

USGS EMA Invasive Species FY20 Cyclical Fund Request for Proposals

Vision: Provide science to support DOI and USGS Ecosystems Mission Area (EMA) Invasive Species Program (ISP) priorities

Mission: Respond to invasive species needs and requirements of resource management bureaus within DOI (e.g. USFWS, NPS, OIA, BLM, BIA, BOR, OSMRE & BOEM).

Caveats: The USGS EMA ISP manages three cyclical funding lines based on recent Congressional priorities: 1) a general invasive species cyclical that emphasizes new and emerging invasive species, 2) Everglades invasive species and 3) Asian carp. This RFP addresses the general and Everglades invasive species cyclicals; Asian carp cyclical funding is allocated thru an independent mechanism. White nose syndrome research is not funded through the ISP and will not be funded thru this RFP.

Duration of Funding for Cyclical Projects: 1 to 3 years

Funding / Individual Proposal Funding Levels: In FY19, the USGS EMA Biothreats Program received \$1,452,188 in cyclical funding to support the general invasive species cyclical. Additionally, \$488,064 in USGS EMA Everglades invasive species cyclical funds were also received in FY19. For planning purposes, we are hoping to have a similar amount of funding available to allocate via this RFP in FY20.

There currently is no “funding cap” for proposals, however, Principal Investigators should realize that all cyclical invasive species funds must cover a wide range of priorities and support a robust national portfolio emphasizing DOI Bureau priorities. Below is a basic financial information related to USGS EMA FY18 and FY19 Invasive Species Cyclical Projects funded via this RFP.

	<u>FY18</u>	<u>FY19</u>
AVERAGE AMOUNT FUNDED	\$51,041	\$60,613
STANDARD DEVIATION	\$18,971	\$38,823
MEDIAN	\$57,746	\$42,363
MAX	\$80,513	\$149,976
MIN	\$3,400	\$11,850

Multi-year Cyclical Projects: In FY19, only three 2-year cyclical projects were funded that require second year funding in FY20. These three projects will not be required to submit proposals however will be required to submit progress reports. All other proposals funded in FY19 were funded for either the last year of multi-year funding or were single year projects and should not require additional funding. In FY20, applicants are encouraged to submit proposals for projects with a 1- to 3-year duration. This funding will support invasive species research across USGS Science Centers and Cooperative Research Units (CRUs).

Distribution of Cyclical Funding:

- Proposals will only be accepted from USGS Principal Investigators.
- All proposals must be reviewed and approved by USGS Center Directors, CRU Leaders or their designees. A mechanism to ensure this occurs will be part of the application process. Any proposal that does not have review / approval from USGS Center Directors, CRU Leaders or their designees will be rejected / not reviewed.
- Cross Science Center, Science Center / CRU and CRU collaboration is encouraged.

- If proposals support graduate student research, USGS scientists are strongly encouraged to provide a detailed budget, timeline and annual milestones for the entire project thru completion of the degree. If graduate student research is funded via this mechanism, there is no assurance of additional funding.
- Proposals are encouraged to focus on discrete research paths vs. several discrete research paths under a single broader topic heading. Proposal that fund generalized research lines related to specific taxa or issues are strongly discouraged.
- Funds are primarily intended to support intramural USGS research thru Science Centers and CRUs. Funding passed thru Universities (outside of CRUs) and other contracting entities will be considered on a case-by-case basis (e.g., innovative proposals). In this case, proposals will require a clear explanation including a breakdown of salary, overhead rates, any direct costs and a justification for funding non-USGS technical staff.
- When multiple Science Centers / CRUs are collaborating on a project, funds will be allocated directly to each center from EMA (no pass through / transferring of funding between Centers). A single proposal is requested for multi-Science Center /CRU proposals. Budgets must clearly indicate funding to be allocated to each Center / CRU per year. Documentation that multiple Science Center / CRU proposals have been reviewed by all Center Directors (or their designee) within each center must be provided. CRU proposals that are submitted need to have a letter of support from CRU leadership from the Region or Headquarters.
- For audit and tracking purposes, Center Directors and Unit Leaders must use these cyclical RFP funds according to awarded proposal budgets. The Invasive Species Program Manager must be notified and must agree to reprogramming prior to any redistribution of funds.

RFP Timeline (should a lapse in appropriations occur, timeline may be extended):

- RFP Solicitation sent out: Wednesday, November 13th, 2019
- On-line application submission process training: Tuesday, November 26th, 2019, 2:00 PM EST
- On-line RFP proposal submission process open: Monday, December 2nd, 2019, 2:00 PM EST
- On-line RFP proposal submission process closes: Monday, December 16th, 2019, 2:00 PM EST
- On-line proposal review process open: Friday, December 20th, 2019, 2:00 PM EST
- On-line proposal review process closes: Friday, January 17th, 2020, 2:00 PM EST

RFP Requirements:

This RFP is designed to meet several goals: 1) to address priorities of the Department of Interior (DOI) Secretary, the USGS Director, and internal cross-cutting priorities within USGS (e.g. across Mission Areas) as they step down to EMA; 2) to support FY2020 Annual EMA Program Guidance – provided with this RFP; and 3) to meet DOI partner Bureau priorities at a national level as determined via discussion with DOI partner Bureaus thru their DOI Invasive Species Task Force representatives.

Thematic / Taxa / Geographic Locale Specific Research Targets for FY20 based on DOI Bureau needs

These items complement the FY20 EMA Program Guidance. Where possible, FY20 proposals should link these broader themes with FY20 EMA Program Guidance:

Broader Thematic Targets

- Developing tools to assist DOI partner Bureaus with planning for and responding to biological threats with an emphasis on biosurveillance.
- Research supporting DOI Bureau priorities related to invasive species at national level.
- Enhancing collaboration between USGS EMA and USGS Core Science Systems relative to invasive species.

- Improving linkages between internal USGS modeling and experimental expertise relative to invasive species prevention and control.
- Science-based projects supporting creative partnerships that move USGS research results toward field implementation (e.g. USGS staff working with partners implementing innovative tools). Implementing detection, risk assessment, and control tools developed by USGS in the field in collaboration with DOI partner Bureaus.
- Technical expertise and capacity to rapidly respond to new invasions in support of DOI Bureau needs (e.g. new and emerging threats).
- Evaluation of the invasive species management costs for taxa that are high priority for DOI Bureau managers to help inform better decision-making in the field.

Geographic and Taxon-specific Targets

- Support for critical priorities identified by DOI Bureau partners within inter-agency planning documentation. Examples are Invasive mussels in the Pacific Northwest (e.g. refer to the DOI “Safeguarding the West from Invasive Mussels” initiative documentation), implementing research components of Aquatic Nuisance Species Task Force’s Strategic Plan, the Brown Treesnake Technical Working Group, the DOI Everglades “Invasive Exotic Species Strategic Action Framework” and the Invasive Mussel Collaborative.
- Support for early detection and rapid response research for invasive reptiles in Florida and bordering States, Pacific Islands and the Caribbean.
- Preliminary research into the feasibility of using species-specific synthetic biology and advanced biotechnology tools for control of dreissenid mussels, Asian carp, sea lamprey, mosquitos, Burmese pythons, brown treesnakes, Phragmites and cheatgrass.
- Specific guidance on USGS EMA research themes for the Pacific Islands can be found in recently prepared, internal planning documents.
- The NPS, Florida Fish and Wildlife Commission, the South Florida Water Management District and USFWS are collaboratively developing a Burmese python research priority list for FY20 which will be sent to FORT and WARC staff working on Burmese pythons shortly.

Funding Decision Process: A review panel will be convened to review proposals. Reviewer scores will be taken into consideration when making funding recommendations to leadership.

Proposal Development and Format:

The following information will need to be developed for all proposals.

- Project title
- Principal Investigator including USGS duty station
- Names of USGS co-investigators including USGS duty station
- Statement indicating if this a self-standing proposal from a single Center or if multiple Centers are collaborating. It is critical to clearly state this fact. Collaborative proposals involving multiple Centers / Coop Units must have individual proposals for each Center.
- Project title and Principal Investigator name clearly identified
- One to two-page description of research (12-pt font) proposed that describes technical and scientific merit and achievability. This one to two-page description should include a timeline (Start and End Dates, Milestones) and key products/outputs/outcomes.
- Science Center proposals building on previous work must reference BASIS+ Project, Task and Sub-Task Number and Title.
- Budget that includes source(s) and amounts for matching funds (e.g., center base funding, reimbursable) for this specific proposed project. Please note consideration in the review

process will be given to the amount of Center / Coop Unit base and reimbursable funding are supporting proposed research. **The budget should be submitted using the Excel template provided.**

- A maximum four sentence description of the project, its goals, outcomes and how it will benefit the American taxpayer written in a manner that the public would understand. Essentially, supply the “elevator speech” that could be used to describe the proposed project to congressional staff or the public. Proposals that do not have an “elevator speech” will not be considered for review / participation in this RFP process.
- DOI stakeholders served (specific Bureau and Unit; e.g. National Park, Wildlife Refuge, Hatchery, etc.) If proposal was developed based on a specific request, a letter of support from the Department, Agency, or unit is encouraged.
- Description of how the project aligns with FY20 cyclic RFP priorities. Please reference RFP priorities and the planning documents that are applicable to the proposal and provide a concise and detailed explanation how the project meets specific priorities. It would be helpful to provide copies or links to specific planning documents if they are not referred to above.
- Brief letters of recommendation from cooperators can be submitted as part of the application process. Please do not have letters of recommendation submitted to EMA HQ staff.

Single Center or CRU proposals should be limited to 6 total pages (maximum) excluding budget. Multi-Center and/or CRU proposals should be limited to 8 total pages (maximum). Proposals should be written in 12-point font with double-space lines. Proposals that do not follow these guidelines related to font size and spacing will be rejected / not reviewed as part of this RFP.

Prior to on-line submission, all proposals must be reviewed and approved by USGS Center Directors, CRU Leaders or their designees; a form indicating such approval will be part of the on-line application process. Application packages not containing this completed form will not be processed. On-line application submission process training will occur during a USGS EMA Invasive Species Community of Practice Call that is scheduled for Tuesday, November 26th, 2019 at 2:00 PM EST.

Rubric for Reviewers: FY18 rubric - A tool to assist proposal development

The following questions were used by reviewers to evaluate the FY18 USGS EMA Invasive Species cyclical proposals. This year’s rubric will be similar, if not the same.

- 1) Technical Merit - Objectives are clearly stated, sound study design and methods, results are attainable in proposed time frame, and quantifiable elements will be statistically reliable and comparable to other studies. Please rate proposal from 1 to 5. A score of 5 indicates a high degree of technical merit. Reciprocally, a score of 1 indicates a low degree of technical merit.
- 2) Scientific Merit – Does the proposed project advance invasive species knowledge in a substantive or novel manner (e.g., does the project advance invasive species science such as: 1) early detection of incipient populations; 2) development of novel control technologies; and 3) understanding / describing previously unknown biological characteristics of a new invasive species?). This can be irrespective of current Departmental and Bureau priorities (and the elevator speech) that are addressed in questions below. Please rate proposal from 1- 5.
- 3) Achievability - Are all pieces of information currently known to allow for completion of the entire proposed effort or does some portion of the proposed effort depend on outcomes of research yet to be done? Please rate proposal from 1 to 5.
- 4) Budget - Is the proposed budget justifiable with a cost-effective plan to achieve proposed activities? Are there in-kind contributions from partners, reimbursable funding, or center support for the project? Are there in-kind contributions, funding or other types of support? Do in-kind commitments appear “solid” or are they pending. Please rate proposal from 1 to 5.

- 5) Elevator Speech – In the call for proposals, applicants for funding were specifically requested to provide a four line “elevator speech” as part of the proposal process. This should be a short succinct non-technical description of the project, its goals, outcomes, and societal value that Congressional staff or the public would understand and be compelled to support. Please rate proposal from 1 to 5.
- 6) Direct Management Application - There is a clear demonstration of the management issue being addressed and how the project will address invasive species management. The way project products will be made available for use by decision makers or managers is clearly defined (e.g. improved management techniques, decision support tools, situational awareness maps). Please rate proposal from 1 to 5.
- 7) Relevance to DOI Partner Bureaus - Project results/products clearly support DOI partner research needs and on the ground actions (e.g. USFWS, NPS, OIA, BLM, BIA, BOR, OSMRE & BOEM). Individuals proposing research projects were provided a list of references that could be cited. Additionally, individuals were encouraged to get letters of support from DOI partners. Reviewers should look at the explanation justifying relevance for proposals individually. Please weigh the information provided from a national perspective given limited DOI funding and multiple competing priorities. Please rate proposal from 1 to 5.
- 8) Topical Relevance to Existing Priorities and Plans - The project addresses DOI and USGS priorities and guidance, and recommendations and priorities in existing nationally relevant invasive species plans (or equivalent). Proposals for all topics except new and emerging invasive species challenges should specifically reference planning documents or have strong letters of support that address topical relevance. Individual proposals should clearly site specific DOI and USGS priorities and guidance, and recommendations and priorities from existing nationally relevant IS plans. Examples of these documents were provided in the RFP. Please rate proposal from 1 to 5.