

AFCEC enables partnership between USAFA, Colorado Springs for stream management, preservation of endangered species habitat

By AFCEC Environmental Directorate

Dr. Clark Jones of AFCEC/CZOM is currently assisting with a planning and programming effort between USAFA and the City of Colorado Springs (COS) to include mutual project funding and U.S. Air Force Academy's (USAFA) use of the city's Stormwater Enterprise office and engineers to help identify, design, review, contract, and implement projects. This effort led to an increase in projected funding for projects representing long-term solutions, along with collaborating meetings between USAFA and the COS Stormwater Enterprise Team.

This partnership is paramount considering the USAFA covers 18,455 acres along the Rocky Mountain Front Range in Colorado, about six miles north of downtown Colorado Springs and includes key stream corridors that are home to the federally threatened Preble's meadow jumping mouse (*Zapus hudsonius preblei*) as well as being a major stormwater conduit for the city. Stormwater and threatened-species management go hand-in-hand and this new partnership is mutually beneficial.

The Academy supports a significant portion of the Preble's mouse population as well as the greatest extent of contiguous suitable habitat in the Arkansas River Basin. Therefore, USAFA's management and oversight is critical for the long-term conservation and recovery of the species. One of the most important habitats on the Academy for Preble's meadow jumping mouse is Monument Creek. The Academy encompasses approximately 12% of the Monument Creek Watershed, but nearly 75% of the watershed's drainage flows through the Academy before exiting the base's southern boundary.

With support from Dr. Jones, the conservation of the Preble's meadow jumping mouse and the Academy is making great strides in the preservation of habitat along Monument Creek, as it represents one of the best remaining plains streams in the upper Arkansas River drainage. Unfortunately, this creek is threatened by changes in hydrology resulting from commercial and residential development outside the Academy boundary. Increases in impervious surfaces surrounding the Academy create unnaturally high flows from stormwater runoff, damaging important habitat. Several ongoing projects on USAFA are designed to mitigate damage, but these projects are costly and do little to address issues beyond the borders of the installation.

In an effort to reduce habitat impacts on the Academy and protect infrastructure downstream, Dr. Jones will conduct project coordination with the USAFA and the COS as they pursue an Intergovernmental Service Agreement for stormwater infrastructure construction and maintenance within the Monument Creek Watershed. This agreement will allow USAFA and the city to partner on future stream channel stabilization and habitat restoration projects. Partnering to maintain the integrity of the stream conditions on the Air Force Academy will enable habitat preservation for a federally-listed species and while simultaneously protecting valuable assets for the City of Colorado Springs downstream.