

Improving Emergency Response for Natural and Cultural Resources: Applying the CESU Cooperative Agreement for All-Hazards Emergencies

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The National Park Service (NPS) and the Piedmont-South Atlantic Coast Cooperative Ecosystem Studies Unit (CESU) have undertaken a pilot project to enhance federal emergency response capability for natural and cultural resources, and improve coordination with non-federal responders. CESU partners (universities, tribes, museums, science centers, botanical gardens, conservation organizations, and more) adopting this approach nationwide would improve the national response capability for emergencies involving natural and cultural heritage by increasing the availability of archeologists, biologists, coastal experts, conservators, curators, historical architects, wetlands scientists, and others ready to respond in every region of the country. This paper describes how the CESU cooperative agreement can facilitate rapidly deploying experts required to address emergency response when federal agencies lack sufficient responders or technical expertise.

Federal emergency response needs

Following the 2005 hurricane season (including Hurricanes Katrina, Rita, and Wilma), federal and non-federal responders and managers reviewed lessons learned, and identified emergency response needs related to natural and cultural resources and historic properties. Three major needs can potentially be addressed, at least in part, through a CESU cooperative agreement:

1. **Expand the federal capacity for response.** The federal capacity to respond to these major events was limited. Federal coordinators need to expand the roster of available responders to include both federal and non-federal responders with natural and cultural resources skills.
2. **Integrate governmental and non-governmental organization (NGO) response.** Responders from NGOs were generally not well integrated with state and federal responses. Available and skilled individual, non-federal responders often could not find a means to get into the response structure. Responders recognized the need for a structure to ensure informed, coordinated, and expedient responses.
3. **Ensure that responders function under the National Response Framework.** Responders must be trained in emergency response, and be familiar with the National Re-

sponse Framework (NRF) and the National Incident Management System (NIMS). Some federal and most NGO responders were not adequately conversant with the NRF or NIMS.

NPS conceived of a pilot project to apply the CESU cooperative agreement to address these needs.

The concept of applying the CESU cooperative agreement to federal emergency response

The CESU cooperative agreement can be an especially useful tool to address federal emergency response responsibilities related to natural and cultural heritage. The agreement can facilitate rapid deployment of experts needed when federal agencies lack sufficient responders or technical expertise for response on federal lands, or to FEMA-coordinated responses in states under presidentially-declared disasters.

Simply described, a CESU is a group of university, museum, NGO, and some non-profit entities that collectively have a cooperative agreement with several federal agencies to achieve mutual goals in natural and cultural resources research, technical assistance, and education. There are seventeen such groups, or CESUs, forming a national CESU Network that covers the entire United States. When a member federal agency has a need for experts in emergency response for natural and cultural resources to supplement federal responders, it can acquire these experts through a task order under a CESU cooperative agreement.

Application of the CESU cooperative agreement to assist emergency response must occur within the context of the federal role in the NRF and NIMS. The federal response may be on federal lands, or to assist a state upon request of the governor. For example, NPS responds to emergencies in parks. NPS may also respond to emergencies for other federal agencies on a reimbursable basis. In addition, NPS may respond when states request federal assistance and FEMA coordinates the federal response.

The National Response Framework is a guide to how the USA conducts all-hazards responses. When a governor asks for federal assistance, the secretary of the Department of Homeland Security (DHS) coordinates the response through FEMA. Response related to natural and cultural resources and historic properties (referred to as NCH) falls under Emergency Support Function (ESF) 11, of the National Response Framework. The Department of the Interior is the coordinating agency for NCH under ESF 11. NPS generally coordinates the cultural resources response under ESF 11.

Coordination of the NCH response under ESF 11 involves recruiting and deploying natural and cultural resource specialists to the impacted area in response to FEMA mission assignments. The first such recruits are federal employees. However, federal employees may be in short supply during major or multiple emergencies. The CESU pilot project is expected to expand the number of experts available by incorporating non-federal expert deployment, ensuring that responders are trained, and integrating federal and non-federal responders by deploying them together under the NRF and NIMS. The pilot project involves NPS, the University of Georgia, and other partners in the Piedmont-South Atlantic Coast CESU.

The CESU model for all-hazards incident response

The Piedmont South-Atlantic Coast CESU was selected for the pilot project in August 2007. This particular CESU encompasses the states of North Carolina, South Carolina, Georgia and the eastern coast of Florida. The University of Georgia (Athens) is the host entity for the CESU and joins eleven other partner universities within the CESU. The capacity and expertise within this cadre of universities offers an excellent resource for the pilot project.

The standard model for processing an NPS project through the CESU cooperative agreement is a fairly linear process, much like boxes moving on a conveyer belt. Typically, a project originates with an NPS unit (such as a park or office). The NPS unit seeks and confirms collaboration with a faculty member from a CESU partner university and drafts a sub-agreement or task agreement (under the CESU cooperative agreement), which passes through an NPS CESU coordinator and an NPS contracting officer. The NPS unit must provide a statement of work and purchase request. The university must provide a series of government-wide grant-related forms, called the SF-424 Form Families, which include grant application coversheets, forms, form data analysis templates, and form schemas. The university also provides a signed proposal and the NPS CESU coordinator provides approval memos. Several federal laws and related mandates require this paperwork. The process generally takes three to six weeks.

Clearly, this standard CESU model would not meet the needs for a rapid response to an all-hazards incident; however, an expedited process, that the NPS CESU coordinator crafted specifically for emergency response, received concurrence from the contracting officer and the university, and formed the foundation on which to build the pilot project. The expedited process includes use of pre-scripted documents that can be modified rapidly and adopted for a specific incident.

The all-hazards incident CESU model works in two phases. The first phase is the creation of a roster of experts at CESU partner universities who would be interested in assisting a federal response. The starting point is a university-appointed contact, who is responsible for broadcasting recruitment announcements throughout the university, calling for faculty experts to add their names to the roster. Interested faculty then take required Incident Command System (ICS) training from a free on-line service, and fill out a short informational form. Once training and supervisory approvals are secured, the university submits the names to the federal roster of stand-by personnel, which the NPS Emergency Incident Coordination Center (EICC) maintains. This roster-building phase may take several months to initiate and will require a continual effort to maintain an up-to-date database of faculty experts.

The model's second phase begins once an all-hazards incident occurs and the federal Incident Command Team (ICT) acknowledges the need for resource experts to supplement federal responders in supporting the emergency effort. The federal natural and cultural resources coordinator (ESF #11 NCH national coordinator or designee) consults the EICC database and selects appropriately skilled faculty members.

At this point, the standard CESU model comes into operation, but at an accelerated rate. The CESU coordinator, university contact, and the NPS contracting officer work

quickly to assemble the required paperwork. The result is that a faculty member can be deployed to an all-hazards incident within 24 to 48 hours of being contracted by the ICT.

The university perspective on the CESU model for all-hazards incidents

The CESU model for the all-hazards incident presents benefits and challenges for the university faculty and administration. Trained responders are one of the benefits. Universities have adopted the ICS for responding to on-campus emergencies and the prospect of having faculty members trained in basic ICS meets a goal for the university. Having a faculty member respond to a stricken area brings positive publicity to the university as well as the faculty member. Less measurable, but probably the most important benefit, is the personal satisfaction gained by the faculty member from contributing during an emergency and applying his or her professional skills to the critical needs of others. This benefit is the primary incentive for faculty to enroll on the EICC roster since all-hazards incidents offer no opportunity for typical advancement towards academic tenure. An important university benefit is financial. The CESU cooperative agreement specifies that the federal agency will cover expenses and reimburse the university for the responder's salary, including a 17.5 percent overhead rate.

The challenges of the CESU model for the all-hazards incident are mainly logistical, although some are of a personal nature. A number of administrative offices oversee faculty in a university. These offices typically are the department office, the college office, the sponsored programs office, the human resource office, the public affairs office, and, at times, the attorney's office. These offices all need notification when a faculty member is deployed to an all-hazards incident. Also, issues related to overtime policies, travel authorities, and appointment terms (such as nine month or twelve month) must be considered.

Faculty members need to arrange for substitutes to cover classroom and research responsibilities during incidents. In addition, the faculty member must be willing and ready to respond within hours; be absent from the university and family for several days; live in a devastated area under hardship and stressful circumstances, including high risks, no electricity, and limited amenities; and work extended hours on a daily basis.

The university's final challenge is the amount of work the university point of contact will do before, during, and after incidents, without additional compensation, other than the 17.5 percent overhead that accrues to the university based on the pay of deployed faculty. Besides sending recruitment announcements, the point of contact will oversee the assembly and maintenance of the roster for the university, forward roster information to the EICC, and respond quickly to facilitate the deployment of university faculty.

The PSAC CESU web site (<http://psacesu.uga.edu/h/nps-emergency-response.html>) provides a complete description of the pilot project and instructions for universities and other CESU partners, and their faculty and staff who want to participate. The web site describes the following:

- The intent and purpose of the emergency response roster:
 - Background information;
 - How the concept works; and

- The contractual side of the roster.
- University administrative approval and responsibilities:
 - Statement of interest;
 - The university's step-by-step process; and
 - The university contact person.
- The qualifications and process for a university expert to enroll on the roster:
 - The qualifications, how to enroll and prepare for deployment;
 - Emergency Response Priority Skills List;
 - Natural and cultural resources and historic properties resource list data form; and
 - NPS Emergency Response Checklist.
- NPS point of contact and support documents.

Summary

The CESU network of universities, bound together with NPS through a cooperative agreement, offers an ideal setting for amassing the skills and capabilities of university faculty to support the agency during all-hazards incidents. NPS may then use this increased capacity to respond to the needs of parks, and to meet its responsibilities in responding to the needs of other federal agencies, including FEMA (which coordinates the federal response to states, when states formally request federal assistance). The CESU cooperative agreement is an excellent tool to expand the federal response capacity, integrate federal and non-federal responders, and ensure that non-federal responders have appropriate training through online courses and emergency exercises. The pilot project with the Piedmont South-Atlantic Coast CESU illustrates several benefits and challenges. The test of real application will refine and improve the process.

If the pilot is successful, the concept could be expanded nationwide to the sixteen other CESUs, greatly increasing the federal capacity to respond during emergencies to impacted natural and cultural resources, and historic properties. The model ensures that non-federal responders are trained in emergency response, and familiar with the National Response Framework. In addition, adoption of the model has the potential to strengthen the natural and cultural resources emergency response experience and capability for the more than two hundred CESU partners nationwide, which would, in turn, enhance state and local emergency response.