



representatives on their own initiative. Scientific findings that are consistent with broader knowledge of the Trinity River may influence Program decision-making.

Process:

- 1) Any partner, including members of a TRRP stakeholder advisory group, who finds an external report of interest to them may forward it to their workgroup coordinator and agency IDT representative for consideration of how it may affect the Program. If either their workgroup coordinator or agency IDT representative concurs that it may have potential value, it is submitted to the Science Coordinator or Implementation Branch Chief.
- 2) The Science Coordinator or Branch Chief forwards the document to IDT
- 3) The IDT determines which workgroup(s) should review the report.
- 4) The workgroup(s) review the report (see review instructions in next section).
- 5) The workgroup(s) submits recommendation to IDT for consideration.
- 6) The IDT reviews the recommendation and if they agree, the Science Coordinator documents the decision in the TRRP document tracking spreadsheet.
- 7) If the document influences a change within the Program, the Science Coordinator publishes the adaptive management decision in TRRP's annual report.

Workgroup Review Instructions:

The workgroup coordinator completes a report based on input from the workgroup. The report template describes the major findings of the report, hypotheses that were tested, what management actions the report relates to, what opportunistic learning ideas arose that the authors may not have highlighted and makes recommendations to change (or not) the management action based on the findings of the report. The purpose of this review is to determine what the document 'means' to the program and enshrine that as 'best available Program science'. It is important that reviewers recognize that progress based on reductionist science is usually incremental and based on many contributions over time, so it is reasonable to conclude the report is inconclusive if more research is needed to affirm or change a management action.

3.3.3. Annual Science Planning Process

Given that the 'best available Program science' is constantly evolving in unpredictable ways, it is important to have an agreed upon and formalized process by which annual science decisions can be made as new information arises. This will improve transparency and consistency of decisions as well as improving the efficiency and effectiveness of Program science. The process must ensure the Program benefits from external expertise where necessary while being guided by the extensive history and understanding of Program scientists and partners. This section provides a formalized but flexible process for how key uncertainties are reviewed, prioritized, and actioned. The primary difference in the new process described here is to enable Program scientists to play a stronger role in identifying science needs and guiding science related activities. It also clarifies the roles and responsibilities of different parties to support annual science planning, including the Science Advisory Board (SAB). The process is summarized in Table 3, with more detail provided below.



Table 3. This table provides a summary of the steps, timing, and responsibilities involved in the annual science planning process. IDT = Inter Disciplinary Team, SAB= Science Advisory Board, EDO=Executive Director's office, TMC= Trinity Management Council.

Step #	Description	Whom	When
1	Confirm Key Uncertainties and determine focus for upcoming funding cycle	IDT	July (of previous fiscal year)
2	Develop specific research questions	IDT with input from SAB	Sept - Oct
3	Develop RFP	EDO supported by IDT + workgroups as needed	Nov - Dec
4	Post RFP	EDO	Jan 1 – Feb 28
5	Evaluation of individual project proposals	Workgroups + SAB	March - April
6	Develop science proposal (i.e., portfolio of projects to fund)	IDT	May
7	Presentation of science proposal	IDT	May
8	Funding decision	TMC	June
9	Contracting	EDO	Oct

Step 1: Confirm key uncertainties and determine focus for upcoming funding cycle (July)

The IDT will confirm the list of key uncertainties is still appropriate. The key uncertainties are not expected to change frequently, but the process must be agile enough to respond to unexpected changes. If a new key uncertainty is identified, it will be discussed and vetted by the IDT using the following questions to guide the discussion:

- Is the new uncertainty nested within an existing key uncertainty? If so, consider adding to the research question parking lot.
- Will assessing this key uncertainty result in revised management actions via AM? Which Actions?
- Will assessing this key uncertainty improve tracking progress towards the TRRP goal? Which attribute of the goal (i.e., form, function, fish)?
- What are the consequences of not assessing this key uncertainty? Why and how would these consequences occur?
- Is there a sequential nature required to resolve key uncertainties? If so, where in the sequence is this key uncertainty?

It will not be possible to resolve all key uncertainties in one year. An initial multi-year plan or path forward is described in Section 3.2.3 and Figure 6. However, the IDT shall update the plan and determine the focus of the upcoming funding cycle annually. The IDT will consider what has been learned to date, budget, and context (e.g., drought conditions). In some years the IDT may choose to focus on a single key uncertainty. In other years the IDT may choose to spread effort across multiple key uncertainties simultaneously.

Step 2: Develop specific research questions (Sept - Oct)

The desired outcome of this step is a short list of the most important and time sensitive research questions to address the focal key uncertainties identified in Step 1. These research questions will form



the basis for specific 'Requests For Proposals' (RFPs) – Step 3. The research questions must be specific enough to ensure the proposals address the identified Program need but should not prescribe the approach or methods, so that the Program is able to benefit from external expertise. A parking lot of potential research questions will be cataloged and maintained to capture good ideas that are not selected for a given year.

Process:

- Research questions may be suggested at any time by Program scientists and recorded in the research question parking lot.
- The IDT will meet and identify a draft list of the most important / time sensitive of the potential research questions and document any supporting information. The key uncertainties and annual focus identified in Step 1 provide the bounds of the IDT discussion.
- The IDT and SAB will meet to discuss the draft list of potential research questions, evaluate trade-offs, and finalize the list which is moved to Step 3. Involving the SAB early in the annual science planning process will provide an independent check on Program direction. Direct interactions among the IDT and SAB will optimize the Program's benefit from SAB expertise.

Step 3: Develop RFP(s) (Nov – Dec)

The RFP(s) is/are developed by the EDO with support from the IDT and workgroups as necessary.

The number of RFPs will vary between years depending on the nature of the research questions and the desired skill sets. The budget may be pre-determined (e.g., 20% for RFP A and 80% for RFP B) or may be open (i.e., one pot to be split among the projects depending on the submissions) and criteria for prioritizing allocations in an open setting will be done prior to issuance of RFPs.

The RFP should include these elements at a minimum:

- Specific research questions (Step 2)
- A description of how the research question(s) is/are expected to help reduce the Key Uncertainties (Step 1)
- A description of how the project is expected to influence management decisions
- A description of how the project will help to build Program capacity (e.g., describe knowledge transfer requirements)
- The nature of the project (e.g., literature review, modeling, data collection, field study)
- Desired skill set
- Deliverables and schedule
- Budget information (may be RFP specific or not, as described above)
- Explicitly stated proposal evaluation rubric with definitions

Step 4: Post RFP (Jan 1-Feb 28)

The EDO is responsible for administering the RFP. The goal is to have a consistent funding cycle, so proponents are prepared to respond each year, resulting in greater likelihood of receiving high quality proposals.