

A wide, muddy-brown river flows through a deep canyon. The banks are covered with dense green vegetation, including shrubs and small trees. The canyon walls are rocky and brown. The sky is overcast and grey.

Project C: Riparian Vegetation Monitoring and Research

25 April 2024

Project C	Compliance?	Trigger?	Exper. Action analyses?	LTEMP Resource Goals	FY24 (386K)	FY25 (609K)	FY26 (629K)	FY27 (625K)
C.1 Ground-based Riparian Vegetation Monitoring	NEPA LTEMP ROD ESA Section 7 NEPA 6.4 GCPA 1802 GCPA 1804 GCPA 1805	No	Yes*	11 Riparian Vegetation *6 Recreational Experience *7 Sediment	212K	348K	351K	345K
C.2 Mechanistic Experiments with Plant Species of Interest	NEPA LTEMP ROD ESA Section 7 GCPA 1804 GCPA 1805	No	Helpful*	11 Riparian Vegetation	16K	73K	89K	80K
C.3 Predictive Modeling of Vegetation Responses to Dam Operations	NEPA LTEMP ROD ESA Section 7 GCPA 1802 GCPA 1804 GCPA 1805	No	Helpful*	11 Riparian Vegetation	143K	67K	70K	72K
C.4 Biogeomorphic Linkages between Streamflow, Sediment Transport, and Vegetation Composition	NEPA LTEMP ROD GCPA 1804 GCPA 1805	No	Helpful*	11 Riparian Vegetation 7 Sediment 2 Natural Processes *6 Recreational Experience	0	94K	101K	109K
C.5 Vegetation Management Decision Support	NEPA LTEMP ROD ESA Section 7 NEPA 6.4 GCPA 1802 GCPA 1804 GCPA 1805	No	Yes	11 Riparian Vegetation	15K	27K	19K	20K

Changes from last workplan:

Increased salary costs all around

C.1: Additional field crew added to existing monitoring to collect vegetation structure data in first two years

C.1: Added 2 months of collaboration with Lower Colorado River bird habitat analysis researcher

C.1: Increased logistics costs

C.2/C.3: Distributed salary costs equitably across projects

C.2: Experimental costs in FY26 ~10K higher than previously, otherwise similar to prior years

C.4: New project, all salary of existing researchers, but salary previously paid elsewhere.

C.5: New *Phragmites* project added 4K in FY25, shifted more salary here

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If you had 10% less budget, what would you cut? Why?

What can be reduced in the project and not sacrifice scientific integrity?

Options:

Within C.1: Reduce sample sizes for wildlife structure data collection, either 1 year (as opposed to 2) or half the effort in both years, cut collaboration with lower Colorado River bird habitat researcher, discuss further options with Brent Powers (Navajo Nation)

Within C.2: Re-evaluate experimental design

Within C.5: Remove Phragmites assessment

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Identify items that can be eliminated (we already have enough data, the data hasn't proven useful for management decisions, etc.)

We have found all previous project elements to be useful and designed appropriately (except the mechanistic experiments would benefit from being larger).

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Is there data that does not need annual collection?

C.1 Requires annual data collection, except wildlife habitat is proposed for first two years only

C.2 Experiments planned for second two years of workplan with preparation/equipment acquisition in first year

C.3 and C.4 use data collected elsewhere

C.5 *Phragmites* (common reed) work has data collection in first year only

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Can monitoring trips be combined with others?

Random sampling – Attempted some collaboration previously (unsatisfactory results), can reevaluate with any new projects/altered projects for this workplan

Long-term monitoring sandbars – already in conjunction with Project B.2