**Klamath Fish Monitoring & Evaluation Priorities**

This project is facilitating discussions by Klamath Basin fish monitoring and evaluation partners to identify a prioritized menu of monitoring options in order to provide budgeting flexibility in these uncertain funding times. Federal funding agencies are seeking flexibility to navigate uncertain budgets regardless of whether operating under a continuing resolution (CR), a new budget with heavy cuts, a new budget with slight increases, and/or whether access remains to the final year of Bipartisan Infrastructure Law (BIL) funding. It is intended to provide a clear path forward for approvals, no matter what.

This draft working document identifies a framework for this prioritization exercise for review and consideration by the project steering committee. This approach is based on guidance from the USFWS. The approach includes:

1. A list of prioritization considerations based on previous workshop discussions by fish monitoring and evaluation partners.
2. Categories of project prioritization based on legal obligations, management applications and local or programmatic importance.
3. Example scenarios consistent with different levels of funding availability.

The project is ultimately intended to:

1. Identify collaboratively agreed to activities (monitoring, research, collaborative process/database) that should be recommended to be funded (existing/new) with FY26 funding to provide a more comprehensive set of information conveying what the Basin needs (ESA/Biop and non-ESA) to support/inform funding decisions by USFWS and other funders.
2. Write a collaborative monitoring strategy that can be used to strongly communicate how the work jointly informs specific local, regional, and legal information needs as this will be helpful in funding requests and to understand the scope of work funded by which entities.
3. Establish a standing group of experts that convenes regularly to identify and coordinate on shared needs related to aquatic/fish monitoring and research, serve as a source of expert advice/recommendations to inform funding decisions, and apply a set of criteria to inform recommendations on work to be funded (existing/new) depending on funding situation such as multiple years (ongoing work) or one-time funding opportunity (equipment, one time survey etc.)

# Considerations

1. Monitoring is essential for effective fish conservation, management and restoration efforts. Current projects all address high priority needs.
2. A comprehensive monitoring plan will identify objectives, requirements, priorities, a core program and additional needs to address critical uncertainties and emerging issues.
3. Research and synthesis to understand key drivers and mechanisms are also critical to identification of effective conservation, management and restoration measures.
4. Information sharing and data archiving are important elements of a comprehensive plan.
5. Reductions in monitoring will decrease precision and accuracy and accuracy of assessments, and increase management uncertainty in a changing environment.
6. Monitoring priorities are a product of legal obligations and management decisions informed by the corresponding information. Information can have immediate and longer-term management applications.
7. Keeping entities and partnerships intact over the long term is also essential for long term success of conservation and restoration in the basin. Tribal presence is a key value for success over long term.
8. There are potential opportunities for scaling across many or most project areas. Even high priority activities can absorb some scaling reduction in order to make room for other priorities.
9. Projects can absorb incremental reductions only to a certain point beyond which incremental reductions critically impair function to the point where the project is no longer effective.
10. Even if funding source of a particular project is not at risk, distribution of funds might be reconsidered to backfill in other priority areas (within the constraints of funding obligations of the source).
11. Some projects may be candidates for skipping a few years – particularly where applications are more long term and not annual in application.
12. A common understanding of the scope and needs for fish monitoring will be a valuable outcome of a collaborative planning and prioritization effort by fish monitoring and evaluation partners.
13. Priorities identified by monitoring and evaluation partners are a preferrable alternative to leaving it strictly up to the high-level funding sources.

# Project Categorization

## Project Definition

Projects are generally defined for the purposes of this exercise by monitoring activity, lead entity and funding source. Project are a term of convenience and include a variety of monitoring activities, objectives, locations and entities. A group of monitoring activities might be supported by a variety of funding sources but because this exercise is ultimately intended to inform funding decisions, we generally attempted to separate projects by primary funding source.

Location of each project is identified. Locations are labeled by area of the basin with each area generally including similar activities sometimes at different sites.

Applications of the information collected by each project were identified to help inform the priorities related to legal requirements and corresponding management decisions. Primary and secondary applications were identified. Applications identified by categories described in the draft monitoring and research activity summary document prepared for this project.

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| * General Fish Status & Trends * ESA Listing & Recovery * Fishery Management * Hatchery Effectiveness * Dam Removal Response | * Passage Effectiveness * Water Management & Mitigation * Habitat Restoration Effectiveness * Factors & Processes |

## “Priorities”

“Obligatory” projects are defined as those specifically *required* by law. Examples include ESA Biological Opinions and legally binding agreements. Note that while a project may be tagged as obligatory, this doesn’t necessarily mean that the entire scope of the project is obligatory. Effort and methodology of obligatory projects may be scalable consistent with project objectives.

“Critical” projects are defined as those *essential* to annual or critical path management decisions. All projects inform management decisions at some level but we distinguish critical projects as those where there is no reasonably effective alternative for the information provided. Examples include annual stock assessments used to generate run forecasts necessary to establish fishing seasons. Monitoring to evaluate the response to dam removal may be another example of a critical project as the effectiveness of current reestablishment efforts would be otherwise unknown. A project can be both obligatory and critical but not every critical project is obligatory and *visa versa*.

“Locally or Programmatically important” projects are those which may not be labeled obligatory or critical but are *significant* to the long-term conservation and restoration Klamath Basin fishes. Locally-important projects inform restoration and management decisions in specific areas of the basin. Programmatically-important projects help sustain programs, staff and infrastructure of management, conservation and restoration partners that are key to the long-term health of the basin’s habitat and ecosystems.

“Scalability” refers to the potential scope for adjusting efforts or methodology while maintaining function consistent with project objectives. Scalability might be accomplished by reducing scope in any given year or by skipping years entirely.

## Funding

Funding agency is the original provider of the project funds (e.g., USBR, USFWS, NMFS, CDFW, ODFW).

Funding source is the program/origin/mechanism for the project funds. Examples include:

Trinity River Restoration Program (USBR)

Klamath Coho Habitat Restoration Program (USBR)

Pacific Coastal Restoration Fund (NMFS)

Sportfish Restoration (CDFW, ODFW)

Wildlife Conservation Board (CDFW)

General Fund (States)

Merkley Klamath Funds (USFWS)

Klamath Basin Restoration Program (USFWS)

Bipartisan Infrastructure Law (USFWS)

National Fish Passage Program (USFWS)

Coastal Program (USFWS)

Partners for Fish and Wildlife Program (USFWS)

Etc.

Recipient is typically the project implementor. Where funds are passed through other entities, the recipient is the destination entity.

Cost – Annual project budget in dollars.

Funding security: Beginning next year, how many years are of funding have been allocated?

Funding dedicated? Identifies cases where funds can only be used for the specified project.

Federal alignment: For federal funding source, is the project aligned with Federal Administration Goals (goals to be identified by federal agencies).

Table 1. Project categories

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| **Project/Activity** | **Location** | **1° Application** | **2° Application** | **Obligatory** | **Critical** | **Important** | **Scalability** |
| Fall Chinook Spawning Surveys | Klamath Lower-Middle | Fishery Management | Status & Trends |  |  |  |  |
| Fall Chinook Spawning Surveys | Trinity | Fishery Management | Status & Trends |  |  |  |  |
| Fall Chinook Spawning Surveys | Klamath Upper | Dam Removal Response | Fishery Management |  |  |  |  |
| Shasta/Scott Tributary Weirs | Klamath Tributaries | ESA Listing & Recovery | Fishery Management |  |  |  |  |
| Upper Klamath Tributary Weirs | Klamath Upper | Dam Removal Response | Fishery Management |  |  |  |  |
| Trinity Mainstem Weirs | Trinity | Fishery Management |  |  |  |  |  |
| Spring Chinook Snorkel Surveys | Salmon/Scott | Status & Trends |  |  |  |  |  |
| Steelhead Snorkel Surveys | Klamath/Trinity Trib. | Status & Trends |  |  |  |  |  |
| Adult Sonar | Klamath Upper | Dam Removal Response |  |  |  |  |  |
| Keno & Link River Adult Counts | Klamath Upper | Dam Removal Response | Passage Effectiveness |  |  |  |  |
| Fall Creek Hatchery Evaluation | Klamath Upper |  |  |  |  |  |  |
| Trinity Hatchery Evaluation | Trinity |  |  |  |  |  |  |
| Adult Telemetry | Klamath Upper | Dam Removal Response |  |  |  |  |  |
| Juvenile Telemetry | Klamath Headwaters |  |  |  |  |  |  |
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Table 2. Project funding

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| **Project/Activity** | **Agency** | **Source** | **Recipient** | **Cost/yr** | **Secure?** | **Dedicated?** | **Fed/ Align.** |
| Fall Chinook Spawning Surveys |  |  |  |  |  |  |  |
| Fall Chinook Spawning Surveys |  |  |  |  |  |  |  |
| Fall Chinook Spawning Surveys |  |  |  |  |  |  |  |
| Shasta/Scott Tributary Weirs |  |  |  |  |  |  |  |
| Upper Klamath Tributary Weirs |  |  |  |  |  |  |  |
| Trinity Mainstem Weirs |  |  |  |  |  |  |  |
| Spring Chinook Snorkel Surveys |  |  |  |  |  |  |  |
| Steelhead Snorkel Surveys |  |  |  |  |  |  |  |
| Adult Sonar |  |  |  |  |  |  |  |
| Keno & Link River Adult Counts |  |  |  |  |  |  |  |
| Fall Creek Hatchery Evaluation |  |  |  |  |  |  |  |
| Trinity Hatchery Evaluation |  |  |  |  |  |  |  |
| Adult Telemetry |  |  |  |  |  |  |  |
| Juvenile Telemetry |  |  |  |  |  |  |  |
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# Scenarios

Scenarios are intended to explore alternative strategies to address funding shortfalls and illustrate the potential tradeoffs of the various funding decisions.

## Scenario 1 – Increased Funds

What additional work or projects might be considered and how will the information be used?

## Scenario 2 – Core Program

Funding available only for obligatory and critical projects.

Core projects continue at current funding levels. Other projects deferred.

What projects would this include and what are the associated costs?

## Scenario 3 – Proportional Reductions in all Projects

For instance, how would each project accommodate a 20% funding reduction.[[1]](#footnote-1)

All projects scale downward to the extent possible while meeting objective requirements.

Which projects are unable to absorb a 20% reduction without becoming non-viable?

## Scenario 4 – Combined Strategy

All projects scale downward for a 20% target or to the extent possible while meeting objective requirements.

Core obligatory and critical projects continue at scaled/reduced funding levels.

Some projects deferred or go to a not-every-year schedule.

A portion of the available funds is dedicated to locally or programmatically important projects in order to bridge critical partners through a period of reduced funding.

1. For exercise purposes. Assumed 20% might require some substantive rethinking of priority activities within a project while 10% reduction could probably be absorbed by most projects. [↑](#footnote-ref-1)