

Subject: Seeking USGS partnership projects for FY 2013 to work with data developed by Core Science Analytics and Synthesis, Gap Analysis Program --Due date extended to June 21, 2013, close of business.

The USGS Gap Analysis Program (GAP) is seeking project ideas from USGS scientists that address the issues of threats to the long term persistence of wildlife and habitat. The GAP program has shifted resources from recently completed projects to provide seed funding to foster these partnership projects. GAP provides a national characterization of biodiversity and an assessment of the extent biodiversity is protected for the long term. For general program information, see <http://gapanalysis.usgs.gov/>. GAP maintains national spatial data sets describing:

- The vegetation of the US, classified to NatureServe Ecological Systems (Comer et al. 2003) and to the NVCS (FGDC 2008). For more information see <http://gapanalysis.usgs.gov/gaplandcover/data/>.
- The range and distribution of vertebrate species. See <http://gapanalysis.usgs.gov/species/data/>.
- The ownership and management of conservation lands. See <http://gapanalysis.usgs.gov/padus/data/>.

Request for project ideas (1 page project proposals):

GAP has recently completed or updated its major, national data sets, which creates a potential for landscape-scale analyses. Fully implementing an analysis effort using these data is a challenge because of tight and declining budgets. Therefore, the best path towards success involves leveraging existing data and tapping into the talent and expertise from other USGS program areas. This request is intended to provide incentives, through small seed funding, to USGS scientists to develop the concepts and methods for examining GAP data to highlight conservation issues and opportunities.

Under current program guidelines, GAP assesses the status of each terrestrial vertebrate species and vegetation type, across its full extent in the US, quantifying its representation within lands considered to be protected. The current approach does not assess threats to wildlife or habitat quality directly. We wish to work with scientists who will provide supplemental data, analyses and expertise to develop innovative analytical approaches to further help inform resource managers who set conservation priorities.

As the country's leading earth sciences organization, the USGS has collected data on many environmental variables that are relevant to wildlife and habitat conservation. These include, but are not limited to: fire; invasives and other landscape scale disturbances; land use change and urban growth; climate change; and factors limiting to wildlife populations.

We are inviting projects that demonstrate the integration of environmental data layers into GAP's assessment process. The traditional gap analysis spatially portrays protection status of each element of biodiversity (vegetation type or species distribution). Projects funded under this request for proposals, should aim to characterize the threats to species and/or plant communities (i.e. urban growth, sea level rise). Threats data could be used to refine the representation or gap analysis (extent to which biodiversity is in protected parks or reserves) and identify the most threatened and unprotected areas of biodiversity.

We also invite projects from scientists interested in assessing the status of suites of related species. These could be habitat associations, such as grassland birds, or according to other ecological groupings such as declining populations, small populations or complex life history requirements, or species groups that interface with aquatic systems for life history requirements.

Project considerations:

- Analyses should be national in scope, or should focus on the full species range or the full extent of the habitat types being examined.
- The intent is to develop analytical approaches and tools relevant to the ongoing examination of biodiversity.
 - Approaches should be repeatable. Data sources should not be anomalous to the chosen geography since this would limit capability of using the approach elsewhere.
 - All data sources used and tools built to support the analysis will need to be made available so that it can be used in subsequent applications. It will need to be delivered in a digital format and should be of an appropriate grain for integration analysis with the GAP data sets identified above.
- The development of tools and interactive applications to facilitate the use of the data should be addressed in project proposals. At a minimum, it should address, whether there are existing applications for making data available or a proposal about web-based data serving applications.
- The focus should be primarily on integration and analysis of existing data. Data gaps always exist but data collection should be minimal.

Project requirements:

- It is unlikely projects with budgets greater than \$50,000 can be funded in FY 2013. The number of projects approved will depend on the quality of proposals. Funds will need to be obligated in FY 2013 or accommodated in your cost center's allowed carryover.
- Funds can be used for staff time, supplies, equipment or sub-agreements with partners.

Proposing projects for seed funding:

Initially, we request only brief pre-proposals of no more than 1 page, to be submitted by June 21, 2013. Please contact us directly if this deadline cannot be met but you wish to submit a proposal. Details on full proposals will be provided after initial review of pre-proposals. These initial proposals should include:

- The research question or topic of the work, including scope and focus.
- Summary of methods to be used, including brief explanation of replicability for other species or habitat types, as discussed above.
- Description of final digital data products to be delivered.
- Statement describing data resources to be used in the analysis.
- Estimated total budget.
- Name of principal investigator.
- Brief statement about qualifications to do the work.

- Brief statement about ability to obligate funds by end of FY 2013.
- Description of final deliverables, which may include:
 - A 2-5 page report that summarizes methods and findings in the minimum written requirement.
 - Plans for publication
 - May include peer reviewed journals or USGS technical reports
 - Should include list of authors and roles
 - Spatial data products generated, delivered in a standard GIS format
 - FGDC compliant metadata.
 - Source code for developed in support of the analysis.

Questions and submissions should be directed to: Kevin Gergely, Program Manager, National Gap Analysis Program, 208-426-5219, gergely@usgs.gov.

Citations:

Comer, P., D. Faber-Langendoen, R. Evans, S. Gawler, C. Josse, G. Kittel, S. Menard, M. Pyne, M. Reid, K. Schulz, K. Snow, and J. Teague. 2003. Ecological Systems of the United States: A Working Classification of U.S. Terrestrial Systems. NatureServe, Arlington, Virginia.

FGDC 2008 National Vegetation Classification Standard, Version 2. Federal Geographic Data Committee – Vegetation Subcommittee. FGDC-STD-005-2008 (Version 2). http://www.fgdc.gov/standards/projects/FGDC-standards-projects/vegetation/NVCS_V2_FINAL_2008-02.pdf