Example B
CESU Cooperative Agreement
Single-Source Determination Form

Project Title: Vulnerability Analysis of Western Water Resources to Climate Variability and Change

Provider: Colorado State University (CSU) and Professor X

Department of the Interior Policy (505 DM 2) requires a written justification which explains why competition is not practicable for each single-source award. The justification must address one or more of the following criteria. Check the criteria that apply and provide a brief written explanation for each.

□..Unsolicited Proposal – The proposed award is the result of an unsolicited assistance application which represents a unique or innovative idea, method, or approach which is not the subject of a current or planned contract or assistance award, but which is deemed advantageous to the program objectives; N/A

□..Continuation – The activity to be funded is necessary to the satisfactory completion of, or is a continuation of an activity presently being funded, and for which competition would have a significant adverse effect on the continuity or completion of the activity; N/A

□..Legislative intent – The language in the applicable authorizing legislation or legislative history clearly indicates Congress’ intent to restrict the award to a particular recipient N/A

X□..Unique Qualifications – The applicant is uniquely qualified to perform the activity based upon a variety of demonstrable factors such as:

a. Location: Colorado State University is located in Ft. Collins, CO. The US Forest Service office that is also participating in this effort is also located in Ft. Collins. The programmatic and technical leads for the Bureau of Reclamation are located in Lakewood, CO. The close proximity of CSU to the Bureau of Reclamation and the U.S. Forest Service provides cost efficiencies and increases collaboration effectiveness.

b. Property ownership: Colorado State University and Professor X have developed the Statistical Eco-Hydrology Model (SDEM). SDEM provides unique capability to model the interaction of land use, vegetation, and climate in water balance dynamics. SDEM development was funded through Department of Energy grants totally more than $600,000, with additional development support from the US Forest Service at a cost of about $180,000. CSU will apply the SDEM model and
their modeling expertise to the research effort funded under this cooperative agreement (i.e. Vulnerability Analysis of Western Water Resources to Climate Variability and Change)

c. **Voluntary support capacity:** The U.S. Forest Service and CSU have collaborated on vulnerability analysis research since 2005 under Joint Venture Agreement (JVA) No. XYZ and on estimation of US Water Supply under other JVA’s since 1995. The US Forest Service and CSU collaboration represents an established capacity representing in excess of $300k in past direct cost research investments and capability development relevant to the subject matter research. The US Forest Service and CSU will continue this established collaboration by jointly participating on the subject matter research project. Reclamation's participation as a 3rd party collaborator under this cooperative agreement provides a unique opportunity to leverage Reclamation's investment with the established USFS and CSU collaborative capacity.

d. **Cost-sharing ability:** CSU is contributing an estimated $35,400 toward this effort in the form of reduced indirect costs. By utilizing the Cooperative Ecosystem Study Unit agreement, CSU indirect costs will 17.5% vs. the standard 47%. The $35,400 represents the differential costs for the estimated 3-year project cost of $120,000.

e. **Technical expertise:**
   - The CSU and US Forest Service expertise described above.
   - Dr. Econ, Research Economist, US Forest Service, Rocky Mountain Research station will be providing collaborative expertise in the form of technical peer review, consultation on methods of projecting water demands, and providing access and synthesis of past research and technical work in this area of research that has been performed by the U.S. Forest Service.
   - The Principle Investigator for CSU(Professor X) has worked on similar research for the past 4-years that has created unique expertise relevant to the project.

f. **Other unique qualifications:**
   N/A

□..**Emergencies** – Program/award where there is insufficient time available (due to a compelling and unusual urgency, or substantial danger to health or safety) for adequate competitive procedures to be followed.

N/A