



2022-2026 Science Action Agenda

Proposed Update Criteria | April 2020 (updated)

Criteria for the SAA Update

The [Science Action Agenda \(SAA\)](#) is a four-year science agenda for the Sacramento-San Joaquin Delta that prioritizes and aligns science actions to inform management decisions and fill gaps in knowledge. The 2022-2026 SAA will be organized by management needs and the highest priority science actions. Unlike the creation of its preceding iteration, generation of the 2022-2026 SAA will stem from a broad list of management questions¹.

The below criteria will be used at various stages to screen, select, and prioritize management questions and science actions. **Please provide your feedback on the proposed criteria to SAA@deltacouncil.ca.gov by 5:00 PM on Friday, July 17, 2020 to have your input considered.**

Screening and Selection Criteria – Management Questions

Screening Criteria

Similar management questions will be merged prior to applying the screening criteria. The number of similar questions from the original list that were merged will be tracked in order to later reference the general importance of that question to multiple entities.

The purpose of the screening criteria is to ensure that the questions fall within the scope of the near-term needs of the Delta's science-management landscape. Screening criteria will be applied to refine the initial list in advance of the public workshop.

1. Management question not fully addressed
 - a. Currently there is no, or only partial information (existing data, monitoring activities, research, tools, or infrastructure), to help address this question
2. Applicability to Delta-relevant Federal, State, and local initiatives
 - a. If answered, the management question would increase the effectiveness of policy regarding the management of species, ecosystems, socio-economic needs, and ecological processes in the face of climate change and other stressors.
3. Feasible
 - a. The management question must be answerable by one or more science actions
 - b. The management question can be answered through means that are possible given fiscal, legal, and institutional considerations.

Once the initial list of management questions is merged and screened, the next exercise will be to group questions into thematic areas prior to the workshop. The initial list of management questions compiled by the Delta Science Program will be tagged by keywords to assist with this organizing effort.

Selection Criteria for SAA

The purpose of the selection criteria is to identify the management questions that best align with the scope of the SAA (actions will address key uncertainties and institutional gaps, while promoting collaboration among agencies and organizations), which is identified by the following criteria:

1. High Impact
 - a. The management question has been identified by one or more key agencies
 - b. The opportunity for progress addressing the management question is high.

¹ SAA 2022-2026 Information Sheet, Delta Science Program 2020

- c. Addressing the management question will have a high potential to address and resolve areas of uncertainty.
- 2. Timeliness
 - a. The management question needs to be addressed within a four-year time frame.
 - b. Efforts to begin addressing the management questions need to happen within the next four years.
 - c. The management question is linked to forthcoming decisions or actions that require information to evaluate the best alternatives.
- 3. Risk Assessment
 - a. Evaluation of the opportunity cost – is the cost of not addressing the management question now high?

Screening and Prioritization Criteria – Science Actions

Screening Criteria

Once the list of management questions is selected for the SAA and organized into management needs, science actions will be identified to address those management needs. Science actions will be gathered through group discussions, relevant documents, and by assessing progress made on actions in the 2017-2021 SAA. The initial list will be screened and later prioritized, using the following criteria (Appendix C of 2017-2021 SAA):

- 1. Science topic not fully addressed
 - a. The science action will contribute to forthcoming decisions that require information to evaluate the best alternatives. Currently, this information is only partially supported, or alternatives and their associated uncertainties have not been fully explored.
 - b. The management need is only partially addressed by an agency, set of agencies, or groups and thus requires further attention from the broader Delta community.
 - c. The science action is only being partially funded or addressed by an agency or group and requires cross-agency support or is currently not being addressed by any group. Science actions that are well supported or in the final stages of implementation do not fall under this criterion.
- 2. Cross-agency and multi-group priority
 - a. The management need is relevant to multiple agencies and organizations throughout the Delta and/or fulfills the mission of multiple groups.
 - b. The science action is not site specific or single-agency focused and integrates the research and science goals of the larger Delta science community.
 - c. The science action is linked to a high-priority policy issue that has cross-agency implications such as the California Water Action Plan, EcoRestore, WaterFix, the Delta Plan, or a new Governor’s initiative.
 - d. Executing the science action will help address achievement of the coequal goals in the Delta Plan.
 - e. The outputs of the action will be directly used in water management or ecosystem management; the action has broad agency and stakeholder support.
 - f. The science action is included in multiple priority lists by science programs that carry out research and monitoring in the Delta.
- 3. Feasible
 - a. The science action can likely proceed given legal, fiscal, and institutional considerations.

- b. The capacity to carry out the research successfully is well established and described.
- 4. Promotes collaborative efforts
 - a. Implementing the science action will provide opportunities to serve the needs of multiple agencies and organizations.
 - b. The science action is synergistic with existing efforts and will support multi-agency collaboration.

Prioritization Criteria

For the 2017-2021 SAA, once the management needs and science actions list was refined, the science actions within each management need were prioritized using the following criteria.

1. Scientific Merit
 - a. The science action is based on a sound rationale (e.g., has a high degree of support from relevant science communities and has high potential to advance knowledge).
 - b. The science action is recommended by the Delta Lead Scientist, IEP Lead Scientist, Delta Independent Science Board, or an independent peer review panel.
2. High Impact
 - a. The science action is usable by one or more key agencies within a four-year time frame.
 - b. The science action identifies and addresses current or anticipated gaps in knowledge relevant to multiple agencies.
 - c. Implementing the science action involves integrating existing data from individual agencies spanning various geographical locations.
 - d. The science action identifies emerging issues requiring a rapid Delta-wide assessment to develop management needs.
 - e. The science action supports synthesis activities that cross multiple existing programs or agency missions.
 - f. The science action supports science infrastructure needs (the action supports the Delta science enterprise, and provides tools, facilities, or professional development for scientists).
 - g. Outcomes of the science action have a high potential to address and resolve areas of scientific conflict.
3. Timeliness/Need
 - a. The science action is ready for further development and the opportunity for progress is high.
 - b. The project has partial support and commitments that can be greatly enriched by focused short-term attention.
4. Risk Assessment/ Opportunity Cost
 - a. Not taking this action today would pose a severe risk to core scientific, technical and organizational capabilities to address management needs today and in the future.
 - b. Addressing this scientific topic is an immediate opportunity for innovation and scientific advancements with high potential for critical new knowledge of the Delta.

More Information

For more information on the 2017-2021 or 2022-2026 Science Action Agendas, please visit scienceactionagenda.deltacouncil.ca.gov or email rachael.klopfenstein@deltacouncil.ca.gov.