TO: All who attend faculty meetings

FROM: President's Commission on Environmental Sustainability (PCES)

RE: Progress on Building Climate Resilience at Dickinson and in Central Pennsylvania

DATE: August 2023

Acting on a resolution passed by the Dickinson faculty, President John Jones signed the Resilience Commitment of Second Nature in December 2022. Second Nature is a non-profit benefit corporation that initiated and coordinates the Resilience Commitment, a program that engages over 100 colleges and universities in working to make their campuses and communities resilient to climate change.

Climate resilience is the capacity to anticipate, prepare for, limit, prevent, withstand, and recover from impacts of the changing climate and to adapt and thrive in an uncertain future.

Responsibilities of signatories include:

- Develop a climate action plan to increase campus and community resilience.
 - Create a working group composed of campus and community members to guide development and implementation of the plan.
 - Assess climate resilience of the campus and the community and develop indicators for tracking progress in increasing resilience.
 - Develop a plan for increasing campus and community resilience to be adopted within 3 years of signing the commitment.
- Make climate resilience a part of students' educational experience and engage students and faculty in research on climate resilience.
- Report on progress annually to Second Nature and make the report publicly available.
- Review, revise, and resubmit the climate action plan every five years.

To guide this process, PCES established the Climate Resilience Working Group as a subcommittee of PCES in spring 2023. The Working Group is co-chaired by Neil Leary and Ken Shultes. Other members include Marisa Arreola '24 (student), Allyssa Decker (ENST faculty), Elizabeth Grant (Cumberland County Planning Department), John Henson (BIOL faculty), Caroline Krauth '26 (student), Lauren Lasater (Compliance & Risk Management), Lindsey Lyons (CSE), Jillian Mann '26 (student), Lindsay Mintz (Student Life), Sara Markowitz (Clarke Forum), Olivia Ngai '26 (student), Sumaiya Quayum (CSE), Hanna Roman (FREN faculty), Kristin Strock (ENST faculty), Jill Swartz (Public Safety), and Jared Woolston (Carlisle Borough Manager's Office).

The Working Group launched the initiative Building Climate Resilience at Dickinson and in Central Pennsylvania and engaged campus and off-campus communities in spring 2023. In summer 2023, the Working Group produced a scope of work, an approach for assessing resilience, and a review of evidence for changing climate hazards in the County. These activities are summarized below.

<u>Campus and Off-Campus Communities Engaged</u>: a number of events were held in spring 2023 and a webpage created (see <u>Climate Resilience</u>) to raise awareness of the initiative and to invite participation. The events include:

- Sustainability Expo, March 31, 2023: The Working Group co-chairs participated in the Sustainability Expo to share information about the climate resilience initiative. Over 300 people attended the Expo, scores of whom were engaged in conversation about the resilience initiative.
- Climate Resilience Open Meeting, April 11, 2023: An interactive, open meeting for Dickinson, Carlisle, and Cumberland County community members was held in the Social Hall and attended by 22 people, including Dickinson students, faculty, and staff and members of Carlisle-area communities.
- Faculty Gathering on Climate Resilience, April 25, 2023: 14 faculty members and the directors of CSE and CCLA gathered to discuss ways in which climate resilience might be incorporated in teaching, research, and practices at Dickinson.

<u>Scope of Work</u>: A scope of work for the initiative was developed and adopted by the Climate Resilience Working Group in June 2023. The scope of work describes the need, purposes, principles, general approach, scope, and timeline for *Building Climate Resilience at Dickinson and in Central Pennsylvania*. **Access online:** Scope of Work.

<u>Approach of the Assessment</u>: The main activity in year 1 of the initiative is to assess climate resilience at Dickinson, in Carlisle, and in Cumberland County. The approach for assessing resilience was developed and adopted by the Climate Resilience Working Group in June 2023. **Access online:**<u>Approach of the Assessment.</u>

In fall 2023, the assessment will focus on Cumberland County and Carlisle, while Dickinson campus will be the focus of assessment efforts in spring 2024. The county and borough assessment will be conducted by students enrolled in the Baird Sustainability Fellows Practicum course. A research protocol for the students' research was submitted and verified in July 2023 as exempt by Dickinson's Institutional Review Board. Efforts were begun in August 2023 to identify and recruit key informants to be interviewed by the students, and responses have been very encouraging. Findings will be presented by the students and feedback invited from community members at a community stakeholder workshop to be held in December 2023. Plans for assessment of climate resilience of the Dickinson campus are in development.

<u>Changing Climate Hazards in Cumberland County</u>: A review of evidence for changing climate hazards in the County was drafted to present current knowledge about Cumberland County's climate and climate hazards, how they are changing, and how they are likely to change in the future. It is intended to serve as a resource and starting point for the climate resilience initiative. **Access online:** <u>Changing Climate Hazards</u>.

The information presented is drawn from peer-reviewed scientific sources, including the 6th Assessment Report of the Intergovernmental Panel on Climate Change (IPCC, 2021a), the 4th National Climate Assessment of the U.S. Global Change Research Program (USGCRP, 2017), and the 2021 Pennsylvania Climate Impacts Assessment from the Pennsylvania Department of Environmental Protection (PA DEP, 2021). Climate projections for Cumberland County are sourced from the dataset that was used by the USGCRP for the 4th National Climate Assessment.