

### CA Save Our Streams Council



October 4, 2019

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**RE: Comments on the 2019 Draft Central Valley Project Cost Allocation Study with regard to CVP Water Rate-setting Policy and Capital Repayment.**

Dear Mr. Conant:

We have reviewed the limited documents made publicly available regarding Reclamation's Plan for Completion of the CVP Cost Allocation Study (9/20/19) after having participated in the listening sessions as requested. Unfortunately, the proposed actions and potential revisions listed as a result of the sessions will not address the concerns that we raised in our June 4, 2014 comments and April 29, 2019 review of the Draft CVP Cost Allocation Study, attached for reference. We reiterate our request for an independent peer review to ensure that CVP costs owed the taxpayer are paid. These are glaring omissions. Moreover, when an agency arbitrarily ignores substantive comments involving tens of millions or more taxpayer dollars, then it discredits the very process of setting cost allocations in keeping with the law, regulations and Reclamation policy.

Despite promises, to date no written public responses to comments have been made available. This lack of transparency precludes meaningful public participation. If Reclamation believes that some of the concerns will indeed be addressed by the proposed actions and potential revisions, we would welcome a point-by-point explanation of how the highlighted concerns in our original review letter (attached) are to be resolved by the proposed list of actions. For those concerns that are not to be addressed, we request an explanation of why Reclamation does not consider them important or addressable.

Three of glaring omissions merit particular attention because they appear to undermine the integrity of the entire approach:

**The Proposed Cost Allocation Policy Collects Insufficient Funds from Water Users to Repay Federal Taxpayers.**

The Coordinated Operations Act of 1986 (PL 99-546) requires that outstanding capital repayment obligations of Central Valley Project (CVP) be repaid by 2030. Of this original time frame, only 11 years remain (22% of the original total). In accordance with Public Law 99-546, the repayment period for the relevant CVP water-system facilities ends in 2030. The proposed CVP cost allocation and rate-setting policy, however, will continue to fail to make sufficient progress toward recovery of Federal investments in the CVP and will likely lead to even greater deficits and greater subsidies by American taxpayers.

Per the USBR 2019 CVP Irrigation water rate schedule A-2Ba, the cumulative capital repayment allocation to Irrigation Contractors is \$1,175,623,988. Of this amount, schedule A-2Ba indicates that \$529,838,650 remains unpaid (45% of the total amount). As 2030 approaches, continuing underpayment will likely be exacerbated by drought conditions that occur during the upcoming decade. Any defensible cost allocation and repayment schedule needs to address this looming underpayment identified in multiple Inspector General Reports (2004 and 2013), along with also addressing the likely impacts of climate change, drought and meeting legally required fish and wildlife mitigation requirements. Reclamation claims, "*Once costs are allocated across purposes, the issue of cost recovery and repayment will be addressed as part of the Cost Allocation Study.*"<sup>1</sup> And yet, no information has been provided as to how the proposed new two tiered allocation approach will result in sufficient repayment of either capital costs or operation, maintenance and retrofit costs owed. Further there is no discussion as to how operation, maintenance and retrofit costs will be allocated. Repeated federal audits have criticized Reclamation for not protecting the taxpayers' pocketbook and collecting insufficient funds.<sup>2</sup>

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<sup>1</sup> See <https://www.usbr.gov/mp/cvp/docs/faq-draft-cvp-final-01-17-19.pdf> After the 90-day review period, Reclamation's Mid-Pacific Region will review comments, provide responses to comments, update the Cost Allocation Study to a final draft and submit that draft to the Commissioner for approval. Reclamation will take information from the final approved Cost Allocation Study and use it to implement updated rates with the goal of having those rates in place by the 2021 fiscal year.

<sup>2</sup> See General Accounting Office (GAO) report titled Central Valley Project Cost Allocation Overdue and New Method Needed, dated March 1992.

Inspector General Report ( No. 95-I-1376) Final Audit Report on Follow-up of Recommendations Concerning the Recovery of Operation and Maintenance Program Expenses, Bureau of Reclamation September 29, 1995. Excerpt: *Our office and the General Accounting Office have also issued five other audit reports that addressed aspects of the recovery of operation and maintenance expenses (see Appendix 4). The reports concluded that the Bureau needed to update operation and maintenance expense allocations; simplify the cost allocation methodology; improve internal controls over debt collection; and accrue, assess, and collect penalties and interest on delinquent payments.*

### **Proposed Policy Underestimates Costs Allocated to Irrigated Agriculture.**

The proposed Cost Allocation approach reduces costs borne by irrigators by dramatically underestimating benefits to irrigators for period 2, and by then averaging period 1 (which already has a deficit) and period 2 with equal weight, thus reducing the future costs to irrigators. The manner in which periods 1 and 2 are defined and then combined appears arbitrary and based on simple operational assumptions designed to yield a pre-determined outcome. The assumption made by the CAS that roughly 80% of the CVP surface water supply benefits exist without the CVP has no basis in reality. This erroneous assumption results in a deflation of the irrigation benefit, thus artificially reducing irrigated agricultural costs.<sup>3</sup>

### **Costs Borne by Taxpayers are Increased.**

While the cost allocation is ambiguous (or even consciously masked), it appears to be based on the presumption that capital and operating costs incurred to compensate, mitigate, or otherwise seek to remedy the damages caused by the BOR facilities should be paid by the taxpayer merely because there is a perception that there is a public "benefit." In fact, hundreds of millions of dollars lent by the taxpayer to the direct project beneficiaries are at stake. For example, the notion that fish, wildlife, and water quality costs incurred by virtue of building and operating BOR's facilities—costs that would not have occurred without the facilities—should be borne by the public is unacceptable and violates basic tenets of sound economic analysis and Reclamation policy. The only justifiable costs that the taxpayer should pay would only be those costs that are demonstrated to have resulted in a net increase or enhancement above and beyond what would have happened had the facilities not been built in the first place.

During the last attempt to update the CVP cost allocation study in 2001<sup>4</sup>, U.S. Fish and Wildlife Service (FWS) stated that it is inappropriate to assign any project costs to fish and wildlife purposes

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Recovery of Operation and Maintenance Program Expenses, Bureau of Reclamation(No. 92-I-269)

Also see: <https://www.doioig.gov/sites/doioig.gov/files/2002-I-0052.pdf> Excerpt:

*...the Water Authorities' assumption of these responsibilities revealed an inherent conflict of interest between the Water Authorities acting as fiscal agents for BOR and representing their member water districts. The Water Authorities, for example, have no financial incentive to enforce the contracts between the Region and the water districts, deposit revenues to the U.S. Treasury on time, or ensure that the Region has sufficient information to maintain accurate accounting and water measurement records. The Water Authorities also continued their practice of co-mingling certain Federal revenues, even after this practice was found to be illegal by the Department of the Interior's Field Solicitor in Sacramento. The transfer of fiscal responsibilities has been detrimental to the government and has significantly increased the risk of loss or misappropriation to Federal revenues.*

*....This conflict of interest, combined with the failure of either BOR or the Water Authorities to establish controls ensuring that Federal revenues were accurate and properly accounted for, jeopardized these revenues and hindered BOR from (1) accounting for water deliveries and district payments, (2) reconciling water deliveries to revenues received, and (3) generally maintaining reliable accounting records."*

<sup>3</sup> See Economic Benefits Analysis Appendix pg 27 <https://www.usbr.gov/mp/cvp/docs/economic-benefits-analysis-appendix-2019-01-17.pdf>

<sup>4</sup> <https://www.usbr.gov/mp/cvpwaterrates/rate-process/allocation.html>  
[https://www.usbr.gov/mp/cvp/docs/cost\\_alloc\\_study\\_fnl/cost\\_alloc\\_fnl\\_exec\\_summ\\_05-2001.pdf](https://www.usbr.gov/mp/cvp/docs/cost_alloc_study_fnl/cost_alloc_fnl_exec_summ_05-2001.pdf)

considering the negative impact that the CVP has had on fish and wildlife.<sup>5</sup> Furthermore, BOR previously rejected the two cost allocation and two period repayment approach first proposed in 2001 by the irrigation contractors.<sup>6</sup> While the currently proposed two-cost allocation and two-period repayment approach differs from the previous irrigation contractor approach, Reclamation's stated reasons for previously rejecting the Contractors' Proposal apply equally to the current proposal. In addition, Congress has directed that water quality standards are reimbursable by water and power contractors. (See Public Law 99-546, Section 102 (c) (1) dated October 27, 1986) And yet, under the proposed cost allocation method, it appears that a substantially higher percentage of project costs associated with meeting water quality or mitigating environmental impacts will be considered non-reimbursable than under the existing cost allocation method thus, charging these costs to the taxpayers.

Furthermore, in yet another example of arbitrary subsidy to agricultural contractors the CAS is silent with regard to how specific subsidies provided to a select group of federal contractors contrary to law and policy will be repaid. In 2017 the Inspector General found, "*USBR did not fully disclose to Congress and other stakeholders the \$84.8 million cost of its participation in the BDCP efforts, including its subsidizing of the Federal Central Valley Project (CVP) water contractors' share of BDCP costs.*"<sup>7</sup> The majority of the \$84.8 million of taxpayer dollars spent benefitted Westlands Water District and three other west side irrigation districts' share of the tunnels project despite state and federal law to contrary. The IG also stated, "*In the process, USBR also decided that the \$50 million in appropriated funds was used for a non-reimbursable purpose, meaning the cost was absorbed by the Federal Government rather than being repaid by CVP water contractors. Had USBR used the appropriated funds for reimbursable CVP operation and maintenance, the purpose for which the funds were originally requested, the costs would have been repaid by CVP water contractors.*"<sup>8</sup> Under the proposed cost allocation it is not clear as to how CVP water contractors that benefitted from this expenditure will repay these costs that were allocated to taxpayers instead.

### **Concluding Remarks**

The cost allocation methodology is the foundation of the entire cost allocation being prepared by Reclamation. The proposed cost allocation will affect the taxpayers' and users' costs for decades to come. Analogous to the foundation of a house, the cost allocation embodies the method, specifications, and assumptions for all that follows. If the methodology is ambiguous, flawed, or incomplete, the resulting structure will be weak and vulnerable and potentially unable to stand. Such is the case with the proposed cost allocation.

We appreciate the opportunity to provide comments. Our coalition understands the importance of properly allocating the capital along with operation, maintenance and replacement costs of BOR facilities between taxpayers, where there are costs that benefit the public at large, and those parties

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<sup>5</sup> <https://www.usbr.gov/mp/cvp/docs.html> Reclamation Mid-Pacific Region CVP Central Valley Project Cost Allocation Study Past Discussions

<sup>6</sup> See Reclamation's 2001 Central Valley Project Cost Allocation Study, pg 11.

<sup>7</sup> Inspector General Report #2016-WR-040 September 2017.  
[https://www.oversight.gov/sites/default/files/oig-reports/FinalAudit\\_BayDeltaPlan\\_Public.pdf](https://www.oversight.gov/sites/default/files/oig-reports/FinalAudit_BayDeltaPlan_Public.pdf)

<sup>8</sup> [https://www.oversight.gov/sites/default/files/oig-reports/FinalAudit\\_BayDeltaPlan\\_Public.pdf](https://www.oversight.gov/sites/default/files/oig-reports/FinalAudit_BayDeltaPlan_Public.pdf)

that are specific beneficiaries of the facilities such as water supply and power. Stated differently, we applaud any effort that threads the needle of properly allocating the complex array of present and future costs between those costs that would have been incurred without the facilities as compared to those costs with the facilities. Unfortunately, what has been presented thus far would perpetuate decades of flawed analyses that have resulted in billions of dollars of taxpayer subsidies for a relatively small number of direct project beneficiaries.

Thank you for the opportunity to comment.



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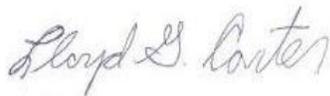
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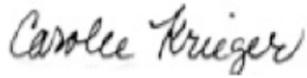


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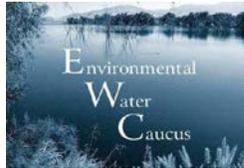
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**Attachments:**

IFR Coalition CAS Comments. June 4, 2014  
PCL et. al. April 29, 2019 review of the Draft CVP Cost Allocation Study



**CA Save Our Streams Council**



April 29, 2019

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The Coordinated Operations Act of 1986 (PL 99-546) requires that outstanding capital repayment obligations of Central Valley Project (CVP) be repaid by 2030. Of this original time frame, only 11 years remain (22% of the original total). In accordance with Public Law 99-546, the repayment period for the relevant CVP water-system facilities ends in 2030. **The proposed USBR CVP cost allocation and rate-setting policy, however, will continue to fail to make sufficient progress toward recovery of Federal investments in the CVP and will likely lead to even greater deficits.**

Per the USBR's 2019 CVP Irrigation water rate schedule A-2Ba, the cumulative capital repayment allocation to Irrigation Contractors is \$1,175,623,988. Of this amount, schedule A-2Ba indicates

that \$529,838,650 remains unpaid (45% of the total amount). As 2030 approaches, continuing underpayment will likely be exacerbated by drought conditions that occur during the upcoming decade. Any defensible cost allocation and repayment schedule needs to address this looming underpayment identified in multiple Inspector General Reports(2004<sup>1</sup> and 2013<sup>2</sup>), along with also addressing the likely impacts of climate change, drought and meeting legally required fish and wildlife mitigation requirements.

One of the major factors compounding the existing under payment problem is the likelihood that the Draft Final Central Valley Project Cost Allocation Study (CAS) will not provide sufficient capital repayment by the Irrigation Contractors to meet the 2030 repayment deadline. Below, significant flaws with the methodologies employed in this Cost Allocation Study are identified. Correcting these flaws is essential in meeting Congressional requirements for repayment by the deadline of 2030.

Our concerns about the Draft Final Central Valley Project Cost Allocation Study (CAS) also include both inadequate study review and documentation, and inadequate transparency and justification of study methods and results. The proposed Cost Allocation approach reduces costs borne by irrigators by dramatically underestimating benefits to irrigators for period 2, as examined further below, and by then averaging the period 1(which already has a deficit) and 2 with equal weight, thus reducing the future costs to irrigators. The manner in which periods 1 and 2 are defined and then combined seems arbitrary and appears to be based on simple operational assumptions designed to yield the desired outcome. This is not how serious and defensible economic analysis is done.

If capital repayment from Irrigation contractors continues to be under collected, capital rates will begin to spike as 2030 approaches. Failing to take corrective action now will likely result in failure to meet Congressionally mandated repayment deadlines, because it will be too late to take corrective action after several more years. The magnitude of underpayment will soon reach a point where three choices are available: set water rates at levels that Irrigation Contractors cannot afford, force power contractors to pay the deficit, or fail to meet the statutory requirement deadline of 2030. Under the provisions of PL 99-546, power contractors and their ratepayers will be on the hook for the shortfall in order to meet the statutory deadline of 2030. Thus, this ballooning deficit

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<sup>1</sup> Office of Inspector General, U.S. Department of the Interior, No. W-IN-BOR-0016-2004, "Central Valley Project Contract Renewal Process," (August 2004). Congress enacted the Coordinated Operations Act of 1986 to address the CVP repayment issues setting a firm deadline of 2030 pursuant to the Coordinated Operations Act of 1986, Pub. L. No. 99-546, 100 Stat. 3050-56 (1986). "We determined that if recent CVP water delivery trends continue, repayment of the capital investment in the CVP irrigation facilities could be short by between \$330 and \$390 million by 2030.." <https://www.doioig.gov/reports/central-valley-project-california-repayment-status-and-payoff> Office of the Inspector General Central Valley Project, California: Repayment Status and Payoff. 2013. pg 6.

<sup>2</sup> <https://www.doioig.gov/reports/central-valley-project-california-repayment-status-and-payoff> Office of the Inspector General Central Valley Project, California: Repayment Status and Payoff. 2013 "We found that USBR's water ratesetting policies do not ensure that an appropriate share of capital costs and prior-year funding deficits are repaid annually. The current CVP ratesetting policies, water projection methods, and contract provisions do not ensure that sufficient revenue is available each year to recover annual operations and maintenance costs and to repay an appropriate share of the remaining Federal investment in the Project."

attributable to irrigators will likely have an unplanned impact on power rates and become an unplanned and unauthorized public subsidy.

Put another way, the broad purpose of the new CAS is to remedy past mistakes and chart a course toward reliably meeting the 2030 deadline. Any costs from Period 1 misallocation being perpetuated or carried forward in the future allocations will only continue the mistakes. If the costs were not appropriately allocated, or errors occurred according to intended, contemporary, or future standards, this is the time to correct that. But, corrections are not being made and, under this proposed approach, the irrigator contractors' debt is being transferred to taxpayers. Requiring the public taxpayers to continue to pay "non-reimbursable" costs for supposed benefits to fish, wildlife, recreation, or other "benefits" that are really nothing more than costs that would not have occurred without the project, is inappropriate and unacceptable.

In short, Reclamation has waited far too long to address the longstanding problem of underpayment by CVP Irrigation Contractors. Further procrastination of this repayment responsibility will magnify the problem. Unless a pro-rated share of each Irrigation Contractor's outstanding capital balance is collected from 2020 through 2030, capital rates will balloon the public subsidies to irrigators. The time to implement fair and effective change is past due.

To assist Reclamation with its effort to improve the CVP Cost Allocation, below we have included further, more detailed comments on specific aspects of the 2019 Draft CAS. In providing these comments, however, it's important to note that the short timeframe, lack of transparency, and missing documentation of some supporting data and methods has prevented what we would consider to be a thorough review.

## Deficiencies in Review and Documentation for the Cost Allocation Study

Any legitimate economic study by a government agency, especially with high public impact, should be peer reviewed to confirm the study or lead to necessary corrections. An independent party should be able to reproduce the underlying allocations calculations from the start to finish and also understand and render judgment on how well the study addresses its goals. This Draft Final CVP CAS should be no different and such peer review must be done.

The documentation deficiencies pertain to the lack of disclosure and publication of all supporting information. Reclamation should publicly disclose, in particular, two types of supplemental data used to calculate the results of the Draft Final CVP CAS:

1. Background calculations used to derive estimated costs and benefits for each project purpose.
2. The assumptions behind the input data within each calculation.

The calculated project benefit totals for several components of the water supply cost allocation, as further discussed below for irrigators, have significant flaws.

In addition to providing all data and information necessary for conducting a full technical review, Reclamation should seek out, fund, and disclose a complete and independent peer review. The

underlying models and assumptions used for the cost allocations are remarkably obscure and extremely difficult for the public to understand. The Cost Allocation Study deviates significantly from the beneficiary pays principle embedded in Reclamation law and policy. Without an independent and expert peer review, the public cannot fully judge the validity of the Draft CAS.

## Cost Allocation Model Yields Preferential Benefits to Irrigators

The Draft CAS reduces costs borne by irrigators by not correcting accumulated deficits during period 1, underestimating benefits to irrigators for period 2 (and thus underestimating their repayment responsibility), as examined further below, and by then averaging the period 1 and 2 with equal weight, thus reducing the future costs to irrigators. Costs are also decreased for Commercial Power, but increased for M&I and Non-reimbursable (taxpayer) components. The manner in which periods 1 and 2 are defined and then combined is arbitrary and appears to be a simple operational assumption designed to yield the desired outcome.

### *Issues Specific to Period 2*

The Economic Benefits Analysis Appendix (EBAA) to the Draft Final CVP CAS includes very inconsistent Irrigation Benefits data for Period 2. There are several significant concerns pertaining to the Irrigation Benefits calculations used for Period 2, most of which reduce the financial burden on irrigators by underestimating their benefits.

The Irrigation Benefits analysis revolves around a comparison of the incremental agricultural benefits attributed to CVP water supply. This comparison is drawn through separate estimates of agricultural production values under two scenarios: (1) with-CVP surface water supplies and (2) without-CVP surface water supplies. The differences between these two scenarios will be referenced going forward as the Differential. There are at least three significant issues pertaining to the EBAA methodology used to calculate these Differentials.

#### **Issue 1: Inconsistent Differentials between Surface Water Deliveries and Acreage, Production Value, and Net Revenues**

The EBAA includes data from the three following tables, which provide the EBAA's take on gross production values (gross revenues), net revenues (profits), and irrigated acres under these two scenarios. Under the financial and acreage totals for each table, a second table calculates the incremental with-CVP values as a percentage of the with-CVP total.

**Economic Benefits Analysis Table 2-3C. Irrigated Acres, by Water Type, Summary (Acres)**

Scenario	Wet	Above Normal	Below Normal	Dry	Critical	Wtd. Avg.
With-CVP	6,933,078	6,933,078	6,933,080	6,918,033	6,870,808	6,920,845
Without-CVP	6,120,784	6,224,034	6,325,339	6,409,911	6,615,852	6,309,136
Difference	812,294	709,044	607,741	508,122	254,956	611,709

Scenario	Wet	Above Normal	Below Normal	Dry	Critical	Wtd. Avg.
With-CVP	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Without-CVP	88.3%	89.8%	91.2%	92.7%	96.3%	91.2%
Difference	11.7%	10.2%	8.8%	7.3%	3.7%	8.8%

**Economic Benefits Analysis Table 2-4C. Agricultural Production Values, by Water Year Type, (\$)**

Scenario	Wet	Above Normal	Below Normal	Dry	Critical	Wtd. Avg.
With-CVP	25,737,744,738	25,740,040,208	25,739,283,492	25,707,650,641	25,599,798,679	25,711,991,067
Without-CVP	23,541,165,754	24,097,132,729	24,516,054,251	24,880,178,636	25,193,038,114	24,338,989,487
Difference	2,196,578,984	1,642,907,479	1,223,229,241	827,472,005	406,760,565	1,373,001,580

Scenario	Wet	Above Normal	Below Normal	Dry	Critical	Wtd. Avg.
With-CVP	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Without-CVP	91.5%	93.6%	95.2%	96.8%	98.4%	94.7%
Difference	8.5%	6.4%	4.8%	3.2%	1.6%	5.3%

**Economic Benefits Analysis Table 2-5C. Agricultural Net Revenue, by Water Year Type, (\$)**

Scenario	Wet	Above Normal	Below Normal	Dry	Critical	Wtd. Avg.
With-CVP	6,804,051,297	6,804,578,903	6,804,032,747	6,790,796,345	6,755,523,737	6,794,239,370
Without-CVP	5,986,641,460	6,217,583,639	6,369,793,159	6,514,279,497	6,602,832,917	6,297,607,641
Difference	817,409,837	586,995,264	434,239,588	276,516,848	152,690,820	496,631,729

Scenario	Wet	Above Normal	Below Normal	Dry	Critical	Wtd. Avg.
With-CVP	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Without-CVP	88.0%	91.4%	93.6%	95.9%	97.7%	92.7%
Difference	12.0%	8.6%	6.4%	4.1%	2.3%	7.3%

Within these three EBAA tables, there is a close relationship between projected benefits with-CVP and without-CVP. The table below summarizes the calculated differences between with-CVP and

without-CVP as percentages for Irrigated Acres, Agricultural Production Values (Gross Revenues), and Agricultural Net Revenues (Net Income).

Scenario	Wet	Above Normal	Below Normal	Dry	Critical	Wtd. Avg.
Acreage	11.7%	10.2%	8.8%	7.3%	3.7%	8.8%
Production Value	8.5%	6.4%	4.8%	3.2%	1.6%	5.3%
Net Revenue	12.0%	8.6%	6.4%	4.1%	2.3%	7.3%

In this table, the percentage relationships under different water scenarios are very similar. The relationship between Acreage and Net Revenue under different water supply scenarios is particularly close.

However, the variance between the with-CVP and without-CVP scenarios for incremental surface water usage is not consistent with the variances in Irrigated Acreage, Gross Economic Benefit, and Net Revenues. EBAA data is provided in the table below.

**EBAA Table 2-6C. Agricultural Water Use, by Source and Water Year Type, Summary (AF)**

Scenario	Wet	Above Normal	Below Normal	Dry	Critical	Wtd. Avg.
Surface Water						
With-CVP	14,629,640	14,102,589	13,754,662	13,163,357	11,999,000	13,687,948
Without-CVP	11,827,810	11,575,908	11,468,196	11,186,185	10,711,728	11,421,574
Difference	2,801,830	2,526,681	2,286,466	1,977,172	1,287,272	2,266,374
Groundwater						
With-CVP	6,816,781	7,351,101	7,691,034	8,205,010	9,223,235	7,710,807
Without-CVP	6,878,441	7,424,578	7,771,194	8,278,480	9,246,689	7,774,876
Difference	-61,660	-73,477	-80,160	-73,470	-23,454	-64,069

Scenario	Wet	Above Normal	Below Normal	Dry	Critical	Wtd. Avg.
Surface Water						
With-CVP	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Without-CVP	80.8%	82.1%	83.4%	85.0%	89.3%	83.4%
Difference	19.2%	17.9%	16.6%	15.0%	10.7%	16.6%
Groundwater						
With-CVP	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Without-CVP	100.9%	101.0%	101.0%	100.9%	100.3%	100.8%
Difference	-0.9%	-1.0%	-1.0%	-0.9%	-0.3%	-0.8%

One discrepancy within this data is visible through comparing the incremental differences in Surface Water under the with-CVP and without-CVP scenarios to the calculated EBAA benefits under the two scenarios. The following table provides the percentage differences under the two water delivery scenarios for Net Revenues (Income) and Surface Water Usage.

Scenario	Wet	Above Normal	Below Normal	Dry	Critical	Wtd. Avg.
Difference: Net Revenues	12.0%	8.6%	6.4%	4.1%	2.3%	7.3%
Difference: Surface Water Usage	19.2%	17.9%	16.6%	15.0%	10.7%	16.6%

The weighted average variation in surface water between the with-CVP and without-CVP scenarios is more than twice the variance in net income between the two scenarios. This variance is substantial and there is no explanation. Differences in revenues or irrigated acreage between the two alternatives are not credibly explained. The differences between irrigated acres and gross economic values (revenues) have already been shown to be highly correlated to Net Revenues (Income).

Water is an essential ingredient in agriculture, and in the CVP service area water supply is the limiting factor that caps the maximum amount of crops that may be grown. As such, differences in water supply, such as between with-CVP and without-CVP water supply, should be highly-correlated to differences in Net Revenues. However, the EBAA fails to reflect this expected relationship.

The impact of the divergence between Net Revenues and Surface water has a significant impact on the calculated values for Irrigation Benefits, and thus cost allocation. The amount of the variance can be estimated by applying the ratio of the Surface Water Usage Differential between with-CVP and without-CVP to the same Differential for Net Revenues. Dividing the incremental difference in Surface Water Usage by Net Revenues results in a Differential of approximately 2.274 (16.6% / 7.3%). Applying this Differential may be used to derive an estimated Irrigation Net Benefits total where incremental Net Revenues matched incremental Surface Water usage. This calculated estimate is provided in the table below.

Differential: with-CVP versus without-CVP	
EBAA Calculated Benefits	\$496,631,729
Differential	2.274
EBAA Calculated Benefits based on incremental % to Surface Water	\$1,129,340,552

As this revised EBAA is based on an interpolation to resolve the with-CVP and without-CVP variances between surface water deliveries and net revenues, the revised total of \$1,129,340,552 should only be used for benchmark comparison purposes. If the remaining factors in the study were valid, the revised benefits number of approximately \$1.13 billion is approximately the amount that would be expected if the Net Revenue matched the Surface Water Differential—and is about \$60 million higher than the Allocation Study value of \$1.07 billion in Table ES-2.

If the EBAA study authors are presenting benefits calculation data in which the net revenues Differential varies this substantially from the incremental surface water differentials, a detailed explanation is needed to justify this variance. Absent a credible explanation, the variance in Net Revenues needs to be corrected to more closely reflect the variance in Surface Water Deliveries. If this discrepancy is not corrected, then Irrigators will not be charged their fair share of costs.

Water supplies are the driver behind irrigated acreage, gross economic production (revenue) and net revenues (profit), not the other way around. Accordingly, the net variance in surface water should be the driver behind net variances in acreage, revenue, and profit.

**Issue 2: "Without-CVP" Surface Water Deliveries Appear to be Substantially Over-Stated**

While the degree of the variance between the with-CVP and without-CVP Differentials for surface water and net revenues is significant (Issue 1, above), there is a much more substantial flaw in the with-CVP and without-CVP surface water analysis: the without-CVP surface water projections in the EBAA are much too high.

EBAA table 2-6C summarizes agricultural use data that is used in the CAS. The surface water portion of this data is provided below.

Scenario	Wet	Above Normal	Below Normal	Dry	Critical	Wtd. Avg.
With-CVP	14,629,640	14,102,589	13,754,662	13,163,357	11,999,000	13,687,948
Without-CVP	11,827,810	11,575,908	11,468,196	11,186,185	10,711,728	11,421,574
Difference	2,801,830	2,526,681	2,286,466	1,977,172	1,287,272	2,266,374

Scenario	Wet	Above Normal	Below Normal	Dry	Critical	Wtd. Avg.
With-CVP	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Without-CVP	80.8%	82.1%	83.4%	85.0%	89.3%	83.4%
Difference	19.2%	17.9%	16.6%	15.0%	10.7%	16.6%

The assumption that approximately 5/6 of surface water supplies available for CVP Contractors comes from non-CVP surface water sources is grossly unrealistic. Both the annual CVP Irrigation water supply usage and the percentage share of with-CVP to without-CVP shares are substantially flawed:

- Annual Irrigation water usage by CVP Contractors is substantially higher than the weighted average referenced in the EBAA. Annual usage data is available in CVP Irrigation water rate books.
- It is unclear how many (or how few) CVP Irrigation Contractors also have State Water Project water contracts for use in agriculture..
- Through what alternative surface water storage projects are CVP Irrigation Contractors receiving alternative surface water supplies? Is the weighted average annual quantity of water from these facilities enough to comprise five times the surface water deliveries that CVP Irrigation Contractors are receiving from CVP facilities?

Between Settlement, Exchange, Water Service, and other CVP water contracts, annual water contracts for CVP Irrigation Contractors exceeds 10 million acre-feet per year. Are there alternative surface water supply sources for CVP irrigation contractors that supply an additional 50 million acre-feet of contract amounts?

More realistically, surface deliveries from the CVP account for at least 4/6 of sum total surface water deliveries that CVP Irrigation Contractors receive from all surface water sources.

If non-CVP deliveries were revised in EBAA calculations to reflect 33.3% of total surface deliveries, the impact on calculated Irrigation Benefits would be substantial. A benchmark approximation for a revised total Irrigation benefit calculation is available through the calculations below.

EBAA Data: Net Annual Benefits per Acre-Foot (AF) of Incremental with-CVP Surface Water

EBAA Data: Net Annual Benefit for Irrigation Contractors	\$496,631,729
EBAA Data: Differential with-CVP Acre-feet	2,265,474
Net Annual Benefits for Irrigation Contractors per AF	\$219.21

Differential AF if 2/3 of total with-CVP surface water is delivered through CVP water contracts.

Wtd. Avg. total Surface Water AF: with-CVP (source: EBAA Table 2-6C)	13,687,048
Percentage of Total Deliveries from CVP facilities	66.7%
Wtd. Avg. total Surface Water AF from CVP facilities	9,129,261

Pro-rated projected Net Annual Benefits for Irrigation Contractors if 2/3 of with-CVP water is derived from CVP water contracts:

Wtd. Avg. total Surface Water AF from CVP facilities	9,129,261
Net Annual Benefits for Irrigation Contractor per AF	\$219.21
Net Annual Benefits for Irrigation Contractors at 66.7% Differential	\$2,001,225,304

This revised annual benefits calculation is also interpolated, and is also intended as a benchmark for evaluating a more accurate benefits calculation. However, as this benefits calculation much more accurately reflects the true Differential in with-CVP surface water versus without-CVP surface water acre-feet, this revised benefits estimate probably more accurately reflect real-world data than the current irrigation benefits value assigned in the Draft Final CVP CAS.

The irrigation-benefits calculation flaw, through under-reporting the Differential with-CVP surface water acre-feet, may be further compounded by the separate issue of under-reporting the net revenue per acre-foot of water. Therefore, an accurate revised calculation of irrigation benefits would need to multiply the updated benefits calculation from the issue 2 evaluation by the multiplier derived from issue 1:

Net Annual Benefits for Irrigation Contractors at 66.7% Differential	\$2,001,225,304
Differential	2.274
Updated Net Annual Benefits Calculation	\$4,550,786,341

This updated estimate of annual benefits to irrigators of about \$4.55 billion is more than 4 times the estimated annual benefits in Table ES-2, and thus would more than quadruple the share of costs to irrigators.

**Issue 3: Under-reporting of Differential with-CVP groundwater usage**

EBAA data within Table 2-6C includes projections for with-CVP and without-CVP ground water pumping levels.

Scenario	Wet	Above Normal	Below Normal	Dry	Critical	Wtd. Avg.
With-CVP	6,816,781	7,351,101	7,691,034	8,205,010	9,223,235	7,710,807
Without-CVP	6,878,441	7,424,578	7,771,194	8,278,480	9,246,689	7,774,876
Difference	-61,660	-73,477	-80,160	-73,470	-23,454	-64,069

Scenario	Wet	Above Normal	Below Normal	Dry	Critical	Wtd. Avg.
With-CVP	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Without-CVP	100.9%	101.0%	101.0%	100.9%	100.3%	100.8%
Difference	-0.9%	-1.0%	-1.0%	-0.9%	-0.3%	-0.8%

The without-CVP delivery data appears to be unrealistically low. Total with-CVP deliveries for almost all CVP Irrigation water contractors are comprised primarily of two sources: CVP water delivery contracts and ground water. There is no other significant substitute water supply alternative in the absence of CVP water supplies. The idea that the availability of CVP surface water only decreases groundwater usage by less than 1% is not credible. Ground water pumping dramatically increases as surface water availability decreases, and vice-versa. The size of the Differential would be much more pronounced during Wet and Above Normal years, and the Differential would be much smaller during Dry and Critical years.

Monthly water use data collected by the State of California includes ground water and surface water usage for CVP water agencies. This data needs to be evaluated versus the EBAA projections to determine whether the Differential is accurate. A conservative weighted average Differential percentage might be 15%. The irrigation benefits through reduced groundwater costs may also be interpolated through data available in the EBAA. This interpolation is useful in providing a benchmark for projected changes to benefits if all other variables in the allocation process are unchanged.

Wtd. Avg. Groundwater Pumping Cost (Source: EBAA table 2-8)	-\$4,372,255
Wtd. Average Projected Groundwater Pumping AF Decrease (Source: EBAA Table 2-6C)	-64,069
Ground water Pumping Cost Savings per acre-foot	\$68.24

Wtd. Avg. Groundwater Pumping Usage without-CVP (Source: EBAA Table 2-6C)	7,774,876
Updated Projected Wtd. Avg Groundwater Pumping Usage with-CVP	6,608,645
Updated Variance in groundwater usage (based on 15% decrease in usage)	1,166,231

Updated Projected Wtd. Avg. Ground water pumping AF decrease through with-CVP	1,166,231
Ground Pumping Cost Savings per acre-foot	\$68.24
Updated Irrigation project benefits from decreased Projected Groundwater pumping	\$79,583,603

An update to Groundwater savings would be independent of revisions to the relationship between Net Revenues and Surface Water and corrections to the with-CVP versus without-CVP surface water delivery Differential. Any increase to irrigation benefits through increased savings from reduced groundwater pumping would be independent of and in addition to other necessary irrigation

benefits revisions, which were described above in issues 1 and 2, and thus would correspondingly increase the costs to irrigators.

## Additional Economic-Analysis Issues

Given the brief review period for the Draft CAS and the sparse documentation, we have not fully evaluated the following additional issues, but they are a sampling of what can and should be resolved through independent peer review and subsequent revisions:

1. The CAS would, once again, institutionalize subsidies by inappropriately taking costs off the table from the outset. Costs incurred that would not have occurred without the CVP, such as the highway/bridge works associated with New Melones (see page 21 of CAS). It is inappropriate to simply assign those to the taxpayers without more careful with-without analysis. Would the highway/bridge works have been undertaken by the taxpayer if the CVP/New Melones were not built? What Reclamation has done appears to be “before-and-after” analysis, which is inappropriate.
2. A basic economic principle is to allocate costs on the basis of marginal costing versus average costing. If certain water/power uses receive a disproportionate share of the benefits but the costs are allocated according to “averages”, those uses are being subsidized.
3. Presumably, the water users want the CAS because they want the outcome to shift even more of the CVP costs to the taxpayers—whether or not that is appropriate. The taxpayers are not being adequately represented in a process of political expediency and direct negotiations with the financial beneficiaries of water/power subsidies. Allocating costs that have already been arbitrarily reduced by hundreds of millions of dollars is perpetuation of failed economic analyses. Even if the subsequent allocation is fair, the allocation is arbitrarily putting on the voiceless taxpayers hundreds of millions of dollars and in the process: (a) continuing subsidies, (b) leading to inefficient national allocation of resources, and (c) understating the value of every affected resource outside of the CVP.
4. With respect to specific cost categories on page 20 (the individual and cumulative effect is to assign the associated costs as non-reimbursable):
  - a. Land and Land Rights: This notion chooses to ignore the opportunity cost of capital used for land acquisition purposes. Considering the many years between land acquisitions for projects, the effect of this notion is to undervalue public services like education, health care, and other taxpayer-supported programs.
  - b. Reimbursable Interest During Construction: The concept of accounting for Interest During Construction is an appropriate use of economic principles by recognizing that the taxpayers have other beneficial uses for that capital during the often very long time between project initiation and completion. To arbitrarily remove that treatment for selected projects (e.g., because the project is now owned by some other agency) understates the actual cost of the project and undervalues the other taxpayer programs that don't receive the funding tied up in construction accounts.

- c. Other Costs Excluded: Why these? Should the taxpayers pay for software costs necessary to manage the project? This is not guided by economic principles.
  - d. Transferred Title Facilities: from a cost allocation standpoint, it doesn't matter that the USFWS now owns the fish hatchery. If any fish hatchery was required to repair damages, costs were caused by the CVP, and the damages should be included in the cost of the water/energy provided. The fact that the USFWS is funded by the taxpayers reflects a public policy decision that the taxpayers want the services USFWS provides, but that does not include using the USFWS as a tool to subsidize water/power customers.
5. Similarly, on page 21: costs allocated on the basis of political directive or negotiations only between BOR and parties that would otherwise have to pay (water/power users) is not based on economic principles. The basis should NOT be administrative convenience.
  6. "Direct Assigned Costs" (pages 20-22)—at \$245 million—suffer from the same problems. If economic principles matter, BOR should advise Congress, the public, and other agencies that these costs are in fact project costs incurred solely because of the CVP and the associated subsidy is to benefit the water/power users. The integrity of economic principles means that these costs should also be explicitly declared as subsidies to water/power users (gifts—or corporate welfare subsidies). Otherwise, an economic analysis should explicitly consider how the taxpayers of New Jersey should contribute to the cost of repairing the American River Pumping Station (page 22) or the taxpayers of Kentucky should contribute toward \$32 million of dam safety work for the benefit of water/power users.
  7. Costs not allocated (page 24). This is a long term CAS, not limited to what is here and now. If the same reasoning is used for these upcoming costs, subsidies will continue to benefit water/power users. If subsidies are to be given, they should be explicitly calculated and published for Congress and the taxpayers to decide whether that is what they want. It should not be masked in the same faulty reasoning—especially the CVPIA Facilities.
  8. Section 4.2: The SCRB Methodology discussion. On the surface the "steps" in the methodology appear rational. But, steps 6-9 create the greatest opportunity for problems. Actual costs, separable costs, and "justifiable costs" are 3 different things. It is true that "joint costs" have to be allocated somehow. But the costs to repair the damages caused by a project belong solely to the purposes for which the project was built, not a cost category unto themselves—and to be shifted to people with no voice in the discussion—the taxpayers.
  9. Page 34: Discount Rate: in order to be economically efficient and equitable, the discount rate should reflect the opportunity cost to those people who are providing the money: the taxpayers of the entire U.S. Ask the taxpayers what their opportunity cost is for a project in far-off California, who have to pay mortgages, credit cards, car loans, student loans, etc. NONE of those people are paying 3.25% for any of these loans. The presentation ducks the economic efficiency and equity discussion by suggesting that rules they wrote require them to use 3.25%.
  10. Pages 34-35: Authorized purposes: This brings up a long-standing issue—When do fish and wildlife reparations become "enhancements"? Ditto "recreation" without accounting for recreation opportunity costs?

11. Page 38: Flood control. What is, or where is, the benefit analysis to show how the taxpayers benefit from the flood control instead of project users? Such an analysis would guide the allocation of the costs, not a “rule” arbitrarily assigning costs to potential non-existent **public** flood control benefits.

## Conclusion

The available time within which to provide comments regarding the Draft Final CVP CAS and its appendices was not sufficient to provide for a comprehensive in-depth evaluation. Nonetheless, several notable inconsistencies were identified within the Water Supply sub-allocations. The impacts of these inconsistencies on the results of the CAS are substantial.

The common thread among each inconsistency was to decrease the share of allocated cost to the water supply project purpose. Irrigation water users were the specific beneficiaries of three major issues identified and evaluated.

The with-CVP and without-CVP Differential data should be reviewed against actual monthly water data that is collected by the State of California. One of the most egregious flaws in the study is the imputed presence of a significant source of non-CVP surface water for CVP Irrigation Contractors. What is this alternative water source and what are the potential impacts of using it?

The identified inconsistencies used in deriving the water supply project purpose benefits are only part of what needs to be addressed before Draft Final CAS is finalized. The Draft CAS requires detailed and independent peer review. Public disclosure of this Draft Final CVP CAS should be subject to the statutory requirements of NEPA and CEQA. Once this information has been publicly disclosed, the Bureau of Reclamation should provide another public review period. This review period should not commence until at least 90 days after the public disclosure of supplemental background calculations and input assumptions.

Thank you for the opportunity to comment.



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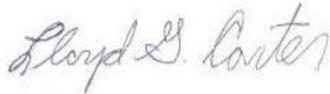
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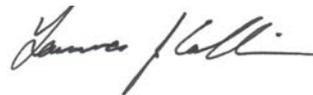
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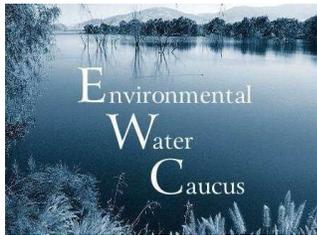
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June 4, 2014

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**RE: Institute for Fisheries Resources (IFR COALITION) Comments on Proposed CVP Cost Allocation Methodology: A recipe for continuing deficits and failure to repay taxpayers.**

Dear Ms. Miller-Levy:

We, the undersigned organizations, are pleased to present our comments on the U.S. Department of the Interior, Bureau of Reclamation's "Economics Guidebook: Chapter 3 "Cost Allocation Methodology" ("CAM") and the "draft Findings and Recommendations Table" ("Table") as prepared by the Institute for Fisheries Resources ("IFR COALITION") by Dr. Guy Phillips, PhD, Economics, dated and attached, May 28, 2014.

Dr. Phillips has more than 40 years experience as an economist with specialization in water resource economics in California and other states. He has held positions in academia (University of California and California State University) and policy positions in the California Resources Agency and the California State Legislature.

Following is a summary of our comments:

1. The CAM does not adhere to some of the most fundamental principles of economic analysis. If implemented as set out, the result would almost certainly result in taxpayers continuing to pay more than their fair share.
2. The CAM is more of a description of a possible methodology than a methodology. The text is vague. The definitions are incomplete; there are analytic assumptions that are presented as if they are fact; and the "exceptions" offered are not only ambiguous but incomplete and appear to be biased against the taxpayer. The result is essentially an invisible analytic approach that is, or at least can be, left to the subjective interpretation and decisions internal to the CAM process. We believe that this lack of transparency is not Congress' intent.
3. These cost allocation methodological questions and their results perpetuate decades of flawed techniques and results that have resulted in billions of dollars in direct and indirect subsidies to a relatively few project beneficiaries. In spite of decades of criticism from the public and from its sister agencies, the BOR has clung to its historical approach as if, by repetition, an invalid system can be made valid. We believe this is directly contrary to Congressional intent.
4. There is no budget constraint, time limitation, or other resource constraint that justifies the BOR approach. As has been repeatedly illustrated elsewhere by reputable agencies such as the Government Accounting Office, there are analytic methods that would actually require less time, less complex effort, fewer agency resources, and would result in better results than those proposed in the CAM. If nothing else, the CAM should present each of these alternatives and explain explicitly why they have been rejected.

5. Furthermore, continued dependence on an historic, flawed, methodology and its results ignores the advances in the field that have occurred over the decades. Today there are better methods, analytic tools, data, and presentation techniques that would enable the public, the taxpayer, and Congress to understand what the BOR has done. Again, if nothing else, the BOR should provide a detailed explanation for why it has rejected the use of contemporary analytic methods and tools.
6. While the CAM is ambiguous (or even consciously masked), it appears to present the view that capital and operating costs incurred to compensate, mitigate, or otherwise seek to remedy the damages caused by the BOR facilities should be paid by the taxpayer merely because there is a perception that there is a public “benefit”. Hundreds of millions of dollars lent by the taxpayer to the direct project beneficiaries are at stake. For example, the notion that fish, wildlife, and water quality costs incurred by virtue of building and operating BOR’s facilities—costs that would not have occurred without the facilities—violates basic tenets of sound economic analysis. The only justifiable costs that the taxpayer should pay would only be those costs that are demonstrated to have resulted in a net increase or enhancement above and beyond what would have happened had the facilities not been built in the first place. The CAM should explicitly address these basic principles and provide an economically sound basis for continuing to adhere to some other idea.
7. We are not able to identify in the CAM a methodology that (a) that the historic under-collections will in fact be collected going forward on an economically sound basis, and (b) that the mechanism for paying the historic under-collections will be based on sound economic analysis and will be practical—e.g., that the reimbursement mechanism will not simply result in more hardship excuses to avoid reimbursement.
8. The Table suffers from similar weaknesses that it is vague and proposes to utilize techniques that have been criticized for decades. Further the Table itself is internally inconsistent. Statements in some parts of the Table are not matched by statements in other parts of the Table.
9. The Table is also inconsistent with the CAM. Statements in the Table directly conflict with statements in the CAM. Obviously, these inconsistencies need to be reconciled. Vagueness will only perpetuate the public/taxpayer impression that arbitrary decisions made in the past will be made again in this Cost Allocation. Furthermore, either the Table or the CAM, or both, should be explicit in justifying the approach (es) proposed. Billions of taxpayers’ dollars for past and future facilities are at stake. The taxpayer deserves a full and explicit analysis of all

alternatives and a justification for the methods, analyses, and data proposed for application in this Cost Allocation.

10. The CAM/Table is very vague relating to future facilities and how the principles will be applied to ensure proper allocation and collection of the reimbursable costs. Past practice suggests that even a proper cost allocation will still result in under collections and subsidies and the burden will fall on the taxpayers.

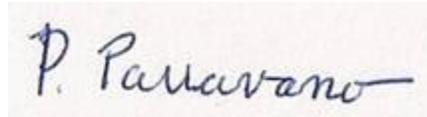
We are very concerned that, as it stands, the CAM/Table leave either the analyst or some other party in the process to make judgments or decisions that may or may not be consistent with sound economic analysis—and may result in nearly invisible vulnerabilities in the entire cost allocation effort.

Since the CAM is actually only a description of a possible cost allocation methodology—based on a seriously flawed historical approach--and not a thorough review and analysis of BOR's proposed methodology, we cannot tell what the final methodology will be.

Therefore, we reserve our right to further comment on the CAM once the details have been more completely developed. We recommend that BOR offer the public in general another opportunity to comment on the CAM once the concerns have been addressed.

Thank you for the opportunity to comment. Please add our emails to your future notifications regarding the CVP cost methodology.

Sincerely,



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Attachment: IFR Coalition Specific Comments: U.S. Department of the Interior Bureau of Reclamation “Economics Guidebook: Chapter 3 “Cost Allocation Methodology” (“CAM”) Guy Phillips, PhD, Economics June 4, 2014

cc: Interested Parties

**IFR Coalition Specific Comments: U.S. Department of the Interior Bureau of Reclamation  
“Economics Guidebook: Chapter 3 “Cost Allocation Methodology” (“CAM”)**

**Guy Phillips, PhD, Economics**

**June 4, 2014**

**INTRODUCTION**

The IFR COALITION appreciates the opportunity to provide comments on the CAM. The IFR COALITION understands the importance of properly allocating the capital and operating costs of BOR facilities between taxpayers, where there are costs that benefit the public at large, and those parties that are specific beneficiaries of the facilities such as water supply, power, water quality, and recreation. Stated differently, IFR COALITION applauds any effort that threads the needle of properly allocating the complex array of present and future costs between those costs that would have been incurred without the facilities as compared to those costs with the facilities.

Unfortunately, IFR COALITION finds that the CAM not only does not thread the needle: the CAM could perpetuate decades of flawed analyses that have resulted in billions of dollars of taxpayer subsidies for a relatively small number of direct project beneficiaries.

The CAM is the foundation of the entire Cost Allocation being prepared by the BOR. The Cost Allocation itself will affect the taxpayers’ and users’ costs for decades to come. Analogous to the foundation of a house, the CAM embodies the method, specifications, and assumptions for all that follows. If the methodology is ambiguous, flawed, or incomplete, the resulting structure will be weak and vulnerable and potentially unable to stand. Such vulnerabilities may be obvious or all but invisible. Thus the IFR COALITION takes this responsibility as seriously as we believe that Congress intended.

The historical context: BOR’s decades-old flawed approach to cost allocation and cost reimbursement methods have inappropriately shifted billions of dollars from direct project beneficiaries to taxpayers.

BOR’s history has added to the taxpayer burden from its facilities in two principle ways: (1) In the first case, by allocating too much of the capital and operating costs of its facilities to the taxpayer rather than the direct project beneficiary, and (2) secondly, through BOR’s methods to collect reimbursable costs that provide (a) arbitrary “ability to pay” calculations that result in even more subsidies and (b) even then do not collect what is due from project beneficiaries which results in serious undercollections of funds due the taxpayer.

**BOR’s biased cost allocations inappropriately charge too much to the taxpayer and too little for the direct project beneficiaries, resulting in large subsidies.**

BOR’s various efforts to comply with Congressional mandates regarding cost allocation and cost reimbursement have been controversial for decades. The conflicts have arisen mainly because reviewers have demonstrated repeatedly that the methods, analyses, data, and assumptions have driven the BOR’s work toward a bias that would have the taxpayers paying more than is warranted by an economically sound analysis. The BOR work has been too ambiguous and has left too much

opportunity for subjective decisions and interpretations to enter the analysis at points in the analysis that would be all-but invisible to the public and the taxpayer.

Finally, the bias against the taxpayer has been repeated in each of BOR's cost analyses over decades. Repetition does not ennoble faulty methods. As such, the BOR has not only resisted comments from sister federal agencies on measures that would remove the bias but the BOR has also rejected the opportunity to use modern analytic tools, methods, and data that have been developed in the decades since BOR's cost allocation efforts began. As it relates to the "fish and wildlife" and "water quality" aspects of BOR facilities, several sister federal agencies and the general public have pointed out that the taxpayers should not be required to pay the costs of such facilities or operations. Curiously, BOR's rejections may have continued and have even exacerbated BOR's bias against the taxpayer (the inconsistency between the CAM and the "draft Findings and Recommendations Table" makes it uncertain which way BOR is going to go).

While the CAM is silent on this point, the "draft Findings and Recommendations Table" ("Table") seems to suggest that no fish and wildlife and water quality costs will be charged to the taxpayer unless it can be clearly demonstrated that such costs are associated with an enhancement of conditions above that which would have occurred without the project. That would be an appropriate direction to take but since it is not explicit in the CAM and the relationship between the CAM and the Table is not clear, we urge BOR to address this explicitly in the CAM. Therefore for purposes of these comments, we will treat the CAM as if the CAM has not addressed this matter.

To cite a few historical examples:

- The Department of the Interior's Office of the Inspector General analysis in 2004 presented the case that the under-collection was at that time about \$1.5 billion and rising quickly. Water irrigators' annual subsidy was estimated at \$250 million/year for only 50 of the water customers and was also rising quickly.
- The Government Accountability Office ("GAO") in 2007 reported to Congress on some of the various ways that the CVP facilities had to be re-tooled or operated differently in order to address emerging issues directly associated with the construction and operation of the CVP. The revised cost allocations buried the associated reimbursements to taxpayers in ways that were not supportable by sound economic analysis. The result is that not only is the former CAM flawed and inappropriate, using its next generation in the same clothing will merely perpetuate the problem.
- GAO's 1992 Critique of the USBR Cost Allocation failure. Most of the critique is still valid today. GAO found that: (1) the Bureau gave limited attention to the congressional mandate to implement an updated cost allocation study by January 1988, mainly because of funding and staffing constraints; (2) the Bureau included inappropriate costs and made questionable estimates of project benefits and alternative costs in its 1988 draft study, and public comments on the study cited similar concerns; (3) the Bureau charges rates to its CVP water users that are based on the cost allocation percentages it developed in 1970 and updated in 1975; (4) delays in properly allocating CVP costs could result in the government recouping less of its capital investment, because the value of the dollar received years later will be less than if those dollars were timely received; and (5) although the Bureau has agreed to explore alternate allocation approaches it continues to rely on its methodologies, which could cause additional delay in developing an acceptable cost allocation.

**With billions of taxpayer dollars at stake, there is no analytic, methodological, budgetary, or time-constrained reason for BOR's perpetuating its flawed cost analysis methodology or results.**

The following excerpts from the GAO (pages 9-11) illustrate not only the flawed approach being followed by the BOR but also demonstrate that there are better analytic approaches that are simpler, would take less time to implement, would cost less to follow, and would yield better results:

*(a) "We discussed with the Bureau two alternative approaches to its cost allocation method. One approach allocates joint costs in direct proportion to the specific costs assigned to each purpose. For example, if specific costs associated with irrigation are 80 percent of all specific project costs, then irrigation would receive 80 percent of the remaining joint costs to be allocated among all project purposes."*

*(b) "The other approach allocates joint costs among purposes on the basis of use. For example, if 20 percent of the water in a reservoir is used for M&I purposes, while 80 percent is used for irrigation, then 20 percent of the costs of the dam and reservoir would be allocated to M&I purposes and 80 percent to irrigation. In many cases, dams and reservoirs are also used for flood control and hydroelectric power generation. In these cases, the percent of space in the reservoir dedicated to controlling floods would represent the share of joint costs dedicated to flood control. Often, almost all water released to water users generates power. Therefore, the remaining joint costs of the dam and reservoir could be divided equally between water and power users. The costs allocated to water users could then be suballocated on the basis of use."*

*(c) "These two approaches have the advantages of (1) eliminating the need to gather data and estimate benefits and alternative costs to allocate joint costs among project purposes, (2) applying a cost allocation formula across all purposes, thus reducing subjective assumptions, and (3) generating a cost allocation more quickly with existing data."*

*(d) "We discussed the appropriateness of these approaches with the Mid-Pacific Region's senior economist responsible for cost allocation. He agreed that our approaches were far less complicated and time-consuming than the method the Bureau had been pursuing and that they would address problems raised in public comments. In December 1991, he informed us that Bureau headquarters advised him to use the AJE method to revise the cost allocation study but also to explore the use of both of our suggested approaches."*

*(e) "The Bureau did not complete its updated cost allocation by the a congressionally mandated deadline. In addition, the Bureau's method has two fundamental problems: (1) it relies on assumptions and subjective judgments about costs and benefits relating to each project purpose that are open to question and (2) it requires data that are not always available*

or that are time-consuming to generate. If the Bureau relies on this method to revise its 1988 draft study, problems identified with the draft are likely to remain, causing additional delay. Because of the potential adverse cost implications for the federal government that are associated with delays in completing the update, we believe the Bureau should adopt a cost allocation methodology that is less complicated and more timely, and relies on existing data.”

(f) “To complete the CVP cost allocation expeditiously, we recommend that the Secretary of the Interior direct the Commissioner of the Bureau of Reclamation to use less costly and more timely methodologies to update the CVP cost allocation study. We have suggested two approaches: (1) allocating joint costs in direct proportion to specific costs or (2) allocating joint costs on the basis of use.”

(g) “Bureau officials also stated that their guidelines do not include consideration of one of the approaches we suggest—the allocation of joint costs in direct proportion to specific costs. However, they believed that they could obtain approval for the use of this approach for the CVP.”

(h) Page 18, from the GAO report: **Delays in Allocating Costs Can Affect Revenues**

(i) “To develop joint cost distribution percentages for the draft 1998 study, the Bureau first allocated among project purposes costs incurred from facilities in service plus \$3 billion in authorized costs that have not yet been spent. These authorized costs include costs for project facilities that, as of 1986, had not yet been, and may never be, constructed. Distribution percentages calculated from these values were then used to allocate only the costs incurred from completed and in-service facilities among project purposes.”

(ii) “We do not believe that the costs of authorized but not completed project facilities should have been included in the distribution calculations. The benefits and alternative costs of future project features are at best difficult to estimate. Furthermore, basing allocation percentages on one set of benefits and alternative costs (those associated with all authorized features), and then allocating a subset of the benefits and costs (those associated with facilities that are complete and in service), potentially distorts the allocation of incurred costs. Actual experience with project facilities may differ significantly from potential future experiences.”

#### **At pages 18-19, the GAO continues: Inappropriate Costs Were Included**

“In addition, the Bureau included in its allocation certain costs that are specific to only one or a few water districts that have sole responsibility for repaying such costs directly. Unlike most other water supply costs, these costs are not repaid through general water rates that are based on cost allocation; they are repaid by the responsible water districts directly through individual repayment contracts. By assigning these costs to the general water supply purpose, the Bureau reduced the allocation of joint costs to water supply, thereby increasing the allocation of joint costs to other project purposes.”

**BOR's approach to collect the already-understated reimbursable costs from direct project beneficiaries further subsidizes the beneficiaries resulting in major shortfalls in reimbursements on an ongoing basis, also at taxpayer expense.**

The history of cost recovery to repay the taxpayers for their huge loans primarily for water supply for the financial benefit of the customers demonstrates that the taxpayers have been put into a position never intended by the original “deal” with the water customers. Not only have the (taxpayer subsidized interest-free) loans from the taxpayers not been repaid, but the CAM as set forward today suggests that the problem will not be corrected.

In simple terms, the original and, theoretically, the present “deal” between the taxpayers and (primarily) the water users was that the taxpayers would lend billions of dollars to build facilities that the water users themselves could not raise the capital to build. Then, the capital and operating costs were to be reimbursed by the project beneficiaries through a mechanism that had substantial subsidies built into the “loan agreement” itself. Now, decades later, history has shown a large number of unintended consequences; to mention but a few:

- The reimbursement mechanism itself has failed to collect what was due the taxpayers by more than \$1.5 billion.
- The impacts of building and operating the projects proved to be much different than expected, particularly with respect to remedying the water quality and salinity impacts.
- The public's priorities changed, particularly as it relates to the value of the environmental, water quality, and fish and wildlife impacts that were attendant the construction and operation of the facilities.
- The projects undertaken not only skyrocketed in cost but had to mitigate, compensate, or otherwise repair damages that would not have incurred had the projects not been undertaken.
- The project costs ended up exceeding the project's benefits, directly contradicting the Congressional mandate that authorized the deal in the first place and stirring the controversy that has existed since.
- The increasing subsidies to a relatively small number of agricultural enterprises—who do not have to pay the prevailing market price for water—are drawing much more public and Congressional attention and corresponding insistence that the problems be remedied.

These are classic examples of the scale and type of economic activity that happens when a resource is undervalued (water) and the taxpayer is asked to step in. The unintended consequences, however, mean that the taxpayers are using their scarce dollars to give those agricultural enterprises receiving the subsidized water a significant competitive advantage over those farmers who do not receive the subsidized water—whether they are next door in California or in other parts of the U.S. While this is not the core of the CAM's challenge, it is central to what the economic analyst must keep in mind when analyzing the costs and benefits of what the taxpayer has financed. What would have happened if no project were undertaken and therefore who should pay for the project that was undertaken?

In response to changing conditions over the years, BOR has made numerous changes to the facilities, priorities, and their operations. Further, so many changes have been made to the purpose(s) and operations of the facilities, that it is a very difficult challenge—the challenge faced by the CAM—to reconstruct the reimbursement obligations.

Even if the reimbursement obligations are calculated using reasonably sound economic analytic methods and solid data, the CAM offers no evidence that the historic and contemporary undercollection problem will be resolved going forward. Instead, the CAM not only perpetuates the undercollections, but uses analytic techniques that would hide from the taxpayer and the general public the true size and distribution of the undercollections.

In conclusion, unfortunately, the IFR COALITION finds that the CAM is ambiguous, flawed, and incomplete. Its flaws are rooted in, but not limited to, BOR's previous methods and practices to estimate costs and cost allocations. The CAM announces that the method to calculate and allocate costs will be the "Separable Costs Remaining Benefits (SCRB)" method. Over the years, the SCRB has been repeatedly and deeply criticized both as a method and for the application of the method. Yet, the CAM argues that the SCRB method should be continued. The only justification offered is that the SCRB has been used for a long time. That is not satisfactory. BOR should utilize contemporary economic methods, tools, practices, and data to achieve Congress' mandate. Only by using a better method can the taxpayers, the stakeholders, and the general public have confidence that the appropriate tools have been used to reimburse the billions of dollars that have been lent to a relatively small number of beneficiaries.

If the SCRB method is to be utilized, the CAM should set out explicitly how the method will be followed in order to improve upon or avoid the flaws of the past. Similarly, if the SCRB method is to be followed, the CAM or BOR should provide an explicit discussion of why it is to be preferred over other alternatives. For example, experts have ranked the "Costs follow the water" and "Capacity rights" approaches as superior to the SCRB method. With billions of taxpayer dollars at stake, the IFR COALITION questions why the SCRB would still be preferred by the BOR.

The balance of our comments are organized in three sections: (1) General Overview, (2) Detailed Comments, and (3) Comments on the "draft Findings and Recommendations Table. Unfortunately, the comments are fairly repetitive. This is due to the fact that the ambiguities or analytic errors are pervasive, important, and very interrelated to the CAM work yet to be completed.

**I. General Overview: the IFR COALITION is concerned that the CAM approach repeats past mistakes, incorporates a flawed methodology (as if repeating the method will make it the correct method), will not result in proper reimbursement of the taxpayer's "loan" to build the facilities, and will continue or even increase the subsidies to the relatively small number of project beneficiaries.**

In summary, IFR COALITION finds that the draft CAM so far is more of the description of a possible approach to cost allocation than a methodology. Indeed, sections of the CAM are so vague that they cannot even be described as a description of a methodology. Rather, those sections describe things that BOR might do. While the CAM describes a reasonable framework for how the allocation of the capital and operating costs of the Central Valley Project and related facilities might be presented, as a methodology we find it to be too conceptual and lacking in the specificity required to gauge whether the resulting methods, assumptions, and data would yield an analysis that would meet the tests of either sound economic analysis or the standards of Congress.

Further, while the CAM seeks to define its terms for the methodology and analysis, IFR COALITION finds that the definitions are too ambiguous and not well enough specified to provide the public much opportunity to comment. Further, the general approach appears to be a good way to start but again is too general to provide guidance for either a sound analytic framework or selection of the data appropriate to the analysis. IFR COALITION cautions against repeating the mistakes of the past.

Therefore, IFR COALITION is concerned that BOR will rely on the CAM as presented to go forward with an analysis using the “tools” in the CAM when those tools are not sufficiently set out, are not themselves analyzed (e.g., strengths, weaknesses, and empirical differences between them), a selection is not made, and a justification is not provided –nor, is there even a description of how the selection will be made.

There are three basic tasks that need to be completed. Their importance cannot be overstated. Billions of taxpayer dollars are at stake:

- (1) How much of the capital and operating cost of BOR facilities is reimbursable to the taxpayer from the project’s users (or as we use it here, the direct beneficiaries)?
- (2) How should those reimbursable costs be allocated to the respective project users? And
- (3) How can the BOR provide enough assurance to both the taxpayers and the project’s users that the undercollections problem will be solved? The CAM is simply too vague throughout to provide much assurance to the taxpayer (a) that the correct allocation of the costs to the taxpayer will result, (b) that costs will be equitably distributed among project users, and (c) that the resulting reimbursement obligations will actually be achieved.

IFR COALITION is not able to identify in the CAM a methodology that (a) that the historic under-collections will in fact be collected going forward (since they are indeed project costs), and (b) that the mechanism for paying the historic under-collections will be based on sound economic analysis and will be practical—e.g., that the reimbursement mechanism will not simply result in more hardship excuses to avoid reimbursement.

IFR COALITION is very concerned that, as it stands, the CAM leaves either the analyst or some other party in the process to make judgments or decisions that may or may not be consistent with sound economic analysis—and may result in nearly invisible vulnerabilities in the entire cost allocation effort.

The result, as is described in the Detailed Comments section below, is that it is possible that historic weaknesses in preceding studies/analyses could be perpetuated in this effort. For example, the flawed historic allocations of costs to the taxpayer should not be perpetuated again through such components as fish and wildlife or water quality that should actually be allocated to those project uses and users that actually benefit from the project and its associated capital and operating costs.

The CAM is not simply an accounting exercise to allocate present and future costs among present and future project-related actions. It is fundamentally an economic analysis challenge. The “accounting” component should follow and be based on the economic principles and analysis. A basic principle of sound economic analysis requires that the costs be viewed “with” and “without”

the facilities rather than “before” and “after” the facilities are built as seems to be suggested in the CAM. It is not clearly stated in the CAM that this principle is central to proper allocation of costs. In fact, it is not even addressed. Stated simply: if the costs incurred would not have been incurred “without the project”, the costs are “with the project” costs and should be allocated to the project beneficiaries, not the taxpayer.

To illustrate: if fish and wildlife or water quality (or wildlife refuges) would not have required public expenditures “without” the facilities, then fish and wildlife and water quality expenditures as a result of the facilities should be allocated to those beneficiaries directly benefiting from the water supply, power, and recreation, not to the taxpayer. Stated differently, if the fish and wildlife or water quality expenditures are actually intended to compensate, mitigate, or repair for the damages or reductions in fish and wildlife or water quality resulting “with” the facilities, then taxpayers should not be expected to pay for them.

Similarly, the re-stated purpose of some of the BOR facilities (such as the “redefinition” of the purpose of New Melones for water quality or the changes to the San Luis facilities) should not be confused with a public benefit to be paid by the taxpayers. Since the water quality expenditures (capital and operating) are only required “with” the facilities and for the purpose of benefitting the water supply functions for the direct benefit of the water supply customers (even if the water quality improvements also benefit fish and wildlife that would not have needed the improvements “without” the facilities), the taxpayers should not pay; the project beneficiaries should pay.

Therefore, the IFR COALITION reserves its right to further comment on the CAM once the details have been more completely developed. IFR COALITION recommends that BOR offer the public another opportunity to comment on the CAM once the concerns have been addressed.

## **II. Detailed Comments: As ambiguous as it is, the CAM’s description of a possible cost allocation methodology is biased against taxpayer recovery of reimbursable costs and biased against undertaking measures to compensate, mitigate, or otherwise pay for the damages caused by BOR facilities.**

1. Do not perpetuate previous methodological or analytic weaknesses: The history is well documented that BOR’s cost allocation(s) have been biased against the taxpayer. Furthermore, it has also been documented that BOR’s previous cost allocation analyses, even as they were biased for the benefit of the direct beneficiaries of the project(s) still resulted in incomplete reimbursement. To the extent that this CAM is intended to represent improvements over preceding cost allocation methods and analyses (including, for example, the SCRB method previously utilized), the differences should be clearly noted and corrected in the CAM (which is presently completely silent on this matter). Further, as the previous cost allocation(s) were flawed, the results or conclusions should not be used as the starting point for this analysis. Rather, if the BOR intends to use any of the results of any previous cost analyses in this cost analysis, the BOR should first adjust any of those past results to reflect today’s improvements.

For example, on page 9 of the CAM, last paragraph, the following language “The basic guideline to follow in updating cost allocations is to use the same method of allocation as was used in the project authorization report” suggests that analytic methods and data sources used decades ago are the best available today and tomorrow (since the CAM will establish the method for future facilities as well). Of course, methods and data sources have improved and will likely continue

to improve. Further, the types of questions that were being analyzed decades ago have changed both in substance and in importance. IFR COALITION suggests that the CAM should seek to reflect the state of the art rather than further endorse methods and results that have proven to be inadequate.

To illustrate, the CAM itself on page 11 acknowledges: “A problem that has often occurred in final allocations and reallocations is the condition wherein project costs to be allocated exceed total benefits...” When such a condition has occurred and when reimbursements are billions of dollars short of their obligation under historically biased cost allocation and reimbursement methods, IFR COALITION is astonished that the BOR has not simply started over again with a fresh look at everything they do.

2. The relationship between the CAM and the draft Findings and Recommendations Table (“Table”) is not clear. The Table sets out descriptions and methods that are not mirrored in the CAM. In order to guide the analyst and the analytic process, the CAM should contain more detail than the Table. Yet, this is not the case. More importantly, it appears that the Table and the CAM are in direct conflict with each other over the treatment of the fish and wildlife and water quality aspects of the CVP.
3. The CAM’s reference points are not well defined. The starting (but not final) reference point should be the original Congressional authorization(s) or subsequent specific (and properly cited) amendments that are specifically related to cost allocation and reimbursement. A number of the BOR facilities are no longer used for the purposes for which they were originally authorized. For example, the New Melones and San Luis facilities were authorized for purposes different from the way that they are managed today. Of course, that changes the cost allocations. Unless Congress has specifically authorized not only the operational changes and the associated cost allocations but has directed that the taxpayer should pay for the changes, the cost allocations should continue to flow to the direct project beneficiaries, not the taxpayer. Further, even if Congress has specified the cost allocation, if subsequent analysis (using appropriate analytic techniques) suggests that the cost allocation specified by Congress is no longer appropriate, IFR COALITION suggests that BOR should seek authorization from Congress to get the cost allocations correct.
4. If Congress will be expected to accept the taxpayer reimbursement amount, its timing, and its implied taxpayer subsidies, then the amounts, distribution (beneficiaries), and timing of such subsidies should be presented. The CAM is biased in favor of the direct project beneficiaries in a host of ways. They are detailed in the following comments. Yet, at no point in the CAM is there acknowledgement of these subsidies and there is no discussion at all of the subsidies implied in the present reimbursement “system” (zero interest loan, reduction in rates for “hardship”, water prices based on historic costs rather than contemporary value, taxpayer reimbursement for the costs associated with project damages rather than by the water customer, and—even with all of those subsidies, a failure to be reimbursed for what is due). Instead, the CAM would entomb those subsidies and damages in a method that does not appear to meet basic economic principles of sound analysis.
5. Taxpayers should not pay for the capital or operating costs associated with the facilities where those costs are incurred as a consequence of, rather than the purpose of, the facilities themselves (see also Comment related to Page 1, “introduction”, below). While the Table partially addresses this concern, the CAM does not. The CAM should clearly delineate

capital and operating costs that are associated with the consequential, remedial, or compensating measures undertaken for the purpose of seeking to mitigate the impacts of or pay for the damage caused by the facilities as distinguished from the costs associated with benefits to specific project beneficiaries.

6. The CAM does not provide a proper delineation between what constitutes costs for “fish and wildlife” and “recreation”. See for example the following comment regarding “Page 4, Suballocation of Recreation and Fish and Wildlife Component”.
7. The CAM does not provide a functional definition for costs associated with compensating, mitigating, or otherwise repairing the damages caused by the project. Our comments herein have repeatedly argued for a clear treatment of mitigation and repair of damages caused by a project (i.e., costs that would not have been incurred in the absence of the project). But, the CAM does not define what is meant by these terms. We urge BOR to provide a clear and functional definition.
8. Page 1, general introduction: There are a number of principles that should guide the cost allocation process. Only some are discussed here. Others include (a) most important: utilizing “with” and “without” analysis, not “before” and “after”, (b) properly attributing benefits between taxpayers and benefits that flow directly to project users (water supply, power, recreation), and (c) allocating costs properly between taxpayers and project users especially where, based on “with” and “without” the facilities, certain costs may appear to benefit the public at large or taxpayers but actually only result because the facilities have caused a deterioration in the “without” facilities case.
9. Page 1, Terminology: While these terms on their face seem appropriate, in their actual application, IFR COALITION cautions that the BOR follow the economic principles previously described. For example, “Specific Costs” for fish passage could mistakenly be allocated to the taxpayer when in fact those costs should be allocated to the water supply or power functions.
10. Similarly, “Incremental Costs” could also erroneously treat such costs as fish passage or water quality costs associated with water supply that would not have been required had the facilities not been built in the first place (the “without” case).
11. Page 2, “Single Purpose Alternative Costs”: IFR COALITION cautions that, viewed as “with” and “without” cases, it is also possible that the Alternative would be “no project”. The specification of this term does not allow for this possibility and therefore could skew the analyst’s results.

Rather than repeat this concern for each of the cost classifications described, IFR COALITION notes that to various degrees the concerns apply for all of the cost terms. Unless these terms are further defined, the terms do not provide enough guidance to the public and the analyst to know how such costs should be allocated.

12. Page 2, the “NED Plan”: as described, this drives the analysis toward structural alternatives and away from the “no project” or “remove project” alternatives. Furthermore, the NED is not the appropriate place from which to assign costs unless there is a net benefit as compared to the “without project” case. And only when it can be demonstrated that there is a net benefit to

the taxpayer clearly and explicitly linked to the “with project” case separate from the direct benefits received by the project user(s).

13. Page 3, 3<sup>rd</sup> paragraph: as described in the General Comments section, since this Chapter is actually more of a description of a possible cost allocation methodology rather than actually setting forth the methodology, it is not possible to provide any substantive comments regarding the description and examples of the SCRIB method of allocating NED costs. IFR COALITION looks forward to its opportunity to review and comment on the actual CAM methodology. IFR COALITION cautions however, as it is well known that the previous applications of the SCRIB method have been weak and controversial, that BOR should carefully set out the new use of the SCRIB early in this process (so that BOR can avoid its previous history of getting too committed to a method only to find that it was weak) and, further, so that the definitions, assumptions, and data sources (particularly as they are influenced by the cost allocation process discussed above) can be clearly understood by the public. Since the NED and SPA elements of the CAM are not at all clearly defined in this Chapter, it is neither clear what the data, etc., will be used and how reviewing such uses by the public will be straightforward. See Figure 1 comments below.

14. Page 4, Figure 1: This is a reasonable format in which to present the results of the analysis. But, as it is only an example of results without the underlying analysis (presumably not yet performed), IFR COALITION can only comment on areas that will need further definition and justification.

- a. It is not clear from the example Figure 1 whether it is intended to represent all of the Project Purposes that will eventually be included in Figure 1. The ones that are presented are appropriate (although “Irrigation” may not be a complete characterization of the water supply purposes). If other purposes are to be included, they should be defined, analyzed, and justified. If not, then many of the comments in this commentary may not apply.
- b. 8% interest: is this meant to mean the rate of inflation on construction and operating costs? Please be sure to provide a clear definition and an analysis and justification for this assumption. “Interest rate”, “discount rate”, and “escalation rate” are not the same for all costs. While a single discount rate may be appropriate for certain types of costs, it is highly likely that the future capital and operating costs will not escalate at the same rates. Some costs, e.g. non-structural costs, may not escalate at all or very little, while capital project costs are likely to escalate at a faster rate than the discount rate.
- c. Further, if the term “interest” is meant to include some correlation to discount rates, the correlation should be defined, analyzed, and justified.
- d. The presentation of “Benefits” is vulnerable to the same concerns raised above. Just because there are “benefits” resulting from certain capital or operating costs, does not imply that those benefits should be paid by the cost category. As discussed above, if the costs of fish and wildlife and/or water quality are costs that would not have occurred “without” the facility, then the only justifiable description of those benefits is that the costs were incurred in order to mitigate, compensate, or otherwise remedy damages associated with the facility. Therefore, the public taxpayer should not be responsible for

such costs and, instead, the direct beneficiary (water supply, power, recreation) should be responsible for those costs.

- e. IFR COALITION cautions that the “Present worth” and “Annual value” components of Figure 1 are vulnerable to the weaknesses discussed throughout these comments on the CAM. If, for example, ultimately more project purposes are added to the Figure, then the Figure simply must distinguish between the costs that are justified for the taxpayer and those that are associated to the “with project” beneficiaries and treated accordingly.
  - f. As for the balance of Figure 1, present and previous concerns about the SCRB method of allocating NED costs remain and are discussed elsewhere in these comments.
15. Page 4, Suballocation of Recreation and Fish and Wildlife Component: Please provide further definition, analysis and justification for the following statement: “Recreation and fish and wildlife **may** [emphasis added] be considered to be a **single component** [emphasis added] especially for interrelated reservoir-type activities”. Without a better understanding of what BOR considers a single component or a “joint cost” as compared to a completely different category of cost, IFR COALITION is not able to provide further comment except as cautioned elsewhere in these comments.
  16. Page 5, first full paragraph: IFR COALITION does not understand what is meant by the following: “both reservoir and instream flow requirement segments of a component”. Clearly, if the fundamental principle of economic analysis is followed wherein costs (and benefits) should be considered “with” and “without” the project, how would the BOR and the CAM consider “instream flow requirements” as anything but a cost “with” the project? As such then, the capital and operating costs associated with instream flow requirements would only be attributable to the direct project beneficiaries: water supply, power, and reservoir recreation. There is, as far as we can tell, no overlap or “joint” costs to be allocated between reservoir recreation or other costs and those associated with instream flow requirements.
  17. Page 5, last paragraph: see comments below regarding the “alternative justifiable expenditure (AJE) method”. This technique has been criticized for years. Why repeat it now?
  18. Page 6, Figure 2: IFR COALITION sees no purpose to this figure as it suggests that there are in fact costs that should be ascribed to “fish and wildlife”. See previous comments regarding both the with/without principle and the compensating nature of the costs associated with fish and wildlife. IF there are any costs (or benefits) to be attributed to fish and wildlife, it would only be those associated with a net gain or net enhancement of the “with project” case above that which would have occurred under the “without project” case. As has been suggested repeatedly in previous comments regarding the fish and wildlife and water quality aspects of the CAM, there is much more definition, analysis, and justification to be done before the CAM can be described as a complete methodology.
  19. Page 6, Figure 2: See also the “analytic” comments regarding Figure 1 preceding.
  20. Page 6, “Exceptions” and “Overriding Legislation or Departmental Directives”: IFR COALITION suggests that the CAM has it all backwards in this section. This whole

discussion emphasizes the importance of IFR COALITION's prior comments. In any case, whatever "overriding legislation" or "directives" the CAM intends to rely upon should be specifically related to Congressional directive(s) to reallocate costs and then should be explicitly analyzed and justified.

- a. Once again, the appropriate principle of economic analysis to guide here is not what BOR has been ordered to do but a complete with/without analysis—not a "before" and "after" framework. Then, if costs are required to remedy or mitigate the consequences of the "with project" situation, whether BOR is ordered to do so or not, these costs are attributable to the direct project beneficiaries. To charge the taxpayer for "fish and wildlife" or "water quality" is inappropriate when those costs would not have been incurred in the "without project" case.
- b. Furthermore, what BOR has been ordered to do is a very incomplete basis to attempt to create an exception that, if used, would be biased against the taxpayer. The CAM's method would suggest that the only time the costs of such measures should be paid by the direct project beneficiaries (e.g., water supply, power, reservoir recreation) instead of the taxpayer, is when ordered to do so. This, of course, creates a substantial bias against any taxpayer or other party to work with the BOR in a less expensive process, such as simple dialogue or settlement agreements. Furthermore, this approach creates a bias for the direct project beneficiaries to resist mightily any notion of a modification or settlement agreement without expensive litigation or a taxpayer-financed expensive Congressional directive.

Finally, this approach will almost certainly allocate to the taxpayers a higher amount of the costs than appropriate or equitable. That, in turn, can be expected to cause even less support from the taxpayers for measures to reduce the damages (e.g., fish, wildlife, and water quality) caused by a project. Surely, this is not the basis for a sound and equitable cost allocation.

Historically, BOR has/may yet modify its operations (only sometimes pursuant to being ordered to do so) for many reasons, to cite but two:

- a. BOR determined that it was the right thing to do as part of its own adaptive management prerogatives;
- b. BOR agreed formally or informally to undertake such measures (sometimes in simply to avoid being ordered to do so) to compensate partially for the damages caused by the "with project" case.
- c. While there may be some basis upon which the remaining of the descriptions of the proposed "exceptions" on Page 7, they need to be much better defined, analyzed for their consistency with sound economic principles, and justified. IFR COALITION's major concern regarding this whole approach is the notion that taxpayer's should pay for the damages cost "with" a project. This is further complicated by the ambiguity of the terminology that, in IFR COALITION's view, does not enable the taxpayer to know what they are paying for and leaves discretion to the analyst to decide what the taxpayers will pay rather than the actual direct project beneficiaries. IFR COALITION does not believe that this is Congress' intent.

21. Page 8, Allocations Based on Other Measures: this whole section does not even describe a methodology. Rather it is a cursory review of possible approaches to disentangling costs. This section does not describe a methodology. "Other Measures" and "alternative

approaches” need to be carefully analyzed themselves for each one’s strengths and weaknesses according to sound economic principles, not simply because agency “policy” overrides economic analysis. Finally, when an approach is selected, it should be justified explicitly on the basis of sound economic analysis.

22. Page 8, “Allocations....”, second paragraph: See previous comments. IFR COALITION is very concerned that language like “salinity control purposes are currently evaluated on a cost effectiveness basis. This requires a slight modification of the SCRB procedure.”, and “water supply purposes are estimates of beneficiaries’ willingness to pay”, and “Instances might arise in which allocated costs to the other beneficiaries are greater than the repayment capability of those beneficiaries resulting in the need to reallocate costs”.

- a. Just because the taxpayers’ investments have been evaluated on a cost effectiveness basis does not imply in any way that the taxpayers should therefore pay any portion whatsoever of the resulting “benefits” if those so-called costs would not have been required “without project”.
- b. “slight modification(s) of the (already heavily criticized) SCRB procedure without explaining what “slight modification” is (whether or not it is “slight” is in the eye of the beholder), without analyzing what the modification means, and without justifying the modification, does not create an economically sound cost allocation method.
- c. “estimates of beneficiaries’ ability to pay” is utterly irrelevant to a proper and sound economic analysis of the costs of the facilities. Cost allocations should be performed independent of any user’s ability to pay (or desire to pay). Let the chips fall where they may. It is an entirely separate consideration, that itself must be supported by analysis, whether the taxpayers or power customers should pay—and how much to further subsidize anyone who cannot or desires not to pay.

23. Page 8, “Allocations....”, third paragraph: See previous comments. IFR COALITION would like to emphasize that this language is arbitrary and not consistent with sound economic analysis:

- a. “Costs may be allocated to purposes based on cost effectiveness using other measures of beneficial use” implies that every “benefit” is equal and should pay or that Congress has authorized a reallocation of costs. This notion completely misses the importance of “with/without project” analysis. Again, while “fish and wildlife” and “water quality” or salinity control may produce benefits, it does not follow that they should in any way be responsible for reimbursement of costs. They probably are not benefits as compared to the “without project” case (this point should also be analyzed according to sound economic principles and practices).
- b. Just because “policy” or “legislation” “authorizes” an assumption that benefits are at least equal to costs or that “the assumption that the use of water for the purpose is at least equal to the value of the water in its next best alternative use; i.e., equal to the opportunity costs of the water” doesn’t mean that it is appropriate from an economic analysis point of view. Policymakers and legislators may have made such

assumptions to make decision making easier. It is unlikely (unless documented in the CAM) that policymakers or legislators made such decisions to instruct the CAM.

24. Page 8, "Allocations....", fourth paragraph: See previous comments. "Note that in the case of some threatened and endangered species, current methodologies do not lend themselves well to measurement of quantifiable benefits... In these instances, costs may be allocated based on other measures." There is no need to measure in either quantifiable or unquantifiable ways the "benefits" to threatened and endangered species unless preceded with a sound analysis that shows that those species achieved a net gain or enhancement over what the "without project" conditions would have been. And then, taxpayers should only pay for the net gain over the "without project" case. Instead, if the costs were incurred to compensate, mitigate, or otherwise repair the damages to those species in the "with project" case, those costs should appropriately be entirely allocated to the direct project beneficiaries.
25. Page 9, "O&M Costs": "The procedure of first choice for allocating Federal O&M costs should utilize the final project cost allocation." This is an assumption and it should be presented as such. Then the assumption itself should be analyzed and justified on the basis of sound economic analysis.
26. Page 9, "O&M Costs", first paragraph: This discussion is not based on economic analysis. Further, once again, IFR COALITION cautions that the use of the term "benefits" is too loose and can lead to serious analytic errors. Similarly, the language "farm enterprise budgets" raises the previously described concerns regarding "ability to pay" and "desire to pay" as false measures of benefits for purposes of cost allocation to reimburse the taxpayers for the loans made.
27. Page 9, "O&M Costs", first paragraph: Similarly, the language "unit-day values may be used to estimate recreation benefits" should not be used to imply that the cost reimbursement obligation of "recreation" should be limited to those day values, "ability to pay", or "desire to pay". If the taxpayer is to subsidize recreation uses of BOR facilities, that should be an explicit act by legislators, not buried in a cost allocation process.
28. Pages 9 and 10, "Other Allocation Problems": IFR COALITION readily recognizes the complex analytic problem of disentangling huge capital and operating costs incurred over decades, historically only partially reimbursed, and for which project purposes and public priorities have changed over time. IFR COALITION submits, however, that the analytic "problem" would be greatly simplified if the task were first organized according to sound economic principles and practices rather than immediately diving into what the CAM has done: frame the task as essentially only an accounting problem. So, rather than repeat many of the comments previously made on other sections of the CAM, IFR COALITION affirms those comments and encourages the BOR to back up and re-frame the analysis. IFR COALITION believes, that the complexity and controversy surrounding its previous methods would be clarified, justifiable, and would yield a result more aligned with the economic challenge of meeting Congress' original and present intent: reimburse the taxpayer for those costs not directly benefitting the taxpayer. Toward that end, IFR COALITION offers the following summary analytic considerations not presently evident in the CAM:
  - a. "Benefits" do not automatically imply a cost reimbursement obligation.

- b. The starting point for disentangling costs should be viewed in the context of a careful analysis of “with project” and “without project” conditions.
- c. “Ability to pay” or willingness to pay should not be gauges for determining an appropriate cost allocation to reimburse the taxpayers. If there is a desire to subsidize with taxpayer or power customer dollars any of the project users, that decision should be explicitly made by the Congress and the amount and timing of such subsidies should be available to the public and the Congress before such a decision is made.
- d. Costs incurred to mitigate, compensate, or otherwise remedy (partially or completely) the damages caused by a project are not appropriate for the taxpayers to pay. Rather, these damages would not have occurred but for the other benefits received by the direct project beneficiaries (e.g., water supply, power, recreation). And,
- e. The CAM should adopt an economic analysis approach that is based on contemporary methods, tools, and data, not merely perpetuate the subtle and not-so-subtle errors of the past. For example, see the preceding discussion in these comments at page 6 regarding the “Costs follow the water” and “Capacity rights” methods.

29. Page 11, “Results of Cost Allocations”: This section should explicitly add to the list of uses of the results: reports to Congress regarding: (a) the level of reimbursement collections received as compared to that expected, (b) the magnitude and timing of subsidies embodied in the cost allocations, and (c) the magnitude and timing of subsidies resulting from the actual reimbursements received.

30. Future capital and operating costs associated with new facilities or new mitigation costs: we are concerned that the CAM as set out is too ambiguous toward future capital projects and project mitigation/damage repair requirements. Whether or not the CAM appropriately addresses historic costs, we find the CAM to be simply too vague regarding future projects that are needed because of the problems caused by the BOR facilities themselves.

31. What is known today about the future of BOR CVP facilities suggests that major capital and operating costs will be incurred as a result of lawsuits, settlement agreements, or court orders. For example, drainage facilities may be required in order to meet regulatory/legal requirements. The CAM is silent on how these facilities will be treated for purposes of cost allocation and recovery. It is critically important that the associated future capital and operating costs be treated in the same manner as costs associated with mitigating or repairing damages caused by the project and should therefore be assigned to the project beneficiaries. Furthermore, in order to ensure that the costs are actually recovered from project beneficiaries, cost recovery should not be part of the present inadequate cost recovery system that provides little assurance that the taxpayers would not end up footing the bill anyway. That is, repayment should be direct, short term, and not subject to reduction or waiver on the basis of arbitrary “ability-to-pay” (or willingness to pay) decisions after the cost allocation has been made. Any other method will inappropriately allocate costs to the taxpayers. The CAM should explicitly set forth these principles and associated methodology.

**32. Comments on the “draft Findings and Recommendations Table”: The Table is a big step in the right direction but is not mirrored in the CAM. In addition, the terminology is not well defined in either the Table or the CAM. Therefore, it is not possible to conclude that the improvements will follow through to the analysis.**

- a. The relationship between the CAM and the Table is not clear. Is one intended to govern the other? Is one intended to be the summary of the other? The answers to these questions are not clear because neither is well defined but, more importantly, they are in conflict with each other. In addition, the Table is inconsistent between the discussion in the first one-half as compared to the second one-half.
- b. One way in which the Table and the CAM are in conflict with each other is with respect to the treatment of fish and wildlife, water quality, and all other matters related to compensating, mitigating, or otherwise addressing the damages and negative effects of the project.
- c. Cost Allocation vs. Cost Recovery: Please provide a description of the methodology by which historic under collections and ongoing subsidies (e.g., “ability-to-pay” or willingness to pay subsidies) will be corrected in this cost allocation. Please also set forth how the existing large under collection will be collected and will not directly or indirectly cause a reallocation of costs to taxpayers (e.g., by reallocating under collections into a category of taxpayer costs).
- d. Cost Allocation Method, “Separable Costs Remaining Benefits (SCRB)” method: please provide a table to illustrate how this application of the SCRB has improved over previous flawed SCRB applications.
- e. Capital Cost Evaluation: Methodology: please specify and remove the ambiguity in the phrase “can be used” and provide a justification for the method used. Then make the appropriate changes to the CAM.
- f. Capital Costs: Types of Costs: see comments on the CAM.
- g. Inclusion of New Melones Unit: see comments on the CAM.
- h. Trinity River – Assumptions: see comments on the CAM.
- i. Flood Control: Benefits-Methodology: see comments on the CAM.
- j. Flood Control: Benefits-Results: Do the benefits estimated by the USACE need to be revisited in order to be consistent with “with project” and “without project”?
- k. M&I Water Supply: Benefits-Methodology: If the results of the different models prove to have inconsistent results, how will those inconsistencies be reconciled? Please describe the justification for each model, its strengths, weaknesses, and how using different models is ultimately helpful.
- l. Refuge Water Supply: Benefits-Methodology: see comments on the CAM. The costs associated with the wildlife refuges are only applicable to the taxpayer to the extent that

a net enhancement of fish and wildlife populations can be demonstrated over the populations that would have occurred without the project. Otherwise, the costs are project costs attributable to the direct beneficiaries of the project.

- m. All of the discussion on fish and wildlife, water quality, recreation, and refuges: see comments on the CAM and reconcile the top half of the Table with the bottom half.