

*Project Summary*  
*Rocky Mountains Cooperative Ecosystem Studies Unit*

**Project Title:** Sustainable Urban Development Planner at Fort Campbell, KY

**Type of Project:** Technical Assistance

**Project Discipline:** Natural

**Funding Agency:** US Army Core of Engineers

**Other Partners/Cooperators:** Colorado State University

**Effective Dates:** 9/19/2011 - 9/18/2015

**Funding Amount:** \$440,944 [FY15: \$93,000; FY14: \$93,347; FY13: \$87,789; FY12:\$84,839; FY11: \$81,969]

**Investigators and Agency Representative:**

**Investigator:** Bob Brozka, Center for Environmental Management of Military Lands, Colorado State University, Fort Collins, CO; (970) 491-7190; Robert.Brozka@ColoState.EDU

**Project Abstract:**

The Directorate of Public Works (DPW), Environmental Division, Fort Campbell seeks to provide subject matter expert (SME) to develop and monitor appropriate desired future conditions for low impact development and sustainability performance indicators for vegetation, community and resource management for trees and green space in the garrison cantonment area. Low impact development and sustainability initiatives are the results of sound, forward-thinking Installation planning, designing, and construction activities emphasizing state of the art strategies for sustainable site and green space development, water savings, energy efficiency, materials selection and indoor environmental quality. Contract will provide SME (Certified Arborist) with urban planning and development experience and education to provide technical and professional input to Installation facility development and green infrastructure master planning. Services will be provided primarily to DPW personnel and other Garrison Directorate personnel involved in cultural resources management work. Services may also be extended on an infrequent basis to active duty Soldiers, other Department of Defense (DoD) civilians, other off-site contractors, product vendors, and commercial service providers. High quality, timely, and efficient personnel services shall be provided to all eligible personnel in the Fort Campbell area of responsibility. Tasks performed shall be accurate and in accordance with all applicable regulatory guidance.

This research focuses on the following objectives:

- 1). Low Impact Development to interface with facility managers, privatization partners, planners, designers, and other governmental personnel with regard to cantonment development.
- 2) Develop land-suitability analysis reports through City Green software to assess impacts of developmental plans as needed.
- 3) Make recommendations to facility development projects with respect to tree selection, placement and maintenance, estimate environmental benefits added through tree shading and reduction of storm-water runoff volumes, and the economic and social benefits of other low impact development initiatives.
- 4) Develop appropriate Desired Future Conditions (DFCs) for green scapes, natural landscape, and urban forest throughout the Fort Campbell cantonment area. Make recommendations and provide technical guidance for future green scapes, natural landscape, and urban forest development and maintenance.
- 4) Increase public environmental awareness and access to open green spaces and the natural landscape within the cantonment area.
- 5) Sustainability including, ArcMap GIS urban forest cover, risk assessment, planting plans, insect monitoring, and developing urban landscape sustainability criteria and performance indicators.
- 6) Urban forest management

**Outcomes with completion dates:** September 5, 2016

**Keywords:** Sustainable Urban Development Planner, Fort Campbell, KY, Colorado State University, Center for Environmental Management of Military Lands