Research, Restoration & Recovery The Arboretum at Flagstaff Research Department

Climate Change Center

The Arboretum at Flagstaff applied for and acquired funding through the Institute of Museum and Library Services (IMLS) to develop, build and evaluate three outdoor kiosks for the Interactive STEM Learning Center, or I-STEM, (currently called the Climate Change Center) which will engage K-16 students and general audiences in the science, technology, engineering, and mathematics of real-time climate change research, interpretation, and mitigation. The Climate Change Center will be developed around a research theme based on the Southwest Experimental Garden Array (SEGA). SEGA's primary purpose is to integrate the study of climate change and genetics to help develop climate change mitigation strategies. SEGA is a research facility being developed by Northern Arizona University, with National Science Foundation funding. SEGA consists of 10 experimental research garden sites across Northern Arizona, two of which are located at The Arboretum.

The completion of the Climate Change Center will accomplish a primary directive in The Arboretum's newly developed strategic plan—to become a major STEM education site in northern Arizona. Over 20,000 visitors per year visit The Arboretum to learn about the flora and fauna of the Colorado Plateau and the environment in which they are found. Additionally, The Arboretum is charged with providing unbiased information on environmental threats and one of the biggest threats to our environment is climate change. Yet the issue is politicized and climate change education is often not place-based. We seek to raise awareness about climate change, connect people to on-the-ground scientific investigation, teach students and teachers, and demythologize a politicized issue. Development of the Climate Change Center is occurring in three phases: Phase 1 is the development of place-based climate change teaching curricula (available as a pdf download on our website) and public outreach materials, language development for interpretive signs, and construction of the first kiosk, which addresses the general issue of climate change and mitigation efforts. This phase is completed and was funded through a grant from the Nina Mason Pulliam Charitable Trust to The Arboretum in 2012. Phase 2, is in progress. We are designing and constructing an interactive, outdoor, public display that highlights the science, technology, engineering, and mathematics involved in place-based, climate change research. Phase 3, for which funding will be sought, will include a virtual kiosk showcasing website pages that will offer introductory material to the Climate Change Center, teaching guides and curriculum, and on-line, real time data access and visualization as well as three additional Exhibit kiosks.



