# **Central Valley Project Improvement Act Fiscal Year 2020 Call for Project Proposals**

### **Most Important Items**

This Fiscal Year 2020 (FY20) Call for Project Proposals includes all three major Central Valley Project Improvement Act (CVPIA) Resource Areas (Fisheries, Refuges & Independent Programs)

- 1. CVPIA Project Proposal Database opens March 4, 2019
- 2. CVPIA Project Proposal Database closes April 5, 2019
- 3. Every Project Proposal (e.g., Charter) must clearly state:
  - a. A clear, concise explanation of which Science Integration Team (SIT) Priorities the project proposal addresses.
  - b. A quantitative prediction of the expected outcome(s) of the management action(s) proposed in the project proposal.
  - c. A year-by-year estimate of the funding request (updated for on-going projects).
  - d. A monitoring plan containing details about the short-term, objective-specific monitoring proposed for the project, and an estimate of how and when on-going long-term trend monitoring will detect the impact on fish production due to the project.
  - e. Every Project Proposal must be prepared by a Project Management Team (PMT). We strongly advise that project proponents form a PMT to plan, prepare, and submit a Project Proposal, and then oversee and implement the project upon funding by CVPIA. The PMT should include the project originator; a U.S. Fish and Wildlife Service (USFWS) representative as either a project manager or subject matter expert, or both; and a Bureau of Reclamation (BOR) representative (optional) in either role. The Project Proposal must describe the PMT members and their roles. Other subject matter experts may join the PMT as the team feels necessary.

### **CVPIA Annual Work Plan Process**

USFWS and BOR, the Implementing Agencies (IA) establish priorities for projects intending to increase fish production in the Central Valley. The Core Team (CT) and SIT recommend fish resource area priorities. The CVPIA Interagency Refuge Water Management Team recommends refuge water supply priorities. Both resource areas identify minimum criteria for project

consideration. This is the FY20 CVPIA Call for Proposals for all Resource areas under CVPIA and a detailed description of the process used in the Fish Resource Area.

The USFWS 2016 Draft Implementation Plan for the anadromous fish related provisions of the CVPIA set forth a science-based approach using Adaptive Resource Management (ARM) for the formulation of the CVPIA Annual Work Plan. Figure 1 outlines that approach. On February 25, 2019, the Science Integration Team (SIT) produced, in lieu of a 5-year Plan, an interim set of FY20 priorities for Fall-run Chinook Salmon. The SIT also produced, in coordination with the Project Work Teams (PWTs) for Spring-run, Winter-run, Steelhead, and Green Sturgeon, a set of FY20 priorities for their respective species. This document serves as an invitation for you to produce Project Proposals in response to these FY20 priorities.

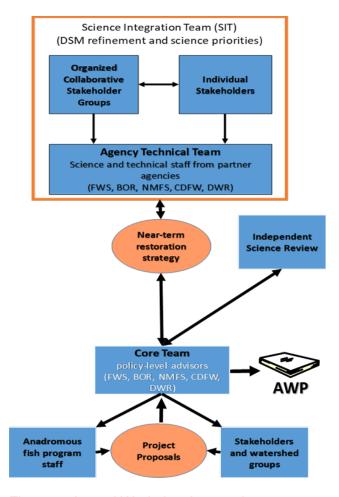


Figure 1. Annual Workplan Approach.

The overall process and schedule is as follows:

1. February 20, 2019 - Science Mentor compiles fall-run Chinook Salmon priorities from Science Integration Team (SIT), as well as spring run, winter run, steelhead, and sturgeon priorities. The Acting Science Coordinator publishes all science-based priorities in the FY20 Technical Memorandum.

- 2. February 28, 2019 CT affirms priorities, considerations and evaluation criteria.
- 3. March 1, 2019 IA compile final priorities and issue FY20 Call For Project Proposals soliciting ideas, concepts, and plans for projects that will contribute to doubling natural production of anadromous fish populations following published priorities.
- 4. March 4–April 5, 2019 Respondents form PMTs and enter proposals into the database; On-going projects are updated in the CVPIA Proposal Database.
- 5. April 8–April 19, 2019 Agency/Core Team review Project Proposals (Scoring)
- 6. April 22–May 1, 2019 IA review of Project Proposals (Scoring)
- 7. May 2, 2019–July 26, 2019 Annual Work Plan (AWP) Development
- 8. July 29, 2019 AWP Released to Public (tentative)
- 9. Aug 30, 2019 CVPIA Open House (tentative) Regional Office, Sacramento, CA

For responses to your questions, please contact:

USFWS CVPIA Co-Lead: Cesar Blanco, cesar\_blanco@fws.gov, (916) 978-6190

BOR CVPIA Co-Lead: Heather Casillas, <a href="https://heather.gov">heather.gov</a>, (916) 978-5360

BOR Fisheries Resource Area Coordinator: Rod Wittler, riwittler@usbr.gov, (916) 978-5232

### **Planning and Reporting Online Application**

Preparation of Project Proposals and funding decisions for FY20 CVPIA activities will again utilize the Planning and Reporting (PAR) online application. From a DOI federal network or using VPN, please visit:

http://apps.mp.usbr.gov/CVPIA

All Inter-Agency Staff will be notified when the database is open for entering data.

### **FY20 Priorities**

The following tables describe the science-based priorities for the FY20 Call for Project Proposals.

#### Table 1. FY20 Priorities by Taxon (Tables 18-20 in SIT Tech Memo)

#### All Chinook Runs

Increase perennially inundated juvenile habitat, Sacramento River above the American River confluence

Increase seasonally inundated juvenile habitat at 2 yr freq, Sacramento River above American River confluence

Increase spawning habitat, Upper Sacramento River

Keep juveniles out of central Delta

Adaptively manage juvenile habitat restoration to allow the evaluation of the effect of habitat restoration on wild juvenile Chinook salmon survival in the Sacramento River

Increase access to juvenile rearing habitat in Sutter and Yolo Bypasses

Maintain spawning habitat in the CVP streams

#### Winter-run Chinook Salmon

Improve adult and juvenile passage on Battle Creek

Increase flows through increasing base flows and/or reducing water diversions on Battle Creek

Increase access to non-natal tributaries to open up habitat in Upper and Upper Mid Sacramento Aug-March

#### Spring-run Chinook Salmon

Increase base flows year round to target benefits to multiple life stages, Deer Creek

Increase base flows year round to target benefits to multiple life stages, Mill Creek

Pulse flows, Upper Sacramento River Oct-Dec (until May in dry- below normal years)

Increase spawning habitat, Stanislaus River

#### Fall-run Chinook Salmon

Increase in rearing habitat in the Central Delta, Delta

Increase spawning habitat, Feather River

Increase perennially inundated juvenile habitat, Lower San Joaquin

Increase perennially inundated juvenile habitat, Stanislaus River

Pulse flows, Mokelumne River Late April early May

#### Steelhead

Increase access to spawning habitat, Battle Creek

Adaptively manage tributary flows, habitat, and/or temperatures to increase the frequency of anadromy

Species	Scenario	Data Limited?	Notes
Green Sturgeon	Pulse flows for attraction and spawning in Feather River	Yes	
	Improve passage at Tisdale, Fremont Weir, and Sunset pumps		
	Reduce fishing mortality (poaching and bycatch) of adults		
	High in-channel flows in Sacramento River for attraction	Yes	Important, but not as hard to get under current conditions. Review existing data before investing
	Maintain flows for spawning/rearing in Sacramento River for recruitment	Yes	Uncertainty with how to quantify recruitment across watersheds because no monitoring program in place except spawner abundance

Species	Scenario	Data Limited?	Notes
White Sturgeon	Reduce harvest (legal and illegal) of adults		
	Improve spawning and rearing habitat in San Joaquin River		
	High in-channel flows (spawning) and manipulate temperatures in spawning and rearing areas of San Joaquin River	Yes	Uncertainty with how to quantify recruitment across watersheds because no monitoring program in place except spawner abundance
	Improve passage at Tisdale and Fremont Weir		
	Maintain flows for spawning/rearing in Sacramento River for recruitment	Yes	Data are available, but analyses are limited

Table 2. FY20 Monitoring Priorities by Taxon (Tables 15-17 in SIT Tech Memo)

Taxon	Tier			
Chinook Salmon (All-Runs), Model Input/parameter				
Egg to fry survival	1			
Juvenile Delta survival	1			
Juvenile population estimates	1			
Adult population estimates	1			
Juvenile mainstem survival	1			
Juvenile tributary survival	1			
Ocean entry survival	1			
Through Delta survival juvenile	1			
Water temperature statistics	1			
Hatchery origin influence reproduction	2			
Juvenile Delta growth	2			
Juvenile river growth	2			
Proportion water diverted	2			
Behavioral dynamics in Delta	3			
Hatchery origin adult returning	3			
Pathology	3			
Predator prevalence	3			
Steelhead, Model Input/parameter				
Adult population estimate	1			
Egg to fry survival	1			
Factors related to anadromy	1			
Frequency of anadromy	1			
Juvenile Delta survival	1			
Juvenile mainstem survival	1			
Juvenile out-migrant abundance estimate	1			
Juvenile tributary survival	1			
Ocean entry survival	1			
Through Delta survival juvenile	1			

Taxon	Tier
Water temperature statistics	1
Hatchery origin influence reproduction	2
Juvenile Delta rearing habitat	2
Juvenile floodplain rearing habitat	2
Juvenile in channel rearing habitat	2
Spawning habitat	2
Adult en route survival	3
Adult pre-spawn survival	3
Behavioral dynamics in watershed	3
Contact point data	3
Proportion water diverted	3
White & Green Sturgeon, Model Input/parameter	·
Adult spawner abundance estimate	1
Juvenile abundance estimates	1
Juvenile Delta rearing habitat	1
Juvenile Delta survival	1
Juvenile in-channel rearing habitat	1
Juvenile main-stem survival	1
Juvenile tributary survival	1
Spawning habitat	1
Adult en-route survival	2
Adult pre-spawn survival	2
Egg to fry survival	2
Entrainment of larval stage in diversions	2
Ocean entry survival	2
Behavioral dynamics in Delta	3
Juvenile floodplain rearing habitat	3
Juvenile movement rate vs. flow model	3
Juvenile river growth	3
Juvenile routing rules	3
Proportion water diverted	3
Streamflow statistics	3

### **Additional Core-Team Priorities**

As of March 1, 2019 the CT has no additional priorities for FY20.

## FY20 Fish Resource Area Annual Work Plan Development Process

Adaptive Resource Management (ARM) is the application of the scientific method to natural resource management. ARM is an iterative application of Structured Decision Making. ARM requires specific, quantitative predictions of the expected outcomes of management actions. Following implementation of actions, predictions are compared to actual outcomes. Information on system processes is systematically updated using this monitoring data. This improved knowledge of system dynamics is then used to make future decisions.

The USFWS 2016 Draft Implementation Plan describes ARM process for CVPIA fisheries provisions. Figure 2 shows the cyclical annual process.

We are working through the process shown in Figure 2. Most parts of the project proposal process are relatively unchanged, such as the PAR tool, and most of its elements.

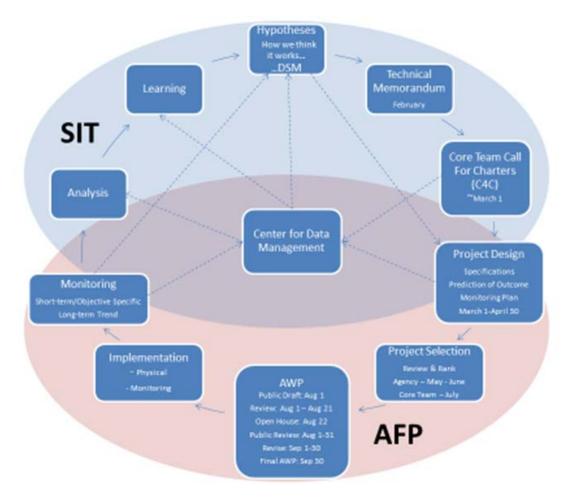


Figure 2. Adaptive Resource Management (ARM) process for the CVPIA fish program, per the 2016 USFWS Implementation Plan.

### **Spatial Extent and Scope of Project Proposals**

A goal of the CVPIA Fish Plan is to move toward watershed-based implementation, with coordination of all activities within a watershed, across programs and staff affiliation. All project proposals should consider and describe the appropriate spatial scale and scope of activities and how the project proposal fits within a watershed-planning framework. For example, is the scope Central Valley-wide, or watershed-specific? If the scope is watershed-specific, are there other project proposals envisioned for the same watershed?

The scope and scale of a project proposal is a decision for the project manager who will implement the Project.

Project proposals must be developed as "all or nothing" funding. The project proposal for an activity should include planning, implementation and monitoring.

### **Project Proposal Development Checklist**

This checklist, posed in the form of questions for proposal preparers, form the basis for development of project proposals. All sections of the project proposal should contain concise yet complete responses. Consider this checklist early in the proposal development phase as a guide for preparing a successful project proposal. The CT may periodically update this checklist to reflect changing priorities and/or needs related to project proposal ranking criteria.

### Applicant(s) (Preparer; Sponsor; Implementer; others)

Who is applying for this project proposal? What is their role? List & describe all project proposal participants.

### General

- 1. Project Proposal Title
- 2. Description: One sentence description summarizing the activity.
- 3. Funding Period: Includes when funding begins, when benefits begin and when funding is complete. This will address start to finish of the project and will require entering resources for each year that funding is required.
- 4. Program Priority and Comments (description/justification): How does this Project Proposal support overall CVPIA goals and AFP priorities, as recommended by the SIT and described by the CT?
- 5. Authority
  - a. Provision
  - b. Percentage

- c. Comment: justify why the project falls within the specified authority
- 6. Partners
- 7. Location ID: Locations should now be specified by a "Site Name" for each project, e.g. Happy Diversion Dam. We will follow up to determine the best way to capture spatial data through points, lines, and polygons that can be mapped.
- 8. Classification
- 9. Managing Office
- 10. Watersheds
- 11. Project Type
- 12. Project Proposal Year: The year the project proposal should be presented in an AWP. In this case, FY20 unless you are planning ahead.

### **Metrics**

- 1. Metrics: category of what is to be measured ()e.g. juvenile fish produced, acres restored, miles accessible.
- 2. Units
- 3. Value: Numeric measure.
- Comment: Documentation on how the metric was chosen and the numeric value estimated.

### Deliverable(s)

- 1. Date: When deliverables are expected to be received.
- 2. Title: Brief descriptive title of deliverable or likely citation. May include As-built drawings, monitoring plans, and reports (monitoring, quarterly, progress and final reports)

#### **Narrative**

Provide a concise description of the project including the following:

- 1. Overall description of the project proposal and associated projects
- 2. How does this project proposal support overall CVPIA goals and AFP priorities, as described in the FY20 SIT/CT Priorities? What Priority does this project proposal address? This description should be concise and to the point. Reciting the specific section from this memorandum is sufficient.

- 3. Detailed descriptions of the projects including the specific types of proposed management actions
- 4. What biological objectives and specific performance metrics (at the Central Valley and/or watershed scale) does the project proposal address? What local (within-watershed) performance metrics do the project proposals address?
- 5. Prediction of project outcome (Quantitative temporal prediction of expected project outcome. Best if made in terms of means objectives, i.e. short-term objective specific monitoring measures physical/biological response to management action.)
- 6. How the project proposal is cost-effective relative to its complexity, regulatory environment, and potential ecological and community benefits. Are the proposed costs substantiated? Does the majority of funding support on-the-ground restoration?
- 7. How does the project proposal fit within the ARM process and DSM model? What fundamental objective does it contribute to? (Peterson, Coarse Resolution Model Report, 2014) What means objective(s) does the project proposal implement/test? (Peterson, Coarse Resolution Model Report, 2014)
- 8. If the project proposal is focused primarily on science or monitoring, how will the results inform the DSMs or reduce uncertainty in decision-making?
- 9. What are the impacts of not doing the project proposal? Explain collaboration with or among stakeholders and agency partners in development and/or implementation of this project proposal.
- 10. Are there stakeholder objections to the project proposal as described? If so, what are these and how are they addressed?

### **Data Management**

List the FY20 Monitoring Priority the project proposal addresses. Describe the associated monitoring plan (objective specific/long-term trend) and if/how monitoring will inform the DSMs or reduce uncertainty in decision-making?

1. Short-Term, Objective Specific monitoring (STOS) relates to the short-term performance of the project. STOS monitoring includes specifications and as-built design drawings of the project. It includes a description of the management action, e.g. spawning gravel introduction or flood- plain lowering, or pulse flow scheduling. It must include statements about the objective(s) of the project, e.g. the objective is to recruit 100, 300, & 500 spawning pairs in years 1, 3, & 5, at 4 m2/pair, for a total 2,000 m2 of spawning area. It must include methods for detecting the first physical and/or biological responses to the project.

Long-Term Trend monitoring (LTT) relates to the impact of the project on fish production in the long-term. CVPIA supports long-term trend monitoring such as Rotary Screw Traps (RSTs). The project's monitoring plan includes a description of how and when the on-going LTT monitoring will detect a full response from the project. This is

- most likely a statistically-based description. Small projects are unlikely to be detectable, so the preparers should make a statement in such a case of the magnitude or number of small projects necessary to achieve a detectable signal.
- 2. Are performance metrics related to or derived from the DSM or means objectives (Peterson, Coarse Resolution Model Report, 2014), and integrated into the monitoring plan?
- 3. Contact information and citation (availability).

### Risks

- 1. Risk Description: Concise description of the specific events that may lead to changes in the scope, schedule, or budget of the work. Examples include: landowner coordination, Endangered Species Act (ESA), permitting, design data, escalation in material costs, etc.
- 2. Likelihood: is the risk likely to occur, remote, somewhere in the middle?
- 3. Risk Impact: how severely will the risk change the project? Stop the project, delays across multiple fiscal years, require additional data, make constituencies upset, etc.

### Resources

- 1. Activity Type: has been simplified to a single field.
- 2. Description: narrative on what the activity entails.
- 3. Year: add record for each resource type for each fiscal year of the project period e.g. year one would include a project planner, year two a biologist doing pre-project monitoring, and year three a project engineer to oversee construction. Project would also include a Project Manager all three years. Fields included are:
  - a. Resource Type
  - b. Resource Name: Specific staff name or agreement number when known. Vacant for a position to be filled or the likely financial instrument if unknown.
  - c. Rate: Rate should be used as the total annual cost for labor. Rate may be any amount for other types of expenditures.
  - d. FTE: FTE should be used as a scalar for the rate. For labor, FTE is the fraction of a year, e.g. for half-time of a \$150,000 per year staff, Rate = \$150,000, FTE = 0.5. For labor, this is used to report the number of federal staff employed. If rate actual amount, enter "1" for the FTE, e.g. a \$100,000 contract.
  - e. Markup: Markup may be used to escalate costs or perform other calculations. For no markup, enter "0".
  - f. Total Cost

- g. Hidden: Requests that CVP Administrators do not disclose the specific amounts. However the values will appear in any totals.
- h. Funding Source
- i. Description: Description should explain the basis for resource and the estimated rate and FTE (e.g. CVPIA Administrator full time staff position for overall management of the Restoration Fund; half time project manager for schedule, budget, and reporting; etc.)

### **Tips**

- 1. Drag the bottom right corner of text boxes to see more of your typing at once.
- 2. Click Print Report to see information more linearly and as a final check.
- 3. Use the markup and placeholder under Resources for out-year estimates where more detailed information is not available at this time, e.g. I think we're headed towards a \$500 construction effort...etc.
- 4. Only one person can make edits at a time.
- 5. Be sure to select the Partner or Program after adding an option to the list.
- 6. To mark a Project Proposal for Deletion, change the title name to start with "DELETE". The project proposal will still be available, but we will know to ignore it.
- 7. If you cannot edit a line, you will need to delete the line and re-enter the data (you can still copy the description first and paste the description into the new record).
- 8. For more information, please review the User Requirements Document.
- 9. Click "Save" regularly to avoid the time-out.

### **Supplemental Instructions/Information**

### Planning and Reporting (PAR) Application

BOR and USFWS staff has been assigned roles for the purpose of the database:

- Creators: program and project managers who can create new project proposals, assign authors, and take responsibility for the content of the project proposal.
- Authors: anyone with a DOI account designated by someone with a "Creator" role to edit specific project proposals.
- Team Member: any non-DOI team member participating in the creation of a project proposal May provide offline content to Creators or Authors for inclusion in the project proposal.

#### Available documentation includes:

- Reference Manual (Background)
- User Requirements (Programming Specifications). Not all features implemented at this time.

#### Creators are asked to:

- 1. Go to PAR (if required) at: http://apps.mp.usbr.gov/CVPIA
- 2. Create Project Proposals, Assign Authors, and Notify Authors
  - a. Click "New Charter" in the menu bar near the top of the screen and enter, at minimum:
    - i. Title
    - ii. Description
    - iii. Project Proposal Year
    - iv. Authors
  - b. Email the Title and Project Proposal year to the appropriate Authors.
- 3. Encourage, Support, and Follow-Up with Authors and Fellow Creators
- 4. Lock Project Proposals for Approval
  - a. Open a Created project proposal
  - b. Review Project Proposal Data and Priorities
  - c. Click "Lock Charter for Approval"
  - d. Return to Home
  - e. Verify the Project Proposal is now in the "Awaiting Approval" group of tables.
  - f. Repeat for Each Created Project Proposal

Creators should note that ongoing work (2015, 2016, 2017, 2018 and 2019) should be "Incremented" to make a Project Proposal that can be updated rather than redone from scratch. Remember to keep the same "Title" and set the "Year" for the FY20 annual work plans cycle. Creators can also "Copy" existing Project Proposals for similar types of work. Be sure to change the "Title" on a copied Project Proposal. Creators can "Unlock" a project to allow further editing by the authors so there is no penalty for finishing early and locking Project Proposals as you go.

#### Authors are asked to:

- 1. Revise historical funding obligations as appropriate.
- 2. Add data and planned funding obligations to support the Project Proposals assigned by a Creator.

Project Proposals support the 2020, 2021, and 2022 budget processes and should consider at minimum the next three years. For projects with a discrete stopping point where a portion of the benefits are realized and funding can be assessed, include all years in the estimate (e.g. all 7 years of a 7 year monitoring and analysis study, all post-project monitoring after construction, etc.). For ongoing projects (e.g. long-term monitoring, water operations, administration, etc.), please include at least 3 fiscal years (2020, 21, & 22).