MEMORANDUM OF UNDERSTANDING BETWEEN THE COUNTY OF DEL NORTE, THE CRESCENT CITY HARBOR DISTRICT AND THE KLAMATH RIVER RENEWAL CORPORATION

This Memorandum of Understanding ("MOU") is made by and between the COUNTY OF DEL NORTE, a political subdivision of the State of California ("County"), the CRESCENT CITY HARBOR DISTRICT, a California special district ("Harbor"), and the KLAMATH RIVER RENEWAL CORPORATION ("Renewal Corporation") as of this __ day of ______, 2021 ("Effective Date"). County, Harbor, and Renewal Corporation are each individually referred to in this MOU as a "Party" and are collectively referred to in this MOU as the "Parties." This MOU is made in reference to the following facts.

RECITALS

WHEREAS, the amended Klamath Hydroelectric Settlement Agreement ("**KHSA**") provides for the removal of four hydroelectric developments comprised of the J.C. Boyle, the Copco No. 1, the Copco No. 2, and the Iron Gate hydroelectric developments, FERC Project No. 14803 (collectively the "**Lower Klamath Project**").

WHEREAS, the KHSA also provides for the implementation of measures associated with dam removal to improve water quality, restore aquatic habitat and reestablish access to over 400 stream-miles of historic spawning habitat upstream of the Lower Klamath Project.

WHEREAS, the KHSA provides for the implementation of dam removal and basin restoration activities through the mechanisms administered by the Federal Energy Regulatory Commission ("FERC") under the authority of the Federal Power Act, 16 USC §791 *et seq.* (the "FPA").

WHEREAS, on September 23, 2016, in furtherance of its obligations under the KHSA, Renewal Corporation filed an application with FERC to surrender the license for the Lower Klamath Project. This application was amended by the Renewal Corporation in November of 2020. As amended, this application is pending before FERC as the *Application for Surrender of License for Major Project and Removal of Project Works*; FERC Project Nos. 2082-063 and 14803-001 ("**License Surrender**").

WHEREAS, on January 13, 2020, PacifiCorp, the States of California and Oregon ("States") and the Renewal Corporation filed an application to transfer the FERC license for the Lower Klamath Project from PacifiCorp to the States and the Renewal Corporation as colicensees. This application is pending before FERC as the *Joint Application for Approval of License Transfer and Request for Expedited Review and Other Relief*; FERC Project No. 14803-004 (the "License Transfer"). Effective upon the States' and Renewal Corporation's acceptance of License Transfer, PacifiCorp shall be released from the license and the States and the Renewal Corporation shall hold the license to the Lower Klamath Project for the purpose of implementing License Surrender.

WHEREAS, the Renewal Corporation has filed with FERC in the License Surrender proceeding its comprehensive plan for the physical removal of the Lower Klamath Project to achieve at a minimum a free-flowing condition and volitional fish passage, site remediation and restoration, including previously inundated lands, measures to avoid or minimize adverse

downstream impacts, and all associated permitting for such actions (the "**Project**"). The comprehensive plan for the Project, as amended, is referred to herein as the "**Definite Decommissioning Plan**". It consists of specifications and measures that are organized in implementation plans.

WHEREAS, the County and Harbor have interests and responsibilities that are implicated by the Definite Decommissioning Plan. The County is a small rural county located in far northern California. The fishing industry including the sports fishing industry is a large portion of the County economy. Tourism provides another essential portion of the economy in the County. The County contains the mouth of the Klamath River within the County boundaries as well as a significant share of the river. The County also contains the Crescent City Harbor within its boundaries. The Crescent City Harbor is an essential facility for the County's fishing industry and economy as a whole. In various ways, the Project may affect the foregoing interests, which are collectively referred to herein as the "County/Harbor Interests".

WHEREAS, the Renewal Corporation, the County and the Harbor have consulted regarding measures to be included in the Definite Decommissioning Plan and submitted to FERC. These measures are intended to address the concerns of the County and the Harbor with potential impacts to the County/Harbor Interests that may be associated with the Project. These measures are proposed for FERC's approval and are set forth in Exhibit A, attached hereto and incorporated herein by this reference ("Recommended Terms and Conditions").

WHEREAS, the Renewal Corporation, the County and the Harbor have consulted regarding additional measures to address the County/Harbor Interests that will be implemented if, and only if, the Renewal Corporation and the States accept the License Transfer and FERC approves the License Surrender on terms and conditions that substantially conforms with the Definite Decommissioning Plan. These additional measures are set forth in Exhibit B, attached hereto and incorporated herein by this reference ("Additional Measures").

NOW THEREFORE, in consideration of the foregoing the Parties agree as follows:

- Recommended Terms and Conditions: The Parties hereby agree to diligently pursue the Recommended Terms and Conditions. The Parties will jointly recommend and request that FERC require (a) that the Recommended Terms and Conditions be included in the applicable implementation plans in the Definite Decommissioning Plan; and (b) compliance with such approved implementation plans as an enforceable obligation and requirement of the Final Order. The term "Final Order" shall mean an order issued by FERC that constitutes the full and final disposition of the License Surrender proceeding and is subject to judicial review pursuant to 16 U.S.C § 8251 (b).
- Additional Measures: The Renewal Corporation will implement the Additional Measures during the term of this MOU. The County and the Harbor will each and both fully cooperate with the Renewal Corporation in the implementation of the Additional Measures and take such further actions, including the execution of documents, as may be reasonable required to implement the Additional Measures in accordance with the terms and conditions of this MOU.

- **3. Term:** The term of this MOU shall commence as of the Effective Date and shall end upon the date that is the earlier of the following dates to occur: (a) the date that FERC shall determine that all of the requirements contained in the Final Order have been satisfied, or, (b) the date that a Party shall terminate this MOU in accordance with Section 7.
- 4. FERC Approval: Renewal Corporation's obligation to implement the Recommended Terms and Conditions and the Additional Measures is contingent upon each and both of (a) the Renewal Corporation's and the States acceptance of the License Transfer and (b) FERC's issuance of a Final Order that substantially conforms with the Definite Decommissioning Plan. The obligations of the County and the Harbor to take no action before FERC, or in any other regulatory or public forum, that is contrary to, conflicts with, hinders, changes, modifies or impairs the implementation of the Recommended Terms and Conditions and/or the implementation of the Additional Measures is contingent upon FERC's issuance of a Final Order containing the Recommended Terms and Conditions.
- 5. Good Faith: The Parties agree to collaboratively and in good faith recommend and support the Recommended Terms and Conditions in the License Surrender proceeding and shall take no action before FERC, or in any other regulatory or public forum, that is contrary to, conflicts with, hinders, changes, modifies or impairs the (a) implementation of the Recommended Terms and Conditions, and/or (b) the implementation of the Additional Measures.
- **6. Reservation of Rights:** Subject to Section 5 and applicable law, the County and the Harbor fully reserve their respective rights to take such action as it deems necessary to fulfill its constitutional, statutory, and regulatory responsibilities or comply with any judicial decision.

7. Termination:

- ("Default"), the other Party may give written notice of such Default to the defaulting Party. The defaulting Party shall have thirty (30) days from receipt of such notice of Default to cure such Default (provided however, if such Default is not capable of cure within thirty (30) days, the defaulting Party shall commence such cure within such thirty (30) day period and shall continuously and diligently complete such cure as soon as is reasonably possible thereafter). If such Default is not cured to the satisfaction of the non-defaulting Party within the applicable cure period, the non-defaulting Party may terminate this MOU by written notice to the defaulting Party. Notwithstanding the foregoing, neither the County or the Harbor may give a written notice of Default to the Renewal Corporation pursuant to this Section 7.1 unless such notice of Default is executed and by both the County and by the Harbor and is given to the Renewal Corporation as a joint County/Harbor notice of Default.
- **7.2** Renewal Corporation may terminate this MOU by written notice to the County and the Harbor if Renewal Corporation elects to reject (a) the License Transfer, or (b) the License Surrender.
- **8. Miscellaneous:** This MOU contains the entire agreement between the Parties with respect to the subject matter hereof and supersedes any and all other prior

understandings, communications and agreements, oral or written, between the Parties with respect to the subject matter of this MOU. This MOU may not be amended or modified except by a written agreement signed by the Parties. If any terms or conditions of this MOU are deemed to be invalid or unenforceable, the remainder of this MOU shall not be affected thereby. This MOU may be executed in multiple counterparts, each of which shall be deemed to be an original agreement, and all of which shall constitute one agreement. This MOU shall be governed the laws of the United State of America and, as applicable, the laws of the state of California. This MOU is binding upon the Parties and their respective successors and assigns.

THIS MEMORANDUM OF UNDERSTANDING is made by and between the undersigned Parties as of the Effective Date.

COUNTY OF DEL NORTE, a political subdivision of the State of California

Ву:
Its:
CRESCENT CITY HARBOR
DISTRICT, a special district of the State
of California
Dv.,
By:
Its:
KLAMATH RIVER RENEWAL
CORPORATION.
By:
Its:

EXHIBIT A RECOMMENDED TERMS AND CONDITIONS

The Renewal Corporation will include the following measures in the Definite Decommissioning Plan. If the Renewal Corporation and the States accept License Transfer and a Final Order is issued that substantially conforms with the Definite Decommissioning Plan, these measures will be enforceable obligations of the Renewal Corporation under the Final Order.

Prior to the Final Order, the Renewal Corporation and the County shall jointly develop a detailed workplan for the implementation of these measures. The work plan shall be consistent with the Water Quality Monitoring Plan and will address the specific logistics, equipment, and protocols associated with implementation of the monitoring measures. The workplan will also provide a summary of the process developed to determine potential impacts within the Crescent City Harbor and the Townsite and Roy Rook boat ramps caused by the Project.

If the Project is delayed, then the timing and sequencing of the date or dates for implementation of the Recommended Terms and Conditions shall be extended to the corresponding date or dates that best reflect the intent of the Parties to this MOU.

A. Sediment Monitoring Measures: The following measures are proposed to evaluate whether sediment released from the Lower Klamath Project reservoirs is (1) moving north from the mouth of the Klamath River to Crescent City Harbor, (2) depositing in the mouth of Crescent City Harbor, and (3) if sediment deposition occurs in Crescent City Harbor, what percentage of the total sediment accumulation is from the dam reservoir drawdown sediment versus normal annual accumulation of sediment which occurs independent of dam removal.

Measure A-1. Establish Bathymetric and Topographic Survey Areas.

The focus of Measure A-1 is to establish baseline conditions for the Crescent City Harbor. Baseline conditions will then be used to evaluate sediment accumulation, as detailed in Measure A-3. Within Measure A-1, the Renewal Corporation will establish multi-beam bathymetric surveys at the following locations:

- Harbor (Area 1 in Figure A-1)
- Inner Basin (Area 2 in Figure A-1)
- Outer Basin (Area 3 in Figure A-1)
- Marina Access Channel (Area 4 in Figure A-1)
- Inner Harbor Basin Channel (Area 5 in Figure A-1)
- Entrance Channel (Area 6 in Figure A-1)

See also Figures 1 through 5 on pages 21 through 25 of the McMillen Jacobs Report.¹

The bathymetric and topographic surveys will be established in 2022. Two sets of measurements will be obtained at each survey area: one in 2022 (late summer or early fall) and one in 2023, approximately 12 months following 2022 baseline measurements. Survey data for each monitoring area will be used to develop a digital elevation model (DEM), which is a three-dimensional representation of a terrain's surface. The two collected datasets for each area will be compared on a cell-by-cell basis using a GIS spatial analyst program and averaged to set the baseline condition for monitoring of the sediment deposition during the dam removal period.

Renewal Corporation will provide bathymetric and topographic survey data to the County for review within two weeks of completion of quality assurance and preparation of draft maps. Determination of baseline surfaces will be made in coordination with the County. Associated reports, memos, and calculations will be provided to the County for review and comment prior to finalizing documents.

Measure A-2. Conduct Current Monitoring During Drawdown.

The Renewal Corporation will conduct current monitoring and analysis to assist in determining the sediment flow patterns exiting the Klamath River and to assess whether the sediment moves north, south, or directly west into the ocean upon discharging from the river. This measure consists of using acoustic doppler current profilers (ADCPs) mounted to buoys to determine current patterns during initial, peak, and terminal sediment deposition periods. An ADCP measures current speed at specified intervals over a water column up to 70 meters in depth. The instrument can be anchored to the seafloor or mounted to a vessel, such as a buoy. The final locations of the monitoring buoys will be determined in consultation with County and Harbor. Upon the completion of this measure, the Renewal Corporation shall cooperate with the County and the State of California to facilitate the continued use of the buoys by the County to monitor ocean currents.

Data collected during the monitoring program can be stored within the ADCP unit and downloaded manually or set up for real time monitoring with data uploaded to a cloud database. Additional functionality can be added to the current monitoring, including echo sounding and turbidity monitoring. Detailed layout and design of the current monitoring and data acquisition system will be completed prior to implementation in coordination with the County. ADCP units will be deployed in 2022.

Renewal Corporation will provide the current monitoring data and associated analyses to the County's consultant for review, within two weeks of completing the data analysis and processing which will occur in the fall of each year.

Measure A-3. Monitor Bathymetric and Topographic Survey Areas

If current monitoring under Measure A-2 indicates sediment transport to Crescent City Harbor, the Renewal Corporation will monitor survey areas established under Measure A-1 to evaluate net

¹ Klamath River Dam Removal, Crescent City Harbor, Proposed Mitigation Measures, Revision No. 6 (McMillen Jacobs Associates, 2/19/21).

sediment deposition volumes. Three sets of data will be collected at each monitoring area; the first data set will be collected approximately 1 month after peak discharge from the mouth of the Klamath River, the second data set will be collected after completion of drawdown, and the third data set will be collected approximately 1-year post-drawdown. Thereafter, for an additional three (3) years following drawdown, the Renewal Corporation will monitor the survey areas and, on an annual basis, provide the County with a data set for each year of additional monitoring.

The bathymetric and topographic survey data will be used to generate post-drawdown DEM surfaces and compared to baseline DEM surfaces to clearly indicate the change in sediment deposition. This information will provide both a graphical representation of the sediment deposition changes from the baseline through post-drawdown conditions and the net total sediment volume observed from the baseline through post-drawdown conditions for each monitoring area.

In order to assess impact to the Crescent City Harbor, a threshold volume must be established for each monitoring location. An incremental increase of 25 percent will be used to define the threshold volume of sediment deposit.

Threshold Volume Calculation for Areas with Historic Dredging Data

The Entrance Channel, Inner Harbor Basin Channel, and Marina Access Channel have established historic dredge volumes. For the Entrance and Inner Harbor Basin Channels (Areas 5 and 6 in Figure A-1), the estimated average annual dredged volume is 12,000 cubic yards. For the Marina Access Channel (Area 4 in Figure A-1), the average dredged volume is 8,000 cubic yards. For purposes of impact determination, the total combined dredged volume of 20,000 cubic yards for the Entrance Channel, Inner Harbor Basin Channel, and Marina Access Channel will be used. The threshold volume for this area will be calculated as follows:

$$V_{Th} = V_{AA} + 0.25 * V_{AA}$$

where V_{Th} = Threshold Volume of Sediment, and V_{AA} = Average Annual Dredged Volume

The threshold volume of sediment for the Entrance Channel, Inner Harbor Basin Channel, and Marina Access Channel is therefore 25,000 cubic yards.

Threshold Volume Calculation for Areas without Historic Dredging Data

The Crescent City Harbor, Inner Basin, and Outer Basin (Areas 1, 2 and 3 in Figure A-1) do not have established historic dredge volumes. Anticipated dredge volumes for these areas will be determined from the baseline surveys and post-drawdown surveys completed per Measure A-3. Threshold volume for these areas will be calculated as follows:

$$V_{Th} = V_{AD} + 0.25 * V_{AD}$$

where V_{Th} = Threshold Volume of Sediment, and V_A = Annual Sediment Deposition Volume Measured during Baseline Monitoring Period

Renewal Corporation will provide bathymetric and topographic survey data collected to support Measure A-3 to the County for review within two weeks of completion of the quality assurance and draft mapping. Threshold volume calculations and associated reports or memos will be provided to the County for review and comment prior to finalizing.

B. Impact Analysis

The Sediment Monitoring Measures provide the data and analysis needed to evaluate the impact of sediment released from the Lower Klamath Project reservoirs (if any) on Crescent City Harbor ("Project Impact"). A Project Impact is defined in relation to a threshold volume of sediment that is transported to and deposited in Crescent City Harbor, *but only if and to the extent* such transportation and deposit of sediment is caused by the Project. The threshold volume for purposes of defining a Project Impact is defined under Measure A-3.

A Project Impact to Crescent City Harbor will be evaluated and determined as follows:

- Step 1 Determine if sediment released from the reservoirs is transported to the Crescent City Harbor. This will be accomplished through a buoy array equipped with current meters (Measure A-2). If current monitoring indicates transport to the harbor, proceed to Step 2. Otherwise, the impact analysis is complete, and a determination of No Impact is declared.
- Step 2 Compare the harbor baseline bathymetry to the post-drawdown bathymetry to determine the total volume of sediment deposited during the monitoring period. Bathymetric survey data will be used to develop a three-dimensional representation of the terrain's surface. A GIS spatial analyst program is then used to complete a cell-by-cell comparison of the two surfaces and calculate the net volume difference.
- Step 3 Compare net volume of sediment deposited during the monitoring period to the established threshold volume for each monitoring area. If the net volume of sediment deposited during the monitoring period is greater than the threshold volume, and if such exceedance in the net volume of sediment deposited during the monitoring period is caused by the Project, then proceed to Step 4. If the net volume of sediment deposited during the monitoring period less than the threshold volume, the impact analysis is complete, and a determination of No Impact is declared.
- Step 4 Determine the mitigation for the Project Impact in accordance with Section C "Mitigation" below.

A Project Impact to the Townsite or Roy Rook boat ramps is stipulated. Renewal Corporation will pay an amount as stipulated below.

C. Mitigation.

The Renewal Corporation will provide mitigation as follows:

- C-1 Crescent City Harbor: If a Project Impact occurs in Crescent City Harbor, then as a one-time mitigation payment, the Renewal Corporation shall bear the proportional and incremental cost incurred by the County and/or the Harbor of dredging and removing such sediment. The County and the Harbor shall cause such dredging to occur in the ordinary course of its harbor maintenance practices, and at such time or times when such dredging customarily occurs. The Renewal Corporation shall not bear any cost in excess of the incremental and proportional cost of additional dredging attributable to the Project Impact. The Renewal Corporation shall not be liable for the cost of any dredging or other harbor maintenance practices undertaken by the United States Army Corps of Engineers unless the cost thereof is (a) directly incurred by the County and/or the Harbor and (b) determined to be payable to the County and/or the Harbor as a one-time mitigation payment (or portion thereof) for a Project Impact in accordance with the terms and conditions of this MOU.
- **C-2 Townsite and Roy Rook Boat Ramps:** The Renewal Corporation will pay the County \$3,500 per boat ramp per year, or \$7,000 per year, for 2 years post-drawdown. The Renewal Corporation shall make this payment on or before May 1 in any year that such payment is due.
- C-3 Mitigation Payments: The Parties will seek to recoup any costs of mitigating a Project Impact from the insurance outlined in this MOU. The County and the Harbor shall, in a timely manner, fully cooperate with the Renewal Corporation, and its contractors, subcontractors, consultants and representatives, to submit such claims, documentation or other information as may be required to any one or more insurance carriers responding to such claim. Provided that the County and the Harbor shall, in a timely manner, fully cooperate with the Renewal Corporation, and its contractors, subcontractors, consultants and representatives, in the submission of such claims, documentation and other information as may be required by any one or more insurance carriers, if such claim or claims are denied, in whole or in part, by the insurance carriers, then the Renewal Corporation shall bear the cost of mitigating a Project Impact (or portion thereof) that is not covered by insurance.
- **C-4 Limitation of Liability:** Except and only as otherwise and specifically provided by this MOU, the Renewal Corporation's liability for mitigating Project Impacts under applicable law is not changed by this MOU.



Figure A-1. Bathymetric Survey Areas: Crescent City Harbor (after USACE 2019)

EXHIBIT B ADDITIONAL MEASURES

If the Renewal Corporation and the States accept License Transfer and FERC issues a Final Order that substantially conforms with the Definite Decommissioning Plan, these measures will be enforceable obligations of the Renewal Corporation under a separate instrument in the nature of an enforceable contract.

Measure B-1. Renewal Corporation will Provide Financial Support for County and the Harbor Review of Recommended Terms and Conditions.

- 1. The Renewal Corporation shall reimburse the County for the cost to retain a consultant to review the Renewal Corporation's implementation of the sediment monitoring measures described in Exhibit A "Recommended Terms and Conditions" in an amount up to, but not in excess of, Twenty-Four Thousand Eight Hundred Dollars (\$24,800.00).
- 2. The Renewal Corporation shall reimburse the County for the cost of County staff time dedicated and expended to review the Renewal Corporation's implementation of the sediment monitoring measures described in Exhibit A "Recommended Terms and Conditions" in an amount up to but not in excess of Three Thousand Seven Hundred Fifty Dollars (\$3,750.00).
- 3. The Renewal Corporation shall reimburse the Harbor for the cost of the Harbor's staff time dedicated and expended to review the Renewal Corporation's implementation of the sediment monitoring measures described in Exhibit A "Recommended Terms and Conditions" in an amount up to but not in excess of One Thousand Eight Hundred Dollars (\$1,800.00).
- **4.** Subject to the foregoing, the County shall be entitled to reimbursement for the following work: document review; meetings and consultation with the Renewal Corporation, the County's Consultant and County staff; and the preparation of a written report to the Harbor summarizing findings and conclusions. Reimbursement cost caps are stated in the aggregate. Reimbursement shall be limited to costs incurred by the County for the first three (3) years of monitoring under Measure A-3 in Exhibit A "Recommended Terms and Conditions."
- 5. The Renewal Corporation shall not reimburse the County or the Harbor for any action that may reasonably be construed to be in opposition to the Project, including without limitation, any action to challenge, protest, appeal, delay, obstruct, or otherwise interfere with the Project.
- 6. Claims for reimbursement may be submitted to the Renewal Corporation by written invoice, together with reasonable documentation to verify the scope of the work for which reimbursement is claimed and the date or dates upon which such work was performed. Subject to the foregoing, claims for reimbursement shall be paid by the Renewal Corporation within thirty (30) days of the Renewal Corporation's receipt thereof. If the Renewal Corporation shall reject a claim for reimbursement, the Renewal Corporation shall provide a written explanation of such rejection. Any claim for reimbursement rejected by the Renewal Corporation may be resubmitted if the reason for rejection is resolved to the satisfaction of the Parties. In the event of a dispute over any claim for reimbursement that cannot be resolved within one-hundred-eighty (180) days

of the date upon which such claim was initially submitted for reimbursement, the Party submitting such claim may thereafter pursue any remedy available under applicable law. In the event any action by legal proceeding shall be instituted with respect to a claim for reimbursement, the Party prevailing in such action shall be entitled to recover from the other Party all of its reasonable costs and expenses incurred in connection with such action, including reasonable attorneys' fees.

Measure B-2. Renewal Corporation Shall Name the County and the Harbor as Additional Insureds.

1. The Renewal Corporation shall name the County and the Harbor as additional insureds on the following policies of insurance. Insurance coverages to be provided pursuant to this MOU are limited to the terms and conditions of the insurance policies hereinafter procured by the named insured, and such coverages are limited to losses caused by the negligent or other culpable acts or omissions of the named insured (if and only to the extent substantiated by a legitimate and properly filed claim against the named insured). The payment of any claims made with respect to such insurance coverages is subject to the terms and conditions of such policies of insurance and any applicable limitations and exclusions stated therein.

Policies and Limits

Type of Insurance	KRRC	Kiewit	RES/HGS
Commercial General Liability (Owner's Interest)	\$2M occurrence \$4M products completed \$4M aggregate	\$2M occurrence \$4M products completed \$4M aggregate	\$2M occurrence \$4M products completed \$4M aggregate
Excess Liability (Owner's Interest)	\$50M (Owner's Interest)	\$200M	\$50M
Contractor's Pollution Liability/Pollution Legal Liability	\$50M		

- 2. The forgoing coverages shall be maintained as follows: (a) any Project-specific insurance, written for the term of the Project, shall have a completed operations period of [number] years after final completion; and (b) any corporate policies shall be maintained for a period of [number] years after final completion.
- 3. Within one hundred eighty (180) days of the date of the Final Order, the Renewal Corporation shall provide the County with a certificate of insurance evidencing that such

insurance, in such form and amount, is in place and that the County and the Harbor are so designated as additional insureds. The certificate must specify that the County and the Harbor will be given at least thirty (30) days' prior written notice by the insurer in the event of any material modification, cancellation, or termination of coverage.