CVPIA Science Integration Team

Guidance for Members

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Responsibilities

The CVPIA Science Integration Team (SIT) is a technical team composed of stakeholders and agency scientists with the responsibilities of:

* Incorporating science and data into the Adaptive Resource Management (ARM) process.
* Refining and revising Decision Support Models (DSMs) with new and existing information.
* Recommending Anadromous Fish Program (AFP) priorities for types of actions, science, and monitoring over a five-year time horizon (documented in the Near-term Restoration Strategy). The SIT is responsible for recommending priorities, not projects.
* Attending in-person meetings and conference calls.
* Keeping up with SIT activities and contacting the Science Coordinator for updates.
* Developing a communication strategy for collaborating with the Core Team and conveying information to stakeholders and the public.

The Science Coordinator will be responsible for ensuring the production of an annual memo (called the Adaptive Management Update) documenting the state of the decision support models, any changes that were made or recommended, and potential influence on the priorities outlined in the Near-term Restoration Strategy (NTRS). The Science Coordinator will also be the lead author for the Near-term Restoration Strategy that will document AFP priorities and restoration strategy. The Near-term Restoration Strategy and annual memo originate from the Science Coordinator and SIT members are not responsible for their contents.

Membership

Interested organizations may appoint members to the SIT. However, SIT membership is individual rather than organizational; thus, the same individual must attend the meetings (see Attendance section for more information). Consultants may serve as an organization’s SIT representative, but organizations may not have both a consultant and an organizational representative on the team.

Attendance

Members will be expected to attend all meetings in person. On the rare occasion that a member must miss a meeting, the member is expected to review meeting notes, ask for information from other members or the Science Coordinator, and find out about any assignments to ensure they are prepared for the next meeting. A member may appoint an alternate from their organization to attend a meeting in their absence, but this practice must be infrequent. The Science Coordinator will decide whether attendance is an issue at their discretion.

Workload

Members will have an important role in guiding the science that will be used to inform decision making by the CVPIA fish programs. SIT members will participate in the refinement of the DSMs and the synthesis of new and existing information. Thus, SIT members will be required to spend time researching topics relevant to model refinement, reviewing published manuscripts and reports and, at times, writing reports for review by fellow SIT members, the Science Coordinator, the Core Team, and technical experts. This may require up to 20 hours per month to complete reviews and write reports plus approximately 12 days per year to attend SIT meetings. SIT members can propose changes to the DSMs and will review the scientific basis for changes proposed by fellow SIT members and other stakeholders.

Collaboration

Members must be willing to collaborate with fellow SIT members and engage in respectful discussions with SIT members, stakeholders, and technical experts. Members must be willing to take ownership in the ARM process and the DSMs. The SIT should be willing to evaluate competing hypotheses for potential incorporation into the DSMs. If the group feels that a member is not willing to collaborate or engage in respectful discussions, or is not a productive member of the team, the group may choose to request the removal of that member from the SIT. However, the authority to remove a SIT member rests with the Science Coordinator.

Decision Making

The SIT is a collaborative team that will make progress through scientific and technical discussions. Individual members will express their own scientific viewpoints that may be informed or refined by group discussions. Any decision made by the group during a meeting will not be revisited at a subsequent meeting during the same year but may be revisited in future years. Agency members of the SIT (the Agency Technical Team) will participate in the discussions and use them to inform decisions about the DSMs and NTRS priorities. The SIT is not a voting body or a consensus-based team. The annual memo and Near-term Restoration Strategy resulting from these discussions are consultative documents that originate from the Science Coordinator.

Subgroups

On occasion, SIT members will form subgroups to complete tasks, such as reviewing recent studies, improving DSM inputs and components, and drafting proposals (detailed below). Although all SIT members are welcome to participate on a subgroup, the subgroups will be self-selected and will consist of SIT members willing to participate.

Subgroups will report to the Science Coordinator and the SIT at large progress on their tasks during SIT conference calls or in-person meetings. The subgroups will be responsible for drafting recommended changes or actions with justification and submit the draft as a proposal for review by the Science Coordinator and SIT in the form of a pre-proposal. The proposal and review process are detailed below.

Proposals for Changes to Decision Support Models

Existing DSMs and inputs can be modified through a proposal process. All proposals made by SIT members and other stakeholders must be constructive and based on peer-reviewed science. Proposed changes to the DSMs will be written as scientific documents using standard forms provided by the Science Coordinator. To ensure the best use of SIT resources and facilitate communication, proposals are evaluated in a two-stage process: pre-proposal and full proposal stages. The Science Coordinator will provide templates for pre-proposals and full proposals.

SIT members may propose model changes at any time. The Science Coordinator will set specific deadlines for full proposals to be ready for prototyping the changes in the DSMs.

Pre-proposal Process

1. SIT member contacts the Science Coordinator with their idea regarding a possible change to the DSMs. The Science Coordinator will review the proposal process and templates, provide information on relevant deadlines, help strategize the best approach to gathering a small subgroup to work on the idea (if applicable), and advise on the timing for engaging the SIT with the pre-proposal.
2. Proposal sponsors fill out the pre-proposal template with the following information:
	1. Brief discussion of scientific rationale for the proposed changes to the DSM.
	2. Illustrations or diagrams of the conceptual changes to the model.
	3. List of sources of information that can be used to inform the model components.
3. Pre-proposals are submitted to the Science Coordinator who is responsible for reviewing the document for completeness and requesting clarification when necessary.
4. SIT members will be provided with copies of the pre-proposals at least one week prior to discussion of the merits of the pre-proposal.
5. The pre-proposal sponsors are responsible for participating in the discussion of their pre-proposal and answering questions from SIT members.
6. Following discussion, the Science Coordinator will ask SIT members for input regarding the merit of the pre-proposal and will inform the proposal sponsors if they are to proceed with a full proposal.

Full Proposal Process

1. Proposal sponsors develop a full proposal after receiving direction from the SIT and the Science Coordinator on the pre-proposal. Full proposals are comprehensive documents that contain the following information:
	1. The scientific rationale for the proposed changes to the DSM complete with citations of peer-reviewed literature.
	2. Illustrations or diagrams of the changes to the conceptual model.
	3. Details of the proposed changes including parameter or data values (when new values are proposed) and the source of the new information.
	4. Explicit instructions on how to integrate the changes into the existing DSM. Proposal sponsors via the Science Coordinator may request assistance from technical staff to determine the appropriate methods for incorporating the proposed changes.
	5. Detailed criteria and source of data (monitoring or otherwise) for evaluating the scientific evidence for or against the proposed approach in the existing ARM framework.
2. Full proposals are submitted to the Science Coordinator who is responsible for reviewing the document for completeness and requesting clarification when necessary.
3. SIT members will be provided with copies of the full proposals at least one week prior to discussion of the merits of the full proposal.
4. Proposals will be evaluated by fellow SIT members based on the scientific rigor of the source of the new information, while at the same time considering if the additional complexity incorporated into the DSM (if applicable) is necessary based on the objectives of the program. Scientific rigor will be evaluated based on study design, proper data analysis, and repeatability.
5. If proposals are evaluated favorably, the Science Coordinator will direct technical staff to prototype the modifications to the DSM. Proposal sponsors are expected to be available to answer questions and meet with the Science Coordinator and technical staff to ensure the proposed changes are implemented as intended by the proposal sponsors.
6. Full proposals must be ready for prototyping the changes in the DSM by the deadline set by the Science Coordinator. These deadlines enable efficient work by technical staff and a predictable workflow for the SIT.
7. The SIT will review the results of the prototyped changes and the influence the modifications have on the model. Based on the SIT evaluation, the prototyped changes will be finalized in the model. The decision on whether to incorporate changes is the responsibility of the Science Coordinator who will instruct technical staff to implement the modifications.

Annual Memo Review Process

The NTRS defines priorities for a five-year period yet the SIT adaptive resource management process allows for updates to those priorities based on new or updated information. These updates are documented in the annual Adaptive Management Update memo, which is a consultative document authored by the Science Coordinator.

The Adaptive Management Updates will include model change proposals that were considered or accepted by the SIT, progress made by SIT subgroups, updates made to the decision support models, and any other relevant updates. The memo will describe any changes to the priority restoration actions or information needs defined in the NTRS based on the decision analysis tools and SIT expert judgement.

SIT members have the opportunity to review and comment on the document through the memo review process, outlined below.

Timeline

The Science Coordinator is responsible for defining the timeline and deadlines for reviewing and finalizing the Adaptive Management Update each year. The expected timing for each step is described below.

Science Coordinator Drafts Memo (1-2 weeks)

The Science Coordinator drafts the memo based on the work of the SIT and any updates related to NTRS priorities. The Science Coordinator will provide the SIT with a draft of the memo and request SIT review of the document for content and potential inaccuracies.

SIT Submits Comments to Science Coordinator (2 weeks)

SIT members will be given a review period of two weeks to provide comments or suggested edits to the Science Coordinator.

Science Coordinator Revises Memo (1-2 weeks)

The Science Coordinator reviews suggested SIT comments and edits of the memo. The Science Coordinator is responsible for determining which comments and edits are incorporated into the final draft memo.

Science Coordinator provides SIT with Final Draft Memo

The Science Coordinator will provide SIT members with the final draft memo within two weeks of receiving comments.

SIT Members Submit Optional Addenda to Science Coordinator (1 week)

SIT members are not required to review the final draft. However, SIT members that disagree with aspects of the memo can record dissenting views in a document that will be added as an addendum to the memo and provided to the Core Team. The SIT will be given one week after receiving the final draft memo to provide these documents to the Science Coordinator. The format of the addendum document (length, file format) will be determined by the Science Coordinator.

Science Coordinator Finalizes and Distributes Memo (1 week)

The Science Coordinator will collate the addendum documents, attach them to the memo, and submit the final memo to the Core Team. The memo will also be posted on the SIT website.