sequester an additional C kilograms of carbon per acre each year if they continue to grow undisturbed. The mean forest carbon sequestration for North Carolina is 237.7 kilograms of carbon per year.

Wild pollination

This parcel contains I acres of potential wild pollinator habitat that is close enough to crops that require pollination for pollinators to move between the habitat and cropland. This habitat area is likely supporting pollinators that may be contributing to increased yields of those crops. About 25.6% of all land in North Carolina is potential pollinator habitat near pollinator-dependent crops.

This parcel contains H acres of pollinator-dependent cropland that is close enough to wild pollinator habitat for pollinators to move between the habitat and cropland. These croplands are likely benefiting from the proximity of pollinator habitat. About 4.7% of all land in the state is pollinator-dependent cropland near pollinator habitat.

Equitable access to green space

This parcel contains D acres that are socially vulnerable (score above the state median on the CDC social vulnerability index) and are more than 0.25 miles from existing green space. This area could increase equitable access to green space in North Carolina if it is open to the public in the future. About 45% of all land within North Carolina falls into this category.