Science Needs as Potential GIT Funding Projects

ALEX GUNNERSON, AMY GOLDFISCHER, AND BRECK SULLIVAN STAR MEETING 7/28/22

Goal

Review science needs identified in the CBP Science Needs Database that may fit within GIT Funding criteria.



Science Needs

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SSRF Guidance

About





View the current science needs



What is the Science Needs Database?

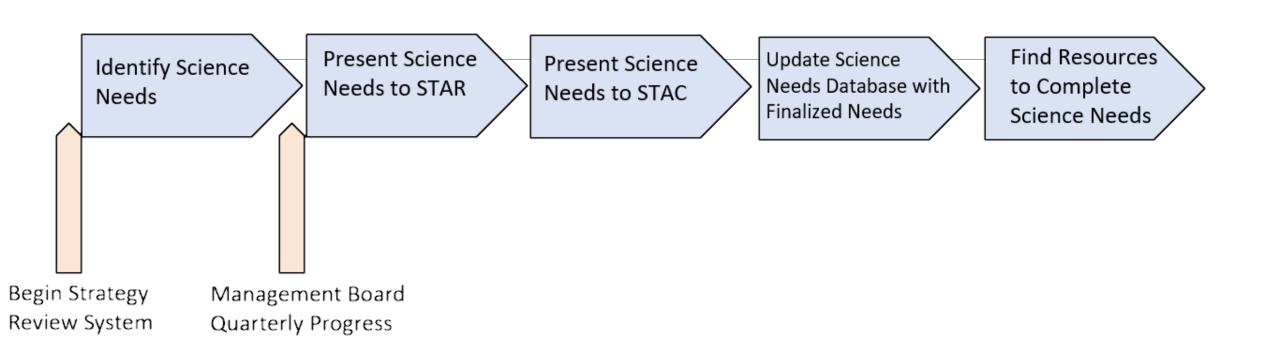
The Chesapeake Bay Program (CBP) has developed the Strategic



What does the database include?

The database provides the most up-to-date list of science needs

Strategic Science and Research Framework (SSRF)



Repeat every 2 years

Meeting (QPM)

(SRS)

Objective

Are there any easy wins?

Previously, GIT Funding has been great as an opportunity to fund science needs.

Example:

15768	13	Chesapeake Bay Watershed Climate Data and Mapping Repository	Eastern Research Group, Inc.	\$29,720	3/1/2018	Completed 7/26/2019 View Final Report here. Climate Data and Mapping	Eastern Research Group (ERG) will apply its expertise in climate change indicators, data analysis, and GIS system development to build an inventory and repository of climate change data layers for the Chesapeake Bay Program. Through a collaborative process, they will establish bounds, identify available datasets, document and categorize data attributes, assess suitability of the	John Wolf
						Repository	data for inclusion, compile links, catalogue data, create metadata, and create new geospatial layers for priority indicators.	

STAR Proposal

Need: Acquiring a contractor to help an outcome develop a monitoring plan.

 Comment: Based on the PSC Monitoring Report, many outcomes need to develop a monitoring plan. Since monitoring needs are also science needs, GIT Funding could be a good way to develop the capacity need to start monitoring.

Types of Needs

To help catalogue the science needs, many have been assigned a category. There are currently 16 different categories in the Science Needs Database, but here are a few examples.

Category	Description
	Need requires some sort of modeling effort, either with CBP modeling
Modeling	team or outside support
	Need is pertaining to monitoring efforts including new efforts, utilizing
Monitoring	existing efforts, coordinating efforts, etc.
g	Need requires to original research to address or generation of new
Research	data or new knowledge
	Nonderstand and the state of th
Cynthesis	Need requires synthesizing existing research or advancing science by
Synthesis	Pulling from multiple current lines of research Need requires new analysis be conducted on existing data or
Analysis	information
rilaryolo	Need requires identifying, finding, consolidating, etc. existing datasets
Data Gathering	or data layers
· ·	Data, information or efforts exist or are ongoing, but coordination is
Coordination	needed between groups
Training/Outreach/Com	Scientific need is met, but resources are necessary to disseminate
munication	information, data, product, etc.
GIS Analysis and	
Mapping	Items where the CBPO GIS team could provide support.
0.1	Does not fit into the above categories; please feel free to assign your
Other	own.

Black Duck Outcome

Need: Evaluate ABDU Decision Support Tool assumptions
AND Update ABDU Decision Support Tool with updated
SLAMM and Urban growth model data.

 Comment: It seems like there is a framework for action, but the main ingredient lacking is funding. Perhaps GIT funding is the fuel this effort needs?

Wetlands Outcome

Needs: <u>Identifying the amount of stream network incising in</u> <u>small to headwater streams</u>. AND <u>Identifying the amount of legacy sediment present along small to headwater streams</u>.

 Comment: These needs may be similar enough where a GIT Funding project could address both of them. Perhaps GIT Funding could utilize some added technical skills here to address these needs?

SAV Outcome

Need: <u>Assess integrated impacts of shallow water uses (e.g. living shorelines, aquaculture, clamming, shoreline</u> structures) on SAV habitat.

 Comment: There are no resources currently to address this need. It is a mapping exercise, and a pilot project could be beneficial with potential to expand after a pilot.

Forest Buffer Outcome

Need: Exploring restoration systems, effectiveness, and plant species. What kinds of forests are we trying to create? Are we planting the right trees and shrubs to ensure the highest success rates?

 Comment: A literature review seems feasible for a GIT funded project. The need also referenced professional conversations so the project could build from the literature review with a roundtable discussion.

Stream Health Outcome

Need: Establish guidelines and relationship between stream corridor restoration activities and functional lift including biological lift.

 Comment: The notes said that GIT Funding in 2019 was a potential resource. If it did not receive funding that year, there might still be interest in using GIT funding to address this need.

Toxic Contaminants Research Outcome

Need: Synthesize and communicate information (on the influence of contaminants) to document fish health and wildlife conditions in the Bay watershed.

 Comment: It seems like the synthesis part has been done but not the communication and outreach.



Brainstorming Time

Brainstorming Reminders

- Projects must be tied to an identified need in a management strategy, L&A plan or SRS quarterly meeting.
- STAR is eligible for funding for the climate outcomes and water quality monitoring outcome. GITs can only submit proposals for outcomes they are responsible for.
- There is an allowance of one project per outcome.

GIT Funding Key Dates

- August 9 Idea Sharing Meeting
- August 16 Chesapeake Bay Trust (CBT) Online System Table 1
 Training Video released + CBT Office Hours Announced (for Q&A)
- September 1 Draft Table 1 entered into CBT online system one project idea per outcome
- September 28 Project Ideas Scoring Meeting
- See email from Greg Allen on 7/27/2022 for more details. <u>Program manual here.</u>

Climate Consultants

- Given the cross-cutting nature of themes like climate change and their involvement in the Climate Resiliency Workgroup, Amy and Alex have volunteered to be "climate consultants" for this GIT Funding award cycle.
- Working with the CRWG coordinator and staffer, Alex and Amy can meet with a team seeking to earn the "addresses a climate change need" annual weighting factor to discuss how the proposal might build in climate resiliency.

Questions?

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