

"Carbon sequestration is the process of storing carbon in a carbon pool." (1) This graphic of the carbon cycle shows how carbon moves from the atmosphere to plants through photosynthesis, from plants to animals through food chains, from plants and animals to soils. At each stage carbon is released and can be stored in trees, plants, roots, micro and macro organisms, soil and water. (2)

"Natural Climate Solutions" are nature-based carbon capture methods such as those noted in the chart; land conservation and restoration, improved forest and land management, restoring and protecting wetlands and grasslands, and improving agricultural land management-such as cropland and grazing practices, using cover crops and compost application. (3) These methods are being studied globally as strategies to reduce emissions and to provide additional co-benefits such as; improving water filtration, flood protection, soil health, improved plant productivity, biodiversity habitat protection, pollinator protection, enhancing public health, and economic development.(4)

- (1) Glossary G.4 2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories https://www.ipcc.ch/site/assets/uploads/2019/12/19R V0 02 Glossary.pdf
- (2) Source: Accessed 2/18/20 https://portfolium.com/HelenPascualPe/portfolio

<sup>(3)</sup> J. E. Fargione, S. Bassett, T. Boucher, S. D. Bridgham, R. T. Conant, S. C. Cook-Patton, P. W. Ellis, A. Falcucci, J. W. Fourqurean, T. Gopalakrishna, H. Gu, B. Henderson, M. D. Hurteau, K. D. Kroeger, T. J. Lark, S. M. Leavitt, G. Lomax, R. I. McDonald, J. P. Megonigal, D. A. Miteva, C. J. Richardson, J. Sanderman, D. Shoch, S. A. Spawn, J. W. Veldman, C. A. Williams, P. B. Woodbury, C. Zganjar, M. Baranski, P. Elias, R. A. Houghton, E. Landis, E. McGlynn, W. H. Schlesinger, J. V. Siikamaki, A. E. Sutton-Grier, B. W. Griscom, Natural climate solutions for the United States. Sci. Adv. 4, eaat1869 (2018).

<sup>(4)</sup> https://www.carbonbrief.org/analysis-how-natural-climate-solutions-can-reduce-the-need-for-beccs Accessed: 2/18/20