STATE OF CALIFORNIA THE RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES AND YUBA COUNTY WATER AGENCY

AMENDMENT NO. 1 TO THE AGREEMENT FOR THE LONG-TERM PURCHASE OF WATER FROM YUBA COUNTY WATER AGENCY BY THE DEPARTMENT OF WATER RESOURCES SWPAO NO. 09-800

THIS AMENDMENT NO. 1 ("Amendment") to the December 4, 2007 "Agreement for the Long-Term Purchase of Water from Yuba County Water Agency by the Department of Water Resources" ("Agreement") is entered into as of MAY 8, 2009 between the Department of Water Resources of the State of California, pursuant to the provisions of the California Water Resources Development Bond Act, the Central Valley Project Act and other applicable laws of the State of California, and Yuba County Water Agency, pursuant to the Yuba Act (California Statutes 1959, Chapter 788, as amended) and other applicable laws of the State of California. Defined terms are set forth in section 1 of the Agreement.

The Parties hereby amend the Agreement as follows:

1. Item no. 9 (at page 55) Section 1 ("General Principles") of Exhibit 2 ("Reservoir Refill Accounting Provisions") is revised to read as follows:

"If the Transfer Amount Account is not zero on September 30, then the remaining balance of the account will be carried forward to the subsequent water year and the impact accounting will continue until the outstanding balance is eliminated. Exception: If the difference in storage between the Actual Storage and the maximum baseline storage, on September 30th is less than the remaining balance of the previous year plus the Base Transfer (see item 1 above), then the transfer amount account will be reset to the difference between actual storage and the maximum baseline storage amount."

2. All remaining provisions of the Agreement will remain in full force and effect.

CONTRACT NO. 4600008061 CCTS NO. 2303

The foregoing is hereby agreed to by the Parties.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement on the date first written above.

Approved as to legal form and sufficiency:	STATE OF CALIFORNIA DEPARTMENT OF WATER RESOURCES
David Sandino, Chief Counsel	Lester A. Snow, Director
APR 2.7 2009 Date	5/8/05 Date
Attest:	YUBA COUNTY WATER AGENCY A Political Subdivision of the State of California
Secretary Upton	Sidody Muck Chairman of the Board
<u>4//4/09</u> Date	4/14/09 Date

Exhibit for Notice to Contractors

Memo Justifying Proposed Change in Exhibit 2 "Reservoir Refill Accounting Provisions"

Мемо

DATE:

October 20, 2008

FROM:

Technical Committee - Lower Yuba River Accord Water Purchase

Agreement

TO:

Management Committee - Lower Yuba River Accord Water Purchase

Agreement

RE:

Proposed Change in Exhibit 2 "Reservoir Refill Accounting Provisions"

The 2008 water transfer is the first year of the long term water transfer between Yuba County Water Agency (YCWA) and the Department of Water Resources (DWR). In 2007 YCWA and DWR completed a transfer to the Environmental Water Account (EWA) under a pilot program. The 2007 transfer resulted in the delivery of 125 TAF of stored water from New Bullards Bar Reservoir to DWR. According to the long term transfer water purchase agreement (Agreement), the storage space in New Bullards Bar Reservoir evacuated as a result of the release of transfer water must be refilled at a time of excess Delta conditions, or an impact is accounted for and the impact volume must be repaid through the release of additional transfer water at a later date. Exhibit 2 of the Agreement contains the accounting steps for determining if a refill impact has occurred. Exhibit 1 of the Agreement contains the procedures for determining the daily transfer flows. According to the refill accounting procedures of Exhibit 2, none of the 125TAF of transfer water from 2007 was refilled in the winter of 2008. As described in more detail below, the accounting of water releases under Exhibit 1 showed that some of the 2007 transfer had actually been refilled. The Technical Committee believes that an additional accounting step is required in Exhibit 2. If Exhibit 2 refill accounting were to remain without the proposed changes of this memo, the accounting in Exhibit 2 would differ from the accounting in Exhibit 1 as of October 1, 2008.

The accounting in Exhibit 1 is accomplished by tracking two sets of daily flows and storage amounts; 1) the actual flows in the Yuba River and storage of New Bullards Bar Reservoir and 2) a determination of the daily flows and resulting storage that would have occurred absent the Agreement and the Lower Yuba River Accord Fisheries Agreement (the Baseline). The primary purpose of Exhibit 1 is to account for the amount of transfer water that is delivered to DWR from the Yuba River. This is accomplished by tracking the actual daily flows and comparing them with computed Baseline daily flows. Since this process must be continuous, it also provides an accounting of the Baseline New Bullards Bar storage and the resulting reduction in flows in the Yuba River due to refilling New Bullards Bar storage in the winter. The determination of transfer flows is tracked through a number of accounting controls to assure DWR that increased releases for transfer are actually occurring. However, in the wintertime, in moderate weather years the ability to determine the exact volume of release that would have occurred under the Baseline is less precise, since this is typically not a transfer time period, and the

ability of DWR to verify these flows is limited, and to a degree affected by YCWA wintertime power production/hydrology risk real-time operations determination. This lack of precision and verification of wintertime operations is the reason Exhibit 2 is in place.

The procedures of Exhibit 2 determine the volume of impact to the Projects due to refill (refill impact) by setting a Target Storage Line that is a "maximum storage operation". If Baseline storage in New Bullards Bar Reservoir, calculated by adding actual storage and unrefilled transfer amount, is above the Target Line, the unrefilled transfer amount is reduced by the volume above the Target Line. And, if the Delta is in balanced conditions, a refill impact of that volume is determined. This system works well as a verifiable method for determining a refill impact for a single year transfer. However, since the reduction of unrefilled transfer volume is only taken when baseline storage is at the Target Line, which is a maximum storage operation, no reduction in the unrefilled transfer volume occurs when New Bullards Bar reservoir is refilling, but baseline storage is below the Target Line. This occurred in the winter of 2008 and is expected to occur in years that are moderately dry. The procedures of Exhibit 2 are to a degree affected by YCWA wintertime power production/hydrology risk real-time operations determination.

As previously stated, Exhibit 1 accounting is computed on a daily basis throughout the year, including a determination of Baseline storage and releases from New Bullards Bar Reservoir. By extension, Exhibit 1 also includes refill of the New Bullards Bar storage, and the effect of that refill on Yuba River flows. The method for refill tracking in Exhibit 2 is different from the method in Exhibit 1, and in dryer year conditions, such as the conditions seen in 2008, results in a difference in the amount of transfer water yet to be refilled between the two accounting methods. The difference results because Exhibit 2 does not have a procedure for adjusting the unfilled amount from a previous year's transfer when the previous year is moderately dry. The Technical Committee has developed a straightforward change to the accounting procedures in Exhibit 2 that would adjust the previous years' remaining refill volume of moderately dry years to be used in the determination of refill impacts.

The Technical Committee has recognized a need to adjust the accounting procedures and had discussed it during several operations-coordination conference calls during the spring and early summer. A meeting at the Joint Operations Center (JOC) was held on June 15th 2008 to review the issue in detail and to come to agreement on a solution. The meeting attendees were John Lehigh and Andy Chu from DWR, Jeff Sandberg from USBR and Steve Grinnell and Jeff Weaver for YCWA. Following a detailed discussion of the issues and possible measures to be added to the accounting, it became clear that the best method was to include a "reset" of the previous years' transfer amount in Exhibit 2. The proposed solution is to modify Exhibit 2 by adding a limit on the amount of previous year transfer volume at the start of the refill period, October 1, to the lesser of; 1) the unrefilled transfer volume from the previous year plus the current year transfer as currently described in Exhibit 2, or 2) the difference in storage between actual storage and baseline storage on September 30.

The proposed change to Exhibit 2 is to change item 9 on page 55 from;

"9) If the Transfer Amount Account is not zero on September 30, then the remaining balance of the account will be carried forward to the subsequent water year and the impact accounting will continue until the outstanding balance is eliminated."

to;

"9) If the Transfer Amount Account is not zero on September 30, then the remaining balance of the account will be carried forward to the subsequent water year and the impact accounting will continue until the outstanding balance is eliminated. Exception: If the difference in storage between the Actual Storage and the maximum baseline storage, on September 30th is less than the remaining balance of the previous year plus the Base Transfer (see item 1 above), then the transfer amount account will be reset to the difference between actual storage and the maximum baseline storage amount.

The practical result of this adjustment is that refill accounting under the Agreement will continue to have the static, verifiable refill accounting of Exhibit 2, while recognizing that the accounting of Exhibit 1 is more precise in determining day to day differences in flows and storage between the accounting Baseline and actual flows and storage during moderate conditions for the purpose of accounting the amount of transfer water.

The technical committee, in examining this issue has also recognized that this addition to Exhibit 2 may not cover all circumstances that might arise due to the complexity of YCWA operations and the complexity of the accounting. It was unanimously agreed that although this solution will address the previous year's unrefilled amount in the Exhibit 2 refill accounting, further adjustments might be needed in the future to address unique and rare circumstances.

The Technical Committee requests that the Management Committee review the proposed change and incorporate it into Exhibit 2 of the Water Purchase Agreement.