



# **— BUREAU OF — RECLAMATION**

## **Central Valley Project Municipal and Industrial Water Shortage Policy Guidelines and Procedures**

**EFFECTIVE DATE: FEBRUARY 1, 2017**

### **INTRODUCTION**

The Bureau of Reclamation (Reclamation) prepared the Central Valley Project (CVP) Municipal and Industrial (M&I) Water Shortage Policy (WSP) Environmental Impact Statement (EIS) to evaluate the potential impacts of CVP M&I WSP alternatives. A Record of Decision was signed on November 13, 2015, to implement Alternative 4 (Appendix A), Updated M&I WSP (preferred alternative). The purposes of the M&I WSP are to:

- Define water shortage terms and conditions for applicable CVP Contractors.
- Determine the quantity of water made available to CVP Contractors from the CVP that; together with the M&I Contractors' drought water conservation measures and other Non-CVP water supplies, would assist the M&I Contractors in their efforts to protect public health and safety (PHS) during severe or continuing droughts.
- Provide information to Contractors for their use in water supply planning and development of drought contingency plans.

### **APPLICABILITY**

These guidelines apply to Contractors whose CVP contracts (Contracts) reference the M&I WSP. A complete listing of Contractors subject to the M&I WSP is located in Appendix B of this document.

### **PURPOSE**

Reclamation developed these guidelines to ensure consistent and equitable implementation of the M&I WSP throughout the CVP for those Contractors subject to the M&I WSP. These guidelines primarily focus on the administrative process and calculations of PHS and possible adjustments to a Contractor's Historical Use.

### **GENERAL**

The M&I WSP is intended to provide clear and objective guidelines on the water supplies available from the CVP during a Condition of Shortage, thereby allowing CVP Contractors to know when, and by how much, water deliveries may be reduced in drought and/or other low water supply conditions. The M&I WSP will help Contractors better plan for and manage available CVP water supplies and better integrate the use of CVP water with other available Non-CVP water supplies.

For any given water year, the Allocation of CVP water supplies is based upon forecasted reservoir inflows and Central Valley hydrologic conditions, amounts of storage in CVP reservoirs, regulatory requirements, and management of Section 3406(b)(2) resources and refuge water supplies in accordance with implementation of the Central Valley Project Improvement

Act (CVPIA). In some cases, M&I water shortage Allocations may differ between CVP divisions due to regional CVP water supply availability, system capacity, or other operational constraints.

Under a Condition of Shortage, Contractors may experience unique circumstances that are not addressed in these guidelines. Reclamation will work with Contractors to address these unique circumstances as they occur.

To ensure continued compliance with applicable federal and state laws, federal authorities, and CVP operational plans, Reclamation will update or revise these guidelines as necessary.

## **DEFINITIONS**

For the purposes of these guidelines, the following definitions apply:

**Allocation-** CVP water made available pursuant to a Contractor's Contract, typically expressed as a percentage of Contract Total.

**Annual M&I Water Information Request** - The letter sent to the Contractor (usually prior to the contract year and initial Allocation) requesting review and concurrence of data and information necessary to calculate PHS needs.

**Contractor** - An entity having a Contract with the United States for the use of CVP Water pursuant to Federal Reclamation law.

**Service or Boundary Area** - The area to which the Contractor is permitted to provide CVP Water as described in their Federal contract(s).

**Contracting Officer** - The Secretary of Interior's duly authorized representative acting pursuant to the contract held between Reclamation and the Contractor.

**Condition of Shortage** - Periods during any Year when the Contracting Officer is unable to deliver sufficient water to meet the Contract Total.

**Contract Total** - The maximum amount of water to which the Contractor is entitled pursuant to the terms of the Contract.

**Central Valley Project Water (CVP water)-** All water that is developed, diverted, stored, or delivered by the Secretary of the Interior in accordance with the statutes authorizing the CVP and in accordance with the terms and conditions of water rights acquired by Reclamation pursuant to California law.

**Non-CVP Water** –Water from sources other than the CVP used to satisfy M&I demand within the Contractor's Service Area.

**Historical Use-** The average quantity of CVP water put to beneficial use, within the Contractor's CVP Service Area, during the last three years of unconstrained CVP water deliveries.

**Projected Demand-** A quantity of water calculated based on what the Commercial, Industrial, and Institutional (CII) need is at the time of a Condition of Shortage.

**Public Health and Safety Needs** - The amount of water determined to be necessary to sustain PHS.

**Public Health and Safety Adjustment** - An adjustment to a Contractor's declaration of CVP water made available to assist in meeting unmet PHS needs.

**Reduction Credit** - The amount of water subtracted from a long-term, newly developed Non-CVP supply available to meet PHS needs.

**Standard Criteria-** The criteria developed by Reclamation in response to the Central Valley Project Improvement Act of 1992 (CVPIA), Public Law 102-575, and in accordance with the Reclamation Reform Act of 1982, Public Law 97-293, for the development and implementation of Water Management Plans.

**Urban Water Management Plan (UWMP)** - The 1985 California Urban Water Management Planning Act required M&I users with more than 3,000 connections or use of more than 3,000 acre-feet (AF) per year to prepare an UWMP. The UWMP must include existing and projected water supplies and demands, water supply Allocations, comparison of supplies and demands, water demand management program (conservation), wastewater recycling, and water shortage contingency plans.

**Water Management Plan (WMP)-** As described in the Central Valley Project Improvement Act, Public Law 102-575, (CVPIA)WMPs completed under the 1982 Reclamation Reform Act include the implementation of all cost effective Best Management Practices that are economical and appropriate, including measurement devices, pricing structures, demand management, public information, and financial incentives.

**Year-** The period from and including March 1 of each Calendar Year through the last day of February of the following calendar year.

## **GUIDELINES FOR IMPLEMENTING THE M&I WSP:**

- A. HISTORICAL USE ADJUSTMENTS:** During a Condition of Shortage, M&I CVP Allocations are based on a Contractor's Historical Use. At a Contractor's request, Reclamation will consult with the Contractor to consider an adjustment to their Historical Use. Historical Use adjustments are based on the following criteria:
- a. Population Growth
  - b. Extraordinary Water Conservation Measures
  - c. Use of Non-CVP water
  - d. Other Unique or Unusual Circumstances

**Alternative 4 of the M&I WSP's final EIS outlines the implementation procedures for Historical Use adjustments.**

1. For an M&I Contractor to be eligible for a Historical Use adjustment, the Contractor, if required by federal or state law, must be actively implementing a Reclamation approved WMP that meets the current CVPIA Standard Criteria; measuring such water consistent with section 3405(b) of the CVPIA; have an established operating drought contingency plan designed to protect PHS; and demonstrate a 'need' for additional water.
2. Any requests for a Historical Use adjustment must be submitted to Reclamation, in writing, within 30 days after the Contractor receives Reclamation's annual initial declaration of CVP water being made available under their Contract. Reclamation's review shall be contingent upon the Contractor providing appropriate data and documentation for the adjustment.

**B. PUBLIC HEALTH AND SAFETY:** The amount of water determined to be necessary to sustain PHS is currently calculated to equal  $D + CI + I + L$

**Where<sup>1</sup>:**

*<sup>2</sup>Domestic use (D) = Current Population X 55 gallons per capita per day<sup>3</sup>*

*Commercial and Institutional (CI) = 70% of Projected Commercial Demand*

*Industrial (I) = 70% of Projected Industrial Demand*

*System (Conveyance) Losses (L) = 10%*

Based on the severity of the Condition of Shortage, Reclamation may adjust the CI, and I percentages of demands to ensure domestic use needs are met throughout the CVP.

**The following guidelines only apply when Contractors are receiving a PHS Allocation.**

1. CII Demand calculation: For the purposes of a PHS calculation, CII demand will be based on previous CII water use as reported in the most recent UWMP, WMP, or the Contractor's previous year reporting response under the Annual M&I Water

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<sup>1</sup> If the State's criteria changes in any given year, then Reclamation would modify this equation to remain consistent with the State's approach.

<sup>2</sup> Multi-family residential units are not to be included in CII calculations. Residential water use for multi-family housing units and incidental domestic use for those living on agricultural parcels is taken into account under population and domestic use. For purposes of this document, the definitions in California Water Code Section 10608.12 of CII users apply. "Commercial water user means a water user that provides or distributes a product or service. Industrial water user means a water user that is primarily a manufacturer or processor of materials as defined by the North American Industry Classification System code sectors 31 to 33, inclusive, or an entity that is a water user primarily engaged in research and development. Institutional water user means a water user dedicated to public service. This type of user includes, among other users, higher education institutions, schools, courts, churches, hospitals, government facilities, and nonprofit research institutions."

<sup>3</sup> The per capita water demand rate used to calculate the PHS need shall be consistent with State law. The 55 gallons per capita demand value reflects the requirements defined in California State Senate Bill SBx 7-7. Reclamation may adjust this value over time to reflect future changes in State law. If State criteria does not exist, the contractor will apply criteria developed by Reclamation (in consultation with the contractor) that will be consistent with relevant criteria used by similarly situated California M&I water entities.

Information Request from Reclamation. If a PHS adjustment is requested, the Contractor must provide the Contracting Officer sufficient justification and documentation for the adjustment. Part of this documentation shall include the annual reports of CII use filed through the State Water Resources Control Board's annual reporting for public water systems from previous years. If CII use is not reported in an UWMP or WMP, Reclamation and the Contractor will need to agree on an appropriate method for calculating demand.

2. Water Sources Available to Contractor: During a Condition of Shortage, Reclamation will make CVP water available for delivery to M&I Contractors consistent with the M&I WSP. Contractors are expected to use their CVP water in conjunction with other available water supplies. In considering other water supplies available to the Contractor, the following apply:
  - a. Any water (CVP or Non-CVP water) acquired via a short-term water transfer (a transfer of one year or less) during a Condition of Shortage will not be counted as an available water source to meet the PHS needs.
  - b. Any water acquired via a long-term transfer (agreements that are more than one year) will be considered an available supply to the Contractor to meet PHS needs, unless such water is CVP water used in calculating the Historical Use of the buyer.
  - c. Water transfers made by a Contractor (as the seller) will be counted as water available to the Contractor, unless it's a long-term transfer considered as an available source to a buyer. Long-term CVP transfers where CVP water is calculated as part of a buyer's Historical Use will not be considered an available supply to the seller.
  - d. With prior approval from the Contracting Officer, in a year preceding an anticipated PHS year, a Contractor may acquire water (through exchange or transfer) for carryover purposes (in facilities not operated as part of the CVP) to use in the Condition of Shortage for PHS needs. This water will be exempt from calculating supplies available to meet PHS needs. This exemption will only be valid for the Contract year immediately following the acquisition.
  - e. Developed non-potable water supplies (water that cannot be properly treated for human consumption) will not be considered for meeting domestic needs. However, the developed non-potable supplies will be included as water available to meet non-potable CII demands, as appropriate. This may include, but is not limited to, recycled water, stormwater runoff, agricultural drainage water, and greywater.
  - f. Water supplies required to meet environmental purposes by permit, water rights, or other legal or contractual obligations and are not otherwise available to meet M&I demands, will not be considered available to meet PHS needs.

- g. At the sole discretion of the Contracting Officer, the Contracting Officer may exempt water supplies developed and used only during a Condition of Shortage. Such water supplies are developed to minimize losses and damages resulting from drought and are limited to actions that are temporary in nature. Temporary actions may include, but are not limited to, emergency pumps and pipes and the construction of temporary facilities for the conveyance or treatment of water. If a Contractor continues to use the developed water beyond a Condition of Shortage, the developed supply will be counted as available water supply to the Contractor in future years.
- h. Water available to meet PHS needs must be operationally available to the Contractor; e.g. water in a reservoir dead pool (water that is too low for release or below intakes), water that cannot be contractually returned from a groundwater bank, or water that is only permitted or licensed for agriculture/irrigation is not considered an available supply.
- i. Contractors that operate their own surface water reservoirs (reservoirs not operated as part of the CVP) will be allowed to exempt an amount of surface water stored in reservoirs from available supplies equal to six months of the Contractor's PHS demand. At the sole discretion of the Contracting Officer, the Contracting Officer may adjust this quantity on a case by case basis if an operating plan, a drought plan, a Record of Decision for operations, or an UWMP or WMP outlines a different policy or approach for carryover storage.
  - a. Water acquired or developed in 2.d or 2.g above will not be counted in the exemption of 2.i, if such water described in 2.d and 2.g remains in storage. For example, a Contractor's six month PHS demand is 50,000 AF. Under 2.g, the Contractor has 15,000 AF in storage and 2,000 AF acquired under the conditions of 2.d also in storage; therefore, 17,000 (15,000 + 2,000) AF would not be counted as part of the 2.i exemption. In this example, the Contractor can exempt 67,000 AF of supplies stored in their own reservoir (50,000 AF + 17,000 AF).
- j. Groundwater that cannot be treated or blended to meet Environmental Protection Act minimum standards under the Safe Water Drinking Act shall not be considered to meet domestic use needs, but may be used to meet certain CII needs, if appropriate.
- k. To encourage drought resiliency and the development of long-term, Non-CVP water supplies in a Contractor's Service or Boundary Area, the Contracting Officer, on a case-by- case basis, may issue reduction credits towards the available water supplies to the Contractor. Reduction credits may not exceed 10 percent of the developed supply and will only pertain to water supplies developed after the enactment of the M&I WSP.

- a. It is the sole responsibility of the Contractor to provide sufficient documentation and data to the Contracting Officer to determine if reduction credits will be issued.

3. Conditions of PHS Adjustments: If Reclamation allocates additional water beyond the Historical Use Allocation to meet PHS needs (PHS adjustment), the following conditions will apply:

- a. Requests for a PHS adjustment must be submitted within 30 days of the Contractor receiving the initial declaration of CVP water made available under the Contractor's Contract. If allocations are decreased after the initial declaration, the Contractor will have 15 days after the decreased allocation notification to submit a request for a PHS adjustment.
- b. The Contractor shall not be allowed to transfer any portion of their CVP supply during the Contract year in which the PHS adjustment occurred.
- c. If the Contractor transferred/sold water prior to a PHS adjustment (during the same Contract year when the PHS adjustment occurs), the PHS adjustment will be reduced by the gross quantity transferred.
- d. Exchanges will be considered on a case-by-case basis. However, exchanges will only be allowed if the exchange occurs during the same Contract year of the Condition of Shortage. Exchanges of CVP water must be done at a minimum of one unit of CVP water to one unit of Non-CVP water (one acre-foot for one acre-foot), meaning that the CVP water exchanged must be equal to or less than the Non-CVP water being received. Under no circumstance will a Contractor receiving a PHS adjustment be allowed to exchange CVP water for a lesser quantity of water in return.
- e. The Contracting Officer may provide exceptions for B.3.a-B.3.c. if the transfer or exchange is needed to fulfill a previous contractual obligation that must be met during the Condition of Shortage.
- f. There will be no carryover or rescheduling of water made available through a PHS adjustment. The PHS adjustment is only available to the Contractor during the Contract year in which the adjustment is made.

**C. Determining Allocations for Contracts with Irrigation and M&I Water Supplies:**

Several Reclamation Contractors have both irrigation and M&I water supplies contracts (mixed contract); however, there is not a quantity of water associated for each use under contract. In most water service contracts, it states, "Project water furnished under this contract will be allocated in accordance with the then-existing Project M&I Water Shortage Policy. Under the M&I WSP, irrigation allocations for mixed contracts will be calculated as follows:

(Total Contract Quantity – M&I Historical Use) X Irrigation Allocation Percentage =

Irrigation Water Available Under Contract (expressed as a quantity)

For example:

Total Contract Supply = 10,000 AF

Three Year M&I Historic Use = 2,000 AF

Irrigation Allocation Percentage = 50%

Irrigation allocation:  $(10,000 \text{ AF} - 2,000 \text{ AF}) * 50\% = 4,000 \text{ AF}$  for irrigation water available under contract.



## **Appendix A: Central Valley Project Municipal and Industrial Water Shortage Policy Guidelines and Procedures**

### **Appendix M**

Alternative 4: Updated M&I WSP

## Mission Statements

The Department of the Interior (DOI) conserves and manages the Nation's natural resources and cultural heritage for the benefit and enjoyment of the American people, provides scientific and other information about natural resources and natural hazards to address societal challenges and create opportunities for the American people, and honors the Nation's trust responsibilities or special commitments to the American Indians, Alaska Natives, and affiliated island communities to help them prosper.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

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## Attachment

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## Abbreviations and Acronyms

AF	acre-foot
AHU	Adjusted Historical Use
BMPs	Best Management Practices
CUWCC	California Urban Water Conservation Council
CVP	Central Valley Project
CVPIA	Central Valley Project Improvement Act
EA	Environmental Assessment
gpcd	gallons per capita demand
gpd	gallons per day
M&I	municipal and industrial
PHS	public health & safety
Reclamation	Bureau of Reclamation
UWMP	urban water management plan
WMP	water management plan
WSP	Water Shortage Policy

# Chapter 1

## Introduction

The Central Valley Project (CVP) Municipal and Industrial (M&I) Water Shortage Policy (WSP) and implementation guidelines are intended to provide detailed, clear, and objective guidelines for the distribution of CVP water supplies during a Condition of Shortage, thereby allowing CVP water service contractors to know when, and by how much, water deliveries may be reduced in drought and other low water supply conditions. This increased level of clarity and understanding is needed by water managers and the entities that receive CVP water to better plan for and manage available CVP water supplies, and to better integrate the use of CVP water with other available non-CVP water supplies.

Allocation of CVP water supplies for any given water year is based upon forecasted reservoir inflows and Central Valley hydrologic conditions, amounts of storage in CVP reservoirs, regulatory requirements, and management of Section 3406(b)(2) resources and refuge water supplies in accordance with implementation of the Central Valley Project Improvement Act (CVPIA). In some cases, M&I water shortage allocations may differ between CVP divisions due to regional CVP water supply availability, system capacity, or other operational constraints.

The M&I WSP does not apply to: 1) CVP water service or repayment contractors with contracts that do not reference the M&I WSP; 2) settlement, exchange, or other types of contracts or agreements in satisfaction of senior water rights; or 3) CVPIA refuge contracts.

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## Chapter 2

# CVP M&I Water Shortage Policy

The proposed CVP M&I WSP is presented below. It is similar to the Draft 2001 policy with some modifications made to reflect Alternative 1B in the 2005 Environmental Assessment (EA) and Finding of No Significant Impact and comments received from water service contractors and other stakeholders. These modifications include:

- Deleted reference to the 1996 M&I Water Rates book;
- Replaced the two tables in Terms and Conditions 4 and 5 of the draft 2001 policy with Table 3-5 (Alternative 1B) from the 2005 EA;
- Removed the provision for “75 percent of M&I reliability” since the 2005 EA’s Table 3-5 alters this provision;
- Expanded definitions to provide greater clarification of key terms;
- Amended the methodology used to make adjustments to contractors’ historical use;
- Removed assumption that the use of CVP water was viewed as supplemental to non-CVP supplies;
- Added recycled water as non-CVP supply, subject to Reclamation approval; and
- Clarified M&I allocation for contracts with both irrigation and M&I use which do not set forth individual Contract Totals for each use.

Chapter 3 contains associated guidelines to provide additional clarification on the implementation process.

## 2.1 Central Valley Project M&I Water Shortage Policy

The CVP is operated under Federal statutes authorizing the CVP and the terms and conditions of water rights acquired pursuant to California law. During any year, there may be constraints on the availability of CVP water for an M&I contractor. The purposes of the M&I WSP are to:

- Define water shortage terms and conditions for applicable CVP water service contractors, as appropriate.

- Determine the quantity of water made available to CVP water service contractors from the CVP that, together with the M&I water service contractors' drought water conservation measures and other non-CVP water supplies, would assist the M&I water service contractors in their efforts to protect public health and safety (PHS) during severe or continuing droughts.
- Provide information to water service contractors for their use in water supply planning and development of drought contingency plans.

Currently, many M&I contractors are not using their full M&I Contract Total. If the M&I water shortage allocation were applied to full Contract Totals, the resulting allocation for some contractors would exceed their current demand. Therefore, in water short years, allocation for M&I are based on historical use. M&I water demands within the CVP are continually increasing. The Bureau of Reclamation (Reclamation) recognizes that as water conservation measures are implemented there is a hardening of demand that lessens an M&I contractor's ability to reduce demand during shortages.

The capability of the CVP to meet the water supply allocations addressed by this M&I WSP is subject to the availability of CVP water supplies. In any given year, M&I water shortage allocations may differ between CVP divisions due to regional CVP water supply availability, system capacity, or operational constraints. Generally, the supply allocation (percentage) to the various divisions will be the same, unless specific constraints require otherwise.

Reclamation explored the concept of two tiers of M&I water supply reliability as proposed by contractors in the CVPIA Administrative Proposal on Urban Water Supply Reliability. Although Reclamation determined not to adopt two tiers, it will facilitate the sale of CVP water from willing sellers to M&I contractors when necessary.

### 2.1.1 Definitions

**Adjusted For Growth** - An adjustment to the contractor's historical use quantity to account for increased demand within the contractor's service area to include (but not be limited to) increases due to population growth and to the number or demand of industrial, commercial, and other entities the contractor serves, based upon the submittal of required supporting documentation to Reclamation.

**Adjusted For Extraordinary Water Conservation Measures** - An adjustment to the contractor's historical use quantity to account for conservation measures that exceed applicable best management practices (BMPs) adopted by the California Urban Water Conservation Council (CUWCC). A water



conservation measure considered extraordinary in one Year<sup>1</sup> may be a mandatory BMP in a subsequent Year and thus would no longer be considered extraordinary.

**Adjusted For Non-CVP Water** - An adjustment to the contractor's historical use quantity to account for water sources other than the CVP supplies used to satisfy M&I demand within the contractor's service area, subject to written documentation from the contractor that shows the extent to which use of the non-CVP water actually reduced the contractor's use of CVP water in the last three unconstrained years. A contractor must show that the non-CVP water used in last three unconstrained years reduced the use of CVP water in these years. Non-CVP supplies may include surface water, groundwater, local storage, recycled water (subject to Reclamation approval), and other Reclamation-approved non-CVP supplies. Attachment A provides information on the documentation required by an M&I water service contractor when requesting an adjustment to historical use based on the use of non-CVP supplies in lieu of CVP water supplies.

**Agricultural Contractor** - A water service contractor delivering water supplies for use in agricultural production, as defined in CVP contracts. Some CVP agricultural water service contractors also deliver M&I supplies.

**Condition of Shortage** - Periods when Reclamation is unable to deliver the Contract Total pursuant to the terms and conditions of CVP water service, water rights settlement, and/or repayment contracts. Reclamation can determine a Condition of Shortage exists based on various factors, including low water supply conditions during drought periods or severe hydrological conditions, CVP system operational constraints associated with legal decisions, regulatory requirements, and hydrologic reductions. A Condition of Shortage may also be regional and not CVP-wide. For example, limitations on the CVP ability to convey water across the Delta in accordance with State Water Resources Control Board (SWRCB) orders and decisions can result in a Condition of Shortage for CVP water contractors located south of the Delta as compared to CVP water users located north of the Delta.

**Contract Total** – the maximum amount of water to which the Contractor is entitled pursuant to the terms of the Contractor's water service or repayment contract.

**Drought Contingency Plan** - A plan provided to Reclamation by each contractor designed to protect public health and safety. The contractor may provide a copy of its urban water management plan (UWMP) or water management plan (WMP) to Reclamation in lieu of a separate drought contingency plan so long as the UWMP or WMP contains the contractor's drought contingency plan.

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<sup>1</sup> Water service contractor Year is defined as March 1 of each calendar year through the last day of February of the following calendar year.

**Extraordinary Water Conservation Measures** - Conservation measures that exceed applicable BMPs, or approved alternative, adopted by the CUWCC. A water conservation measure considered extraordinary in a given year may be a mandatory BMP in a subsequent year and thus would no longer be considered extraordinary.

**Historical Use** - The average quantity of CVP water put to beneficial use within the service area during the last three years of water deliveries that were unconstrained by the availability of CVP water. At the contractor's request, Reclamation will review documentation for adjustment of the historical use for population growth, extraordinary water conservation measures, or use of non-CVP water supplies. Also, Reclamation may agree to adjust the historical use on the basis of unique circumstances, after consultation with the contractor.

**Irrigation Water Contactor** - See "Agricultural Contractor"

**M&I Water Contractor** - A water service contractor delivering water supplies to water users or retailers serving residential, non-agricultural commercial, industrial, and municipal water users. Some CVP M&I water service contractors also deliver agricultural supplies.

**Non-CVP Water** - Water from sources other than the CVP used to satisfy M&I demand within the contractor's service area, subject to written documentation from the contractor that shows the extent to which use of the non-CVP water actually reduced the contractor's use of CVP water in the unconstrained years. Example sources may include, but are not limited to, local surface water supplies; water rights water; groundwater; transfer water; and, recycled water, subject to Reclamation approval.

**PHS Needs** - The amount of water determined to be necessary to sustain public health and safety, calculated with the formula in Section 3.3, which may be revised in the future to remain consistent with the State of California's approach. During a Condition of Shortage, Reclamation will strive to make CVP water available for delivery to M&I water service contractors at not less than their unmet PHS need, in conjunction with their use of CVP allocations and other available non-CVP supplies, subject to the availability of CVP water supplies, if: a) the Governor declares an emergency due to water shortage applicable to that contractor; or b) Reclamation, in consultation with the contractor, determines that an emergency exists due to water shortage. At that time, the PHS need would be determined by the contractor and reviewed and approved by Reclamation prior to an adjustment to a contractor's allocation in order to assist in meeting unmet PHS need.

**Shortage Allocation** - Refers to the allocation of CVP water during a Condition of Shortage, pursuant to the water allocation amounts prescribed in the CVP M&I WSP. The allocation of water is based on the availability of CVP supplies and Reclamation's ability to convey water.

**Unconstrained Year** – A year in which the M&I water supply allocation is 100 percent of Contract Total by the final allocation announcement.

**Urban Water Management Plan** - The 1985 California Urban Water Management Planning Act required M&I users with more than 3,000 connections or use of more than 3,000 acre-feet (AF) per year to prepare a UWMP. The UWMP must include existing and projected water supplies and demands, water supply allocations, comparison of supplies and demands, water demand management program (conservation), wastewater recycling, and water shortage contingency plans.

**Water Management Plan** - As described in CVPIA, WMPs completed under the 1982 Reclamation Reform Act include the implementation of all cost-effective BMPs that are economical and appropriate, including measurement devices, pricing structures, demand management, public information, and financial incentives.

### 2.1.2 Terms and Conditions

1. During a Condition of Shortage, allocation of M&I water will be based on a contractor's historical use of CVP M&I water. At the contractor's request, Reclamation will consult with the contractor to adjust the contractor's historical use on the basis of: a) *growth*; b) *extraordinary water conservation measures*; and c) *use of non-CVP water*, subject to Term and Condition 3. Reclamation will adjust the historical use to reflect the effect of non-CVP water used in lieu of use of the contractor's CVP water. Crediting for this non-CVP water will be based on 1 AF for 1 AF, unless Reclamation and the contractor agree otherwise after considering unique circumstances. The contractor must fully document use of non-CVP water to clearly demonstrate how much of that water use actually reduced the contractor's use of CVP water in unconstrained years, and submit the documentation in writing to Reclamation when requesting an adjustment (see Attachment A).
2. For an M&I contractor to be eligible for adjustment to its CVP water supply, the contractor's water service contract must reference the M&I WSP. In addition, the CVP contractor must: a) have developed and be implementing a water conservation plan that meets the current CVPIA criteria; b) be measuring such water consistent with section 3405(b) of the CVPIA; c) have and be implementing a drought contingency plan designed to protect public health and safety; and d) demonstrate a 'need' for additional water. Reclamation intends to incorporate a provision in all new, renewed, and amended CVP contracts that references the CVP M&I WSP.
4. Before allocation of M&I water to a contractor will be reduced, allocation of irrigation water will be reduced below 75 percent of Contract Total, as shown in Table 1.

**Table 1: Allocation of Irrigation and M&I Water Supply Under a Condition of Shortage**

<b>Irrigation Allocation (% of contract entitlement)</b>	<b>M&amp;I Allocation <sup>(1)</sup></b>
< 100%	100% (Contract Total)
95%	100%
90%	100%
85%	100%
80%	100%
75%	100%
	<b>M&amp;I Allocation (% of historical use)</b>
70%	95%
65%	90%
60%	85%
55%	80%
50%-25%	75% <sup>(2)</sup>
20%	70% <sup>(2)</sup>
15%	65% <sup>(2)</sup>
10%	60% <sup>(2)</sup>
5%	55% <sup>(2)</sup>
0%	50% <sup>(2, 3)</sup>

(1) For any contract for both irrigation and M&I uses which does not set forth individual Contract Totals for each use, the M&I allocation will be determined by historical use.

(2) Subject to PHS considerations described in Implementation Guidelines.

(3) Nothing in this policy prevents M&I allocation from being reduced below 50% if CVP water availability is insufficient to meet the 50% allocation

5. When allocation of irrigation water has been reduced below 75 percent and still further water supply reductions are necessary, both the M&I and irrigation allocations will be reduced by the same percentage increment. The M&I allocation will be reduced until it reaches 75 percent of historical use, and the irrigation allocation will be reduced until it reaches 50 percent of irrigation Contract Total. The M&I allocation will not be further reduced until the irrigation allocation is reduced to below 25 percent of Contract Total, as shown in Table 1.
6. When allocation of irrigation water is reduced below 25 percent of Contract Total, Reclamation will reassess both the availability of CVP water supply and CVP water demand.
7. Reclamation will strive to deliver CVP water to M&I water service contractors at not less than the amount needed to meet PHS need, taking into consideration contractors' CVP allocations and available non-CVP supplies, provided CVP water is available, if (a) the Governor declares an emergency due to water shortage applicable to that contractor or (b) Reclamation, in consultation with the contractor, determines that an emergency exists due to

water shortage. The contractor will calculate the PHS need using the criteria in Section 3.3 or the most current, which will remain consistent with the State of California's approach, and submit the calculated need to Reclamation along with adequate support documentation for review. Reclamation will ensure that the calculated need is consistent with such criteria. Reclamation may determine that it is necessary to vary the allocation of M&I water by contractor, taking into consideration a contractor's available non-CVP water supply.

8. Each M&I contractor will provide Reclamation its drought contingency plan designed to protect public health and safety. The contractor may provide a copy of its UWMP to Reclamation in lieu of a separate drought contingency plan so long as the UWMP contains the contractor's drought contingency plan.

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# Chapter 3

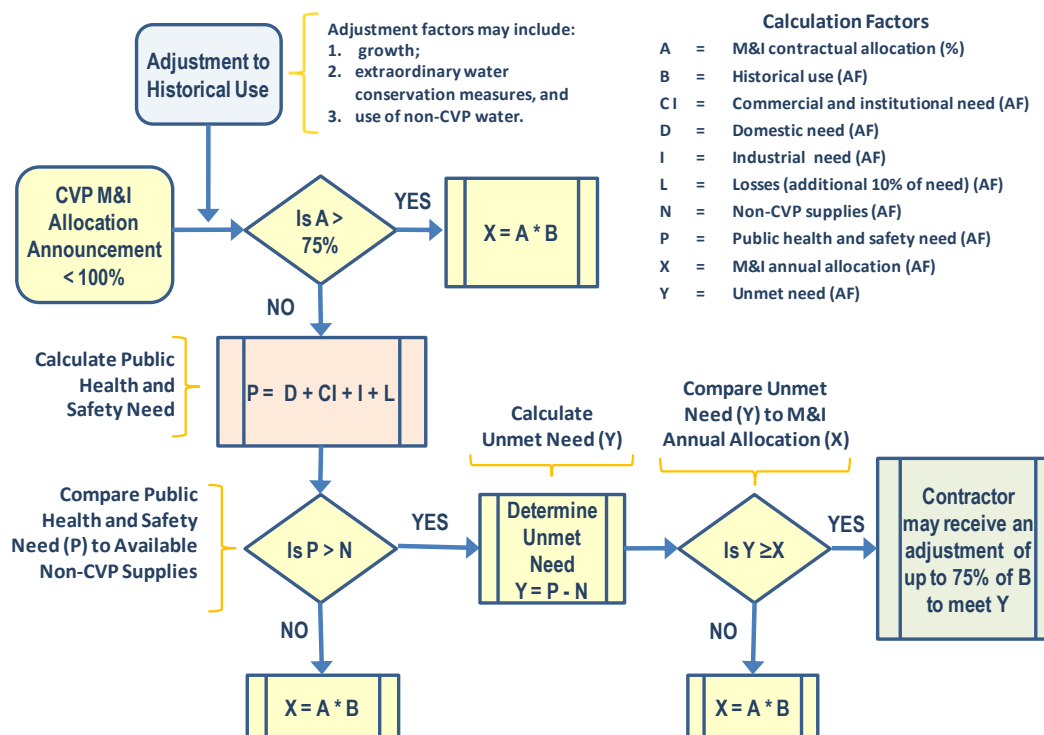
## Implementation Guidelines

This section outlines implementation steps for the M&I WSP and describes other factors considered and/or excluded from the M&I WSP.

### 3.1 Implementation Procedures - General

1. Irrigation contractor allocations are based upon Contract Total.
2. When M&I contractor allocations are at 100 percent, the allocation of M&I water will be based on Contract Total.
3. When M&I contractor allocations are below 100 percent, the allocation of M&I water will be based on a contractor's historical use of CVP M&I water.
4. An M&I contractor's historical use will be determined by calculating the average quantity of CVP water put to beneficial use within the service area during the last three years of water deliveries that were unconstrained by the availability of CVP water.
5. The general sequence of steps that Reclamation will use to determine CVP supplies for M&I contractors during a Condition of Shortage is shown in Figure 1.

**Figure 1. Steps to be Used to Determine Shortage Allocation for M&I Water Contractors**



### 3.2 Implementation Procedures - Historical Use Adjustments

1. At the contractor's request, Reclamation will consult with the contractor to adjust the contractor's historical use on the basis of:
  - a. growth;
  - b. extraordinary water conservation measures, and
  - c. use of non-CVP water.

Each of the three most recent unconstrained years will be assessed for adjustment. Adjustment will be made accordingly and prior to calculating the contractor's historical average.

2. Adjustment for Population Growth: If requested by an M&I contractor, an adjustment for population growth may be applied to an M&I contractor's historical use. In such a case, the historical use in each of the last three unconstrained years will be adjusted to reflect the population growth (i.e., difference in respective population between each unconstrained year to



current population). The sum of all adjustments will be calculated prior to averaging.

The following equation shall be used to adjust the historical water demand in each of the three unconstrained years for population growth:

**Equation 1:** Adjusted Historical Use ( $AHU_{yearX}$ ) =  $HU_{yearX} \times (P_{current} / P_{yearX})$

**Where:**

- $AHU_{yearX}$  is the historical use in applicable year X (one of the three unconstrained years) adjusted for population growth
- $HU_{yearX}$  is the actual historical use in applicable year X (one of the three unconstrained years)
- $P_{current}$  is the current population
- $P_{yearX}$  is the population in historical use in applicable year under consideration

An M&I contractor may develop and submit to Reclamation, for verification and approval, its own calculation of its historical use and its estimate of the adjustment for population growth.

Reclamation and the contractor may confer and enter into negotiations regarding the calculated historical use and adjustment for population growth, if needed. However, the historical use and any adjustment for population growth will be subject to Reclamation approval and shall not exceed the Contract Total.

3. Adjustment for Extraordinary Water Conservation Measures: If requested by an M&I contractor, an adjustment for water conserved via extraordinary water conservation measures implemented and documented by a contractor may be applied to an M&I contractor's historical use. To be eligible for such an adjustment, the water service contractor must;
  - a. have developed and be implementing a water conservation plan that meets CVPIA criteria, and
  - b. be measuring such water consistent with section 3405(b) of the CVPIA.

This adjustment to the contractor's historical use quantity to account for conservation measures that exceed applicable best management practices adopted by the CUWCC must be quantifiable.

4. The following criteria shall be used to quantify and calculate an adjustment for water conserved via extraordinary water conservation measures:
  - a. A contractor requesting such an adjustment will be required to provide sufficient documentation to account for the water conserved via extraordinary water conservation measures.
  - b. The quantitative data provided by the contractor shall detail the actual quantities of water conserved by exceeding the schedule for implementation of BMPs developed by the CUWCC and/or the CVPIA Criteria for Evaluating Water Management Plans."
  - c. As water demand and water supply conditions vary from one year to the next, a contractor's extraordinary water conservation will be required to be documented and calculated for each of the three unconstrained years to be considered in the historical use calculation. The calculated amount of extraordinary water conservation in any one year will only be considered in the adjustment for the respective year.
  - d. The calculated annual adjustment for a contractor's extraordinary water conservation will be applied to the respective unconstrained year by adding the calculated adjustment amount (in AF) to the Adjusted Historical Use ( $AHU_{yearX}$ ) following its adjustment for population growth, if applicable. Each of the three unconstrained years eligible for an adjustment for extraordinary water conservation will be adjusted individually prior to calculation of the average of the adjusted historical use. Adjusted historical use would not exceed Contract Total.
5. Adjustment for "Non-CVP Water" Supplies: If requested by an M&I contractor, an adjustment for use of non-CVP water may be applied to an M&I contractor's historical use. Reclamation will adjust the historical use calculation to reflect the effect of non-CVP water used in lieu of use of the contractor's CVP water. In order to receive an adjustment based on non-CVP water, the contractor must fully document use of non-CVP water to clearly show how much that water use actually reduced the contractor's use of CVP water in the unconstrained years, and submit the documentation in writing to Reclamation (see Attachment A). A list of non-CVP water supplies that may be considered in this adjustment is provided below.

An M&I water contractor's available non-CVP supply will differ from contractor to contractor and will therefore have to be determined on an individual basis. Reclamation will use information provided by the

contractor, other available information, and the following equation to calculate an M&I water contractor's total available non-CVP supply:

**Equation 2:**  $N_{(AF)} = N_1 + N_2 + N_3 \dots N_n$

Where types of non-CVP supplies ( $N_x$ ) may Include:

- *Surface water(non-CVP supplies)*
- *Groundwater*
- *Local storage*
- *Recycled water, subject to Reclamation approval*
- *Other Reclamation Approved Non-CVP Supplies*

*Note: Units (N) are in AF of available annual water supply yield.*

The calculated annual adjustment for a contractor's use of non-CVP water in lieu of use of the contractor's CVP water will be applied to the respective unconstrained year by adding the calculated adjustment amount (in AF) to the Adjusted Historical Use ( $AHU_{yearX}$ ) following its adjustment for population growth, extraordinary water conservation measures, if applicable, with a maximum of the contract total amount. Each of the three unconstrained years eligible for an adjustment for use of non-CVP water in lieu of use of the contractor's CVP water will be adjusted individually prior to calculation of the average of the adjusted historical use.

Reclamation may also adjust the historical use on the basis of unique circumstances after consultation with the contractor. An example of a unique circumstance is the Year following a Year in which water users implemented extraordinary water conservation measures, or the converse, in which a contractor may use more water than historically used in order to recharge groundwater.

6. The following equation shall be used to average the adjusted historical use in each of the three unconstrained years after the above adjustments are made:

**Equation 3:** Average Historical Use ( $HU_{average}$ ) =  $(AHU_{yearX} + AHU_{yearY} + AHU_{yearZ}) \div 3$

**Where:**

- *$HU_{average}$  is the average of the three adjusted historical use amounts corresponding to the three unconstrained years)*
- *$AHU_{yearX}$ ,  $AHU_{yearY}$  and  $AHU_{yearZ}$  are adjusted historical use in applicable year X (one of the three unconstrained years), after adjustments for population growth, extraordinary water conservation, and use of non-CVP supplies.*

7. Before allocation of M&I water to a contractor will be reduced, allocation of Irrigation water will be reduced below 75 percent of Irrigation Contract Total. When the allocation of Irrigation water is less than 100 percent but greater than or equal to 75 percent, the allocation of M&I water will be based on 100% Contract Total, as shown in Table 2.

**Table 2: Allocation of M&I Water When Allocations of Irrigation Water are Above 75 Percent**

<b>Irrigation Allocation (% of Contract Total)</b>	<b>M&amp;I Allocation (% of Contract Total)</b>
< 100%	100%
95%	100%
90%	100%
85%	100%
80%	100%
75%	100%

8. When allocation of Irrigation water has been reduced below 75 percent and still further water supply reductions are necessary, both the M&I and Irrigation allocations will be reduced by the same percentage (e.g., 5%) increment. The allocation of M&I water will be based on historical use. The M&I allocation will be reduced until it reaches 75 percent of adjusted historical use, and the Irrigation allocation will be reduced until it reaches 50 percent of Contract Total. The M&I allocation will not be further reduced until the Irrigation allocation is reduced to below 25 percent of Contract Total, as shown in Table 3.

**Table 3: Allocation of M&I Water When Allocations of Irrigation Water are Less Than 75 Percent and Greater 25 Percent**

<b>Irrigation Allocation (% of Contract Total)</b>	<b>M&amp;I Allocation (% of historical use)</b>
70%	95%
65%	90%
60%	85%
55%	80%
50%-25%	75%

9. When M&I water allocations are less than 100 percent, the M&I allocation amount will be calculated using the following equation:

**Equation 4:** M&I annual allocation (X AF) = Average of ( $HU_{yearX} + HU_{yearY} + HU_{yearZ}$ )  $\times Z$

**Where:**

- $HU_{yearX}$  is the actual historical use in applicable year X (one of the three unconstrained years)
- Z is the corresponding M&I Allocation percent from Table 3 or Table 4.

*Note: Units (X) are in AF, annual M&I shortage allocation of CVP water.*

M&I contractors could then request an adjustment to their historical use, if thought necessary.

10. When allocation of Irrigation water is reduced below 25 percent of Irrigation Contract Total, Reclamation will reassess both the availability of CVP water supply and CVP water demand. Due to limited water supplies, during these times M&I water allocation to contractors may be reduced below 75 percent of adjusted historical use.
11. Once an adjustment to a Contractor's historical use is approved by Reclamation, it may increase their allocation quantity for the current water short year.

### 3.3 Implementation Procedures - Public Health & Safety

1. When M&I allocations are reduced below 75 percent, the M&I allocation will be equal to the greater of the percentage of historical use or PHS need (to a maximum of 75% of historical use), as shown in Table 4.

**Table 4: Allocation of M&I Water When Allocations of Irrigation Water are Below 50 Percent**

Irrigation Allocation (% of Contract Total)	M&I Allocation (% of historical use)
Between 25% and 50%	75%
20%	Maximum of 70% of historical use or PHS consideration
15%	Maximum of 65% of historical use or PHS consideration
10%	Maximum of 60% of historical use or PHS consideration
5%	Maximum of 55% of historical use or PHS consideration
0%	Maximum of 50% of historical use or PHS consideration

Note: If CVP water is not available, M&I contractors may be reduced below 50%.

2. Reclamation will strive to make CVP water available to an M&I contractor at not less than the amount necessary for PHS need, in conjunction with the use of CVP allocations and other non-CVP supplies, provided CVP water is available, and if:

- a. an M&I water contractor submits a request to Reclamation for PHS water supply delivery;
  - b. the Governor declares an emergency due to water shortage applicable to that contractor; and/or
  - c. Reclamation, in consultation with the contractor, determines that an emergency exists due to a Condition of Shortage.
3. The PHS will be calculated to reflect the contractor's domestic, commercial, institutional, and industrial demands and system losses, as follows<sup>2</sup>:

**Equation 5:** *Public Health and Safety Allocation Amount (PHS) = D + CI + I + L*

**Where:**

$$\begin{aligned} \text{Domestic use (D)} &= \text{Current Population} \times 55 \text{ gpd}^3 \\ \text{Commercial and Institutional (CI)} &= 80\% \text{ of Projected Commercial Demand} \\ \text{Industrial (I)} &= 90\% \text{ of Projected Industrial Demand} \\ \text{System (Conveyance) Losses (L)} &= 10\% \text{ of } D + CI + I \end{aligned}$$

4. M&I water contractors will have the option of calculating the PHS need for review and approval by Reclamation or request that Reclamation calculate the PHS on behalf of the M&I water contractor.
5. If an M&I water contractor calculates its own PHS need, Reclamation will review and verify calculations submitted by the contractor. The contractor will calculate its PHS need using criteria noted in Item 18 and will submit the calculated need to Reclamation along with adequate support documentation for review.
6. If Reclamation calculates the PHS need, Reclamation may use information received from the water contractor as well as information from other sources.
7. Reclamation and the contractor may confer and enter into negotiations regarding the calculated PHS need, if needed; however, the final PHS

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<sup>2</sup> If the State's criteria changes in any given year, then Reclamation would modify this equation to remain consistent with the State's approach.

<sup>3</sup> The per capita water demand rate used to calculate the PHS need shall be consistent with State law. The 55 gallons per capita demand (gpcd) value reflects the requirements defined in California State Senate Bill SBx 7-7. Reclamation may adjust this value over time to reflect future changes in State law. If State criteria does not exist, the contractor will apply criteria developed by Reclamation (in consultation with the contractor) that will be consistent with relevant criteria used by similarly situated California M&I water entities.

need to be used to determine the M&I water contractor's allocation will be subject to Reclamation approval.

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# **Attachment A**

## **Documentation Required for Verifying Non-CVP Water Use in Lieu of CVP Water**

### **1. Data Required for Unconstrained Years**

- a. Contractor provides:
  - i. Non-CVP water supply documentation - See No. 2 below, Non-CVP Water Checklists
  - ii. Department of Water Resources (DWR), State Water Supply delivery data (Form 3017)
  - iii. CVP water delivery data
- b. Reclamation provides:
  - i. Area Office's CVP water delivery data
  - ii. Area Office's annual declaration letters announcing water allocation
  - iii. Area Office's annual rate exhibits annotated with historic average quantity
  - iv. Region's water needs assessment
  - v. Region's water conservation plan
  - vi. Central Valley Operations' water declarations for specific CVP division (identify three unconstrained years based on division)

### **2. Non-CVP Water Checklists (Attached):**

- a. For surface water: refer to “Checklist for Surface Water Supply as a Source of Non-CVP Water in Unconstrained Years”
- b. For ground water: refer to “Checklist for Groundwater as a Source of Non-CVP Water in Unconstrained Years)
- c. For water released from a Non-CVP reservoir: refer to “Checklist for Use of Non-CVP Water from a Non-CVP Reservoir in Unconstrained Years”

### **3. Other Non-CVP Water Supplies:**

- a. Recycled Water – Reclamation will review documentation on a case by case basis.

## Checklist for Surface Water Supply as a Source of Non-CVP Water in Unconstrained Years

1. **Point-of-Contact.** Provide the name, address, and telephone number of the holder of the water right for the non-CVP surface water to be utilized in lieu of CVP water.
2. **Non-CVP Water Source.** Provide the name and location of the source(s) from which the non-CVP water to be utilized in lieu of CVP water can be diverted and indicate whether such surface water, in accordance with the non-CVP water right, is to be directly diverted or diverted to and re-diverted from storage.
3. **Status of Non-CVP Water's Water Right.** Has the right to divert the Non-CVP surface water been abandoned or forfeited? If so, explain.
4. **Post-1914 Surface Water Rights.** Provide:
  - a. The application number, permit number and/or license number, if applicable, assigned the non-CVP surface water right, by the SWRCB or its predecessor;
  - b. The number(s) and date(s) of all SWRCB decisions and orders that relate to the application, permit and/or license to appropriate the non-CVP surface water to be utilized in lieu of CVP water.
5. **Pre-1914 Surface Water Right.** Provide:
  - a. Copies of all Statements of Diversion and Use of the non-CVP water to be utilized in lieu of CVP water that have been filed with the SWRCB for the last three unconstrained years;
  - b. The date of priority of the non-CVP surface water right;
  - c. Copies of California Environmental Quality Act compliance documents addressing any change in point of diversion, purpose of use, or place of use considered necessary for purposes of effectuating the use in lieu of CVP use.
6. **Description(s) of Non-CVP Surface Water Source(s).** Provide:
  - a. a description of the authorized purpose(s) of use and place(s) of use;
  - b. the authorized season of diversion of the water; and
  - c. the maximum quantity and/or diversion rate authorized for beneficial use.
7. **Identify Court Decree(s) or Adjudication(s).** If any, provide copies.
8. **Identify Water Master?** If there is a water master, (a) describe the bases and scope of the water master's authority to regulate diversions of the non-CVP surface water utilized in lieu of CVP water and provide copies of all relevant reports, directives, etc., issued by the water master; and (b) include written concurrence from the water master that use of the non-CVP water was authorized by the water master and, in the water master's opinion, would not cause injury to another user.
9. **Identify Applicable County Ordinances.** If any, explain and provide copies of such regulating use of non-CVP surface water in lieu of CVP water pursuant to the non-CVP water right.

10. **Submit Applicable Water Right Record(s).** Provide records indicating quantity, type, and season of water use under the water right for each of the last 3 unconstrained years. If monthly historical diversion and use records are available for this surface water right, provide such records. If the information is already available to this level of detail for any particular year as part of (a) a Statement of Diversion and Use filed with the SWRCB that contains the information required for such filing as provided in Part 5.1 of the California Water Code, section 5100, et seq., or (b) information previously reported or included elsewhere in lieu of such filing to the SWRCB as allowed pursuant to Part 5.1, then provide copies of such documentation.

## **Checklist for Groundwater as a Source of Non-CVP Water in Unconstrained Years**

1. **Identify Well Location, Capacity, and Certification.** Provide:
  - a. Well owner's name and identification number, District, and District's well identification number
  - b. Well's latitude and longitude (DWR standard coordinate system and datum (GCS, NAD 83, decimal degrees)), map (similar detail to 7.5 minute United States Geological Survey quad sheet) with well location and all surface water features within two miles of District boundary
  - c. Well capacity
  - d. Photographic evidence of the calibrated instantaneous reading and totalizing flow meters installed on each well supplying non-CVP water
  - e. Certification by a Professional Engineer or Professional Geologist of proper flow meter installation and calibration performed consistent with the manufacturer's specifications
2. **Volume of Water Pumped.** Provide operational records indicating the volume of groundwater pumped from each well for each of the last three unconstrained years.

## Checklist for Use of Non-CVP Water from a Non-CVP Reservoir in Unconstrained Years

1. **Storage Right.** Identify the storage right covering the Non-CVP water, and provide California Environmental Quality Act environmental compliance documents or the SWRCB approval process, as appropriate
2. **Reservoir Operations.** For the last three unconstrained years, provide reservoir operating data including:
  - a. Daily reservoir storage
  - b. End of month storage
  - c. Daily inflow and reservoir releases
  - d. Any regulatory or operational obligations affecting reservoir operations.
  - e. Location, type, and ownership of water measurement device downstream of the reservoir, as applicable.

## **Appendix B: Central Valley Project Municipal and Industrial Water Shortage Policy Guidelines and Procedures**

### **Water Service Contractors Subject to the M&I WSP**

<b>General Geographical Region</b>	<b>CVP Division</b>	<b>Water Service Contractors</b>	<b>M&amp;I</b>	<b>Ag</b>
North of Delta	Shasta and Trinity River	Bella Vista District	X	X
		Centerville Community Services District	X	-
		City of Redding	X	-
		City of Shasta Lake	X	-
		Clear Creek Community Services District	X	X
		Mountain Gate Community Services District	X	-
		Shasta Community Services District	X	-
		Shasta County Water Agency	X	-
		U.S. Forest Service (Shasta)	X	-
	Sacramento River	4-M Water District	X	X
		Colusa County Water District	X	X
		Corning Water District	X	X
		Cortina Water District	X	X
		Count of Colusa	X	X
		County of Colusa (Stonyford)	X	X
		Davis Water District	X	X
		Dunnigan Water District	X	X
		Elk Creek Community Services District	X	-
		Glenn Valley Water District	X	X
		Glide Water District	X	X
		Holthouse Water District	X	X
		Kanawha Water District	X	X
		Kirkwood Water District	X	X
		La Grande Water District	X	X
		Myers-Marsh Mutual Water Company	X	X
		Orland-Artois Water District	X	X
		Proberta Water District	X	X
		Stony Creek Water District	X	X
		Thomas Creek District	X	X
		U.S. Forest Service (Salt Creek)	X	-
		Westside Water District	X	X
		Whitney Construction, Incorporated	X	-
	American River	City of Roseville	X	-
		East Bay Municipal Utility District	X	-
		El Dorado Irrigation District	X	-
		Placer County Water Agency	X	-
		Sacramento County Water Agency	X	-
		Sacramento Municipal Utility District	X	-
		San Juan Water District	X	-

<b>General Geographical Region</b>	<b>CVP Division</b>	<b>Water service Contractors</b>	<b>M&amp;I</b>	<b>Ag<sup>1</sup></b>
South of Delta	Delta	Banta-Carbona Irrigation District	X	X
		Byron-Bethany Irrigation District	X	X
		City of Tracy	X	X
		Coelho Family Trust	X	X
		Contra Costa Water District	X	-
		Del Puerto Water District	X	X
		Eagle Field Water District	X	X
		Fresno South Water District	X	X
		James Irrigation District	X	X
		Laguna Water District	X	X
		Mercy Springs Water District	X	X
		Oro Loma Water District	X	X
		Pajaro Valley Water Management Agency, Westlands Water District	X	X
		Patterson Irrigation District	X	X
		Reclamation District No. 1606	X	X
		Tranquility Irrigation District	X	X
		Tranquility Public Utility District	X	X
		<del>U.S. Department of Veteran Affairs<sup>2</sup></del>	<del>X</del>	-
		West Side Irrigation District	X	X
		West Stanislaus Irrigation District	X	X
		Westlands Water District Distribution Districts	X	X
	West San Joaquin	City of Avenal	X	-
		City of Coalinga	X	-
		City of Huron	X	-
		Pacheco Water District	X	X
		Panoche Water District	X	X
		San Luis Water District	X	X
		State of California	X	-
		Westlands Water District	X	X
	San Felipe	San Benito County Water District	X	X
		Santa Clara Valley Water District	X	X
	Cross Valley Canal	County of Fresno	X	X
		County of Tulare	X	X
		Hills Valley Irrigation District (includes Rag Gulch Water District)	X	X
		Kern-Tulare Water District	X	X
		Lower Tule River Irrigation District	-	X
		Pixley Irrigation District	X	X
		Tri-Valley Water District	X	X

<sup>1</sup> Ag = Agricultural water service contractor

<sup>2</sup> Section 3404(b) of the Central Valley Project Improvement Act (CVPIA), provides for up to 850 acre-feet (AF) "delivery in perpetuity" for "quantities sufficient to meet the needs of the San Joaquin Valley National Cemetery, California.. ."