

ATTACHMENT C



February 28, 2020

Laura Hazlett
Klamath River Renewal Corporation
2001 Addison Street, Suite 317
Berkeley, CA 94704

RE: GMP Report

Resource Environmental Solutions, LLC (RES), has provided for Klamath River Renewal Corporation (KRRC)'s consideration the following GMP Report and cost proposal. This GMP is based on the 60%-level design completed by RES, input from the relevant governmental authorities regarding the anticipated permitting terms and conditions, and other governmental approvals discussions with KRRC and its advisors.

GMP Summary

Description	TOTAL
Restoration	\$48,097,244
Vegetative Restoration	\$7,371,163
Stream Restoration	\$36,956,166
Engineering Services	\$3,769,915
Local Impact Mitigation Fund (LIMF)	\$29,861,270
Monitoring	\$16,009,568
Maintenance	\$13,851,702
Total GMP	\$77,958,514

Within this GMP, RES has included all materials, labor, equipment, subcontractors, management, and overhead. The GMP includes an appropriate level of contingency to complete the restoration aspects of the project scope. This estimate is compiled consistently with RES' standard industry practice.

GMP Components

RESTORATION

• **Vegetative Restoration**

This component includes revegetation of all lands currently inundated by the JC Boyle Reservoir, Copco Lake, and Iron Gate Reservoirs. No revegetation is included for Copco 2 explicitly because it is essentially a run-of-river dam with no accumulated sediment. The purpose of the revegetation work is to promote landscape succession by promoting soil formation and reducing runoff generated erosion.



Revegetation is further broken down by vegetative cover types, or planting zones. These include zones for upland, riparian, and wetland planting. Final planting zones will be delineated following drawdown. Immediately following drawdown, all exposed reservoir sediment will be seeded with a pioneer seed mix that has been formulated for success on the clay and silt rich sediment.

Included in the revegetation component is the cost for collecting and propagating native seed to ensure adequate supply for restoration and adaptive management activities.

- **Invasive Exotic Vegetation (IEV) Management**

This component includes management of invasive exotic vegetation (IEV) in and around the reservoirs during the pre-drawdown, implementation, and maintenance & monitoring phases of the project.

- **Supplemental Sediment Evacuation**

This component includes activities to promote sediment evacuation during the current drawdown window. Activities may include sediment-water jetting using airboats outfitted with water cannons or ATVs outfitted with high volume pumps and fire hoses, boat prop and wake wash, and hand clearing of sediment blockages in tributaries within the reservoirs and between Iron Gate dam and Cottonwood Creek.

- **Grading**

This component includes both general and fine grading to support stabilization of the proposed restoration areas that include Spencer Creek, Beaver Creek, Jenny Creek, Scotch Creek, and Camp Creek. General grading is focused on reworking and removing reservoir sediments that remain on the floodplains of the target stream restoration areas. Fine grading includes reconfiguring the tributary channels to promote a stable planform, profile, and section that will promote volitional fish passage.

- **Habitat Features**

This component includes the acquisition of materials, preparation, and installation of habitat enhancement features in the targeted restoration areas. Habitat enhancement features include large wood (both helicopter and ground placed), boulder clusters, and willow baffles.

- **Engineering Services**

This component includes engineering and consulting services for drawdown and post drawdown activities which include primarily post-drawdown topographic surveying and surface model generation, and final restoration design and plan set preparation. Services also include Engineer of Record presence (Stantec) during RES' construction activities.

LIMF

- **Monitoring**

This component includes pre-drawdown, drawdown, and post-drawdown monitoring activities associated with water quality and various terrestrial and aquatic resource measures required by federal and state governmental approvals (permits, MOUs, agreements, etc.).

- **Maintenance**

This component includes maintenance activities for the following project components through the duration of the LIMF: fish barrier removal, temporary access roads, floodplain and stream habitat enhancement (grading and habitat features), IEV, irrigation, fencing, and vegetation (riparian, wetland and upland).

Explanation of Restoration Obligations

Because the areas that will be restored cannot be fully investigated until reservoir drawdown, RES has used an adaptive approach to restoration design. This is consistent with industry and regulatory practices. Upon drawdown, RES will apply or update current designs, as appropriate, to include site-appropriate stream restoration for historically fish-bearing tributaries within the current reservoir footprint (Camp Creek, Scotch Creek, Jenny Creek, Beaver Creek, and Spencer Creek).



Based on conversations with governmental authorities regarding the restoration objectives and conditions that will be included in the applicable permits and governmental approvals for the project, RES' GMP accounts for the level of effort required to restore formerly inundated lands and establish free-flowing conditions on the Klamath River and in key fish-bearing tributaries. The assumptions used to create the GMP are based on several months of conversations with governmental authorities regarding the restoration objectives and conditions that will be included in the applicable permits and governmental approvals for the project.