## WATER EFFICIENCY AND ALLOCATION PROGRAM

#### **Casitas Municipal Water District**

### May 9, 2018

### **SECTION 1: INTRODUCTION**

In 1992 the Casitas Municipal Water District (Casitas) adopted a series of ordinances, resolutions, and a Water Efficiency and Allocation Program (WEAP) in response to the increasing water demands and declining water storage in Lake Casitas experienced during the 1987-1991 drought period. The collective work in 1992 set the starting point for a system of water allocation assignments and demand response criteria that are based on the level of water storage in Lake Casitas. Since 1992, there has been a significant outreach by Casitas to raise the public's awareness on the importance to conserve local water supplies, changes in the water supply and demand, regulatory compliance directives pursuant to the Endangered Species Act (ESA), and system outage events that temporarily activated Casitas' emergency response plan. All of these factors, including the responses and experiences of the current drought, are considered in the update of the Water Efficiency and Allocation Program.

### **1.1** Purpose and Principles of the Plan.

The purpose of this update of the WEAP is to provide guidance on water supply and demand strategies that (1) conserve the water supply of the Ventura River Project, Lake Casitas and other water resources that are in the direct control of Casitas, for the greatest public benefit, (2) mitigate the effects of a water shortage on public health and safety and economic activity, (3) allocate water use so that a reliable and sustainable supply of water will be available for the most essential purposes under all water storage conditions of Lake Casitas, and (4) adapt to changing conditions of water supply demand and constraints.

The WEAP describes the water demand reduction strategies and measures to address future water shortage conditions, promote water conservation and the efficient use of water, and the application of a conservation penalty to customers who waste water.

### 1.2 Relationship between this Document, Water Codes, and Other Plans.

This WEAP shall be guided by State regulations and planning requirements as provided by the California Water Code that provides Casitas with broad powers to implement and enforce regulations and restrictions for managing a water shortage (§71640-71644), to implement water conservation programs (§375--378), to implement allocation-based conservation water pricing (§370-374), and to declare a water shortage emergency(§350-359).

As required by Water Code Section 10632, this WEAP shall be integrated as a part of the Casitas Urban Water Management Plan (UWMP), as amended or updated every five years. The Casitas 2010 UWMP has been accepted and approved by the State Department of Water Resources. The UWMP provides an in-depth description of the Casitas water system, water resources and demands, and water supply reliability. For the purposes of integration and lessening the conflicts due to the replication of information, the WEAP shall rely on the updates of the Water Code Sections provided in the attached Appendices and UWMP, as amended or updated every five years.

### SECTION 2: WATER SUPPLY AND DEMAND CONDITIONS

## 2.1 Water Supply.

The water supply for Casitas is derived from (1) the watersheds that flow directly and indirectly by diversion from the Ventura River of water during wet years to carryover storage in Lake Casitas for use during dry years, and (2) groundwater to the extent that Casitas has its own groundwater supply. The watersheds of the Ventura River region are subject to an extreme variation in the weather patterns, ranging from multiple years of drought to sometimes significant wet year events that are associated with El Nino conditions that add to the uncertainty of available local water supplies.

## 2.1.1 Surface Water.

The primary goal of Casitas is to provide a safe and reliable water supply. Due to the uncertainty of weather conditions that provide water to the local watersheds, a safe yield modeling has been implemented to provide guidance on water supply availability. The safe yield modeling criteria for the Casitas surface water supply provides a theoretical rate of decline in available water supply during a critical drought period, that if given a specific annual extraction rate from storage, that would reduce Lake Casitas to an exhausted minimum pool.

The sizing of Lake Casitas storage volume and the determination of the annual safe yield of water from Lake Casitas was originally determined by the Bureau of Reclamation in 1954, based on the hydrologic modeling for the critical drought period that started in 1919 and continued through 1936. The storage volume of the off stream reservoir, Lake Casitas, was set to be 254,000 acre-feet and the annual safe yield was determined to be 28,000 acre-feet. In 2004, Casitas recalculated the annual safe yield of Lake Casitas for the drought period of 1944 to 1965 based on newer knowledge of the diminished value of Matilija Reservoir and its impending removal, and the change in Robles Diversion operations resulting from the 2003 Biological Opinion established by the National Marine Fisheries Service pursuant to the federal Endangered Species Act. The recalculated annual safe yield of Lake Casitas was determined to be 20,840 acre-feet per year.

The safe yield trend for the 1944-1965 critical drought period is illustrated in Figure 1, with the assumption that the critical drought period begins with a full reservoir. The modeling applies the hydrology, river diversions operations, and lake evaporation for the period (1944-1965) that contribute to the Lake Casitas storage. The safe yield is a constant extraction rate from lake storage that contribute to the decline in Lake Casitas storage during the critical drought period, taking lake storage from full capacity to a minimum pool condition. Based on the safe yield model with a continuous and steady extraction rate, or safe yield, of water at 20,840 acre-feet each year, Lake Casitas would decline from full storage to minimum pool in approximately twenty years.

Also included in Figure 1 is the Recovery Period of Lake Casitas, which illustrates the actual filling rate experienced at Lake Casitas during the 1959 to 1978 period. The recovery of the Lake Casitas volume during the Recovery Period that is illustrated in Figure 1 cannot be assumed as the normal or common sequence given the variability of the rainfall amounts in the Ventura River watershed, constraints, and other influences to Lake Casitas inflow and storage. Casitas may experience elevated water supply risks that could be associated with a delay in the start of the recovery period while at minimum pool in Lake Casitas, or there could be a condition where the critical drought period begins with a partially recovered storage level in Lake Casitas.

The availability of the Lake Casitas supply can be influenced or impacted by long-term droughts, changes to lake water quality, and/or changes to diversion and storage conditions. The safe yield of Lake Casitas and annual water availability may need to be reconsidered in the future as a result of changing conditions or new information that differs from the present conditions.

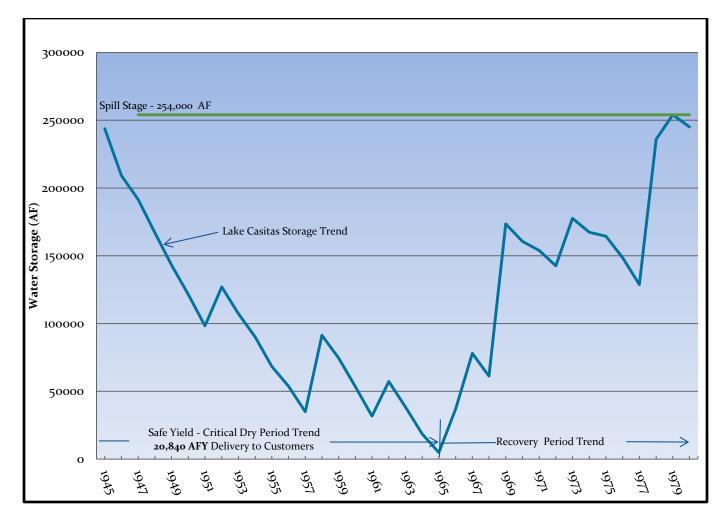


Figure 1 - Lake Casitas Safe Yield Storage and Recovery Period Trends

## 2.1.2 Groundwater.

Within Casitas' district boundaries, there are several local groundwater basins that are primary and critical sources of water supply for other local water purveyors (public, mutual and private), individual residential use and agriculture. During extended periods of drought with several years of less than average rainfall (20-inches) the local groundwater basins can become depleted due to pumping, natural drainage and evapotranspiration. The Lake Casitas surface water supply serves as a back-up water supply to the groundwater supply during times of extended drought.

Table 1 – Groundwater Basins of the Ventura River Watershed

Tuble 1 Glound water Dushis of the Venture River Watershed								
Groundwater Basin	Acres	Max. Capacity (AF)	Approx. Safe Yield (AF/Yr.)					
Upper Ojai	2,840	5,681	Unavailable					
Ojai Valley	6,471	85,000	5,026					

Upper Ventura River	9,360	35,118	9,482
Lower Ventura River	6,090	8,743	2,130

Source: Ventura River Watershed Council

The groundwater basins have demonstrated an ability to recharge rapidly in any one year with sufficient rainfall events, upon which time groundwater becomes the preferred source for those with well pumping access to the groundwater basins.

## 2.2 Water Demand.

The Casitas Board of Directors has established that the average long-term demand upon Lake Casitas must not exceed the annual safe yield of Lake Casitas supply. As a result of the 1987-1991, multi-year drought that resulted in water demands exceeding the annual safe yield, Casitas implemented specific actions in 1992 to limit water demands. The actions included the declaration of a voluntary twenty percent reduction in water demand, the assignment of water allocations based on 80 percent of FY1989-90 water usage that reflects a reduction in demand that comports more closely to safe yield of the Lake Casitas Supply, the implementation of water conservation measures to assist water users in adapting to less water consumption, and the limiting of new water service connections and expansions of agricultural plantings. Table 2 provides a comparison of classification water use, from prior to the action being taken by Casitas, to the level of water use during the recent drought. The FY 1989-90 water demand is recognized as being a high extreme water demand year at the end of the four year drought period.

Classification	No. of Service	No. of Service Connections Water Demand – Lake Casitas (A				
	FY 1989-90	FY 2013-14		FY 1989-90	FY 2012-13	FY 2013-14
Residential	2424	2700		1603	1678	1738
Business	93	108		821	663	724
Industrial	12	9		155	23	22
Other	33	41		530	244	255
Resale Gravity	8	8		7724	4642	5614
Resale Pumped	15	15		1027	551	1182
Irrigation	253	251		11706	7978	9385
Interdepartmental	21	21		343	120	119
Temporary				11	13	55
Total	2,859	3,153		23,909	15,899	19,094

Table 2 – Water U	se Comparison by	Customer Classification
	1 2	

The local groundwater resources of the Ojai Valley and Ventura River provide on average 7,385 acre-feet per year (Daniel B. Stephens, 2010) to municipal, residential and agricultural pumpers. During multiple dry years, the groundwater basins become depleted and groundwater demands are met by supplementing groundwater supply from the Lake Casitas supply. In most cases, groundwater pumpers have a water service connection to Casitas as a backup supply of water. During any year or multiple dry year sequence of less than average rainfall, Casitas can anticipate that a portion of the 7,385 acre-feet of groundwater demand may be supplemented by the Lake Casitas supply. When groundwater basins are restored by rainfall events, groundwater pumpers convert back to the less expensive groundwater supply. The demand shifts are illustrated in Table 2 and Figure 2 for various classifications of water consumers. The FY 1989-90 and FY 2013-14 water demands occurred at the end of a three-year drought sequence.

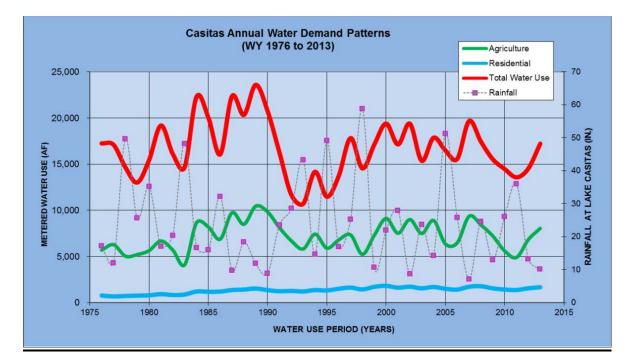


Figure 2 – Casitas Annual Demand Patterns

## 2.3 **Priorities of Water Use**.

Casitas recognizes the following priorities for potable water:

- 1) Public safety, health and sanitation;
- 2) Economic sustainability; and
- 3) Quality of life for the district's customers.

Within each of the customer classifications there may be water uses that are considered non-essential to public health and sanitation and may have no significant impact to the economic productivity of the western Ventura County. The non-essential water uses may be asked at any time to be curtailed during times of extreme water shortages.

Casitas recognizes that the agricultural crops in western Ventura County are primarily tree orchards that require a substantial period of time before becoming productive, and if fallowed will experience several years of non-production. To maintain water supplies into the future that will meet the local water demands, Casitas and the public may be faced with additional decisions on water use reductions that may impact the agricultural classification.

# **SECTION 3: WATER SHORTAGE EMERGENCY ACTIONS**

## 3.1 Urban Water Contingency Analysis.

Water Code 10632 requires that the agency's Urban Water Management Plan provide an urban water shortage contingency analysis that includes specific elements that are within the authority of the urban water supplier. The required water shortage analysis is performed in the Casitas 2010 Urban Water Management Plan, and is further supported by this WEAP and the Casitas Emergency Response Plan, as amended.

### **3.2** Water Shortage Emergencies.

Water Code §350-359 provides that the governing body of a distributor of a public water supply may declare a water shortage emergency condition to prevail within the service area whenever it finds and determines that the ordinary demands cannot be satisfied without depleting water supplies to the extent that there would be insufficient water for human consumption. When deemed as a water shortage emergency in accordance with Water Code 350, Casitas shall follow the procedures provided by the Water Code in the implementation of the water shortage declaration and actions.

The State of California, through its authority under the Water Code and Government Code, may declare a water shortage emergency and require curtailment of water use that is above and beyond the requirements of the Casitas WEAP. Customers of Casitas must respond and comply with the orders of the State in a timely manner. A failure to comply may cause the State to impose fines and penalties that will be redistributed to the customers of Casitas in a manner determined by the Casitas Board of Directors.

## **3.3** Water Shortage Contingency Plan.

The District has prepared a Water Shortage Contingency Plan (Resolution 92-11), and further defined in the Casitas Urban Water Management Plan, that addresses emergencies under short-term, catastrophic events, and long-term water shortages that may occur as a result of a prolonged drought.

A water shortage emergency may be determined to exist in the event of a short-term interruption of water supply or as a result of long-term diminishment of the Lake Casitas water supply. A short-term interruption of water supply can be the result of earthquakes, regional power outages, landslides, or other major and minor events that impact Casitas water facilities or supply. These events are more often a short term interruption of water supplies until the water system can be restored to the customers. A long-term or district-wide condition may be the result of drought conditions or a reduction in local water supplies that will require long-term water supply-demand management.

The Casitas response to a short-term interruption of water supply may cause the implementation of the Casitas Emergency Action Plan that is structured under the State's Standardized Emergency Management System (SEMS), in coordination with federal, state and county emergency response planning that provides the framework for an organized response to catastrophic events.

# 3.4 Water Waste Prohibitions on Certain Uses.

Water Code § 71640 provides the District the authority to restrict the use of district water during any emergency caused by drought, or other threatened or existing water shortage, and the district may prohibit the wastage of district water or the use of district water during such periods for any purpose other than household uses or such other restricted uses as the district determines to be necessary. The District may also prohibit use of district water during such periods for specific uses which it finds to be nonessential.

# SECTION 4: STRATEGY FOR MANAGED WATER SUPPLY AND DEMAND

## 4.1 Strategy Principles.

The communities and rural agricultural areas of western Ventura County recognize that there is a reliance on limited local groundwater and surface water supply to serve all of the beneficial uses within the District, and there is a local responsibility required to sustain those supplies during

extended drought periods. The continuous implementation of water conservation education and measures (Best Management Practices) has had a significant influence on the beneficial use and sustainability of local water supplies. Ongoing water conservation efforts can ease the impact on normal activities during drought periods, but may not completely eliminate the need for reductions in water use during periods when Lake Casitas water supplies are severely impacted by extended drought. The main mechanism to respond to water supply conditions is to rely on informed customers working in partnership with Casitas to limit water use to no more than the assigned water allocation and support the water use limitations with appropriate conservation penalties for water use in excess of the assigned, or adjusted, allocation.

To address the water shortage risk that may occur during an extended drought, the Casitas Board established in the Casitas Urban Water Management Plan of 1995 a series of five storage levels of Lake Casitas at which the Board could take actions to restrict the annual water extractions from Lake Casitas. The safe yield trend and the five stages of restrictive actions are illustrated in Figure 3.

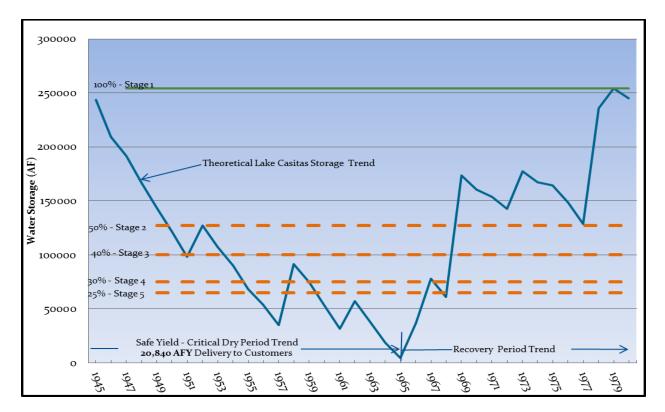


Figure 3 – Lake Casitas Safe Yield Storage Trend and Stages for Demand Reduction

### 4.2 Water Allocation Principles.

Each and every water service provided by Casitas is metered and a basic water use allocation is established for each customer account that provides a reasonable amount of water for the customer's needs and property characteristics (WC § 372). The following principles are to be followed for the Casitas water allocations:

- 1) Each Casitas water service shall be assigned either a monthly water allocation in the terms of Units or an annual water allocation in terms of Units and Acre-feet.
- 2) Allocation shall not mean an entitlement or imply water rights in favor of the customer.

- 3) The assignment of allocations shall be based on reasonable and necessary water use, the application of water conservation practices and standards, and other relevant factors associated with water use during Stage 1 conditions at Lake Casitas.
- 4) The Casitas Board of Directors reserve the right to make individual allocation assignments and to change water allocations at any time within each classification based on the changes to the availability of water stored in Lake Casitas, changes in water use that appears to compromise the reliability of the Lake Casitas water supply, and changes in water conservation practices and standards.
- 5) Water allocations provided by Casitas are assigned to property or water purveyors and are not transferrable from one property or water purveyor to another.
- 6) Casitas' water allocations shall not be sold, exported, bartered or traded by or between Casitas' customers.
- 7) Casitas water allocated shall not be transported from the property or by any agency served to any other property or agency without prior written agreement with Casitas.

## 4.3 Allocation Assignments to Water Service Classifications.

Casitas has established the definitions of water customer classifications as provided by the Casitas Rates and Regulations for Water Service and has made specific allocation assignments to each and every water account by either (1) written agreement, or (2) the application of historical water use data, or (3) the application of documented water use standards. Where deemed necessary by Casitas, Casitas may perform site specific water use audits and survey to determine the appropriate level of allocation to be assigned to any one service connection or customer. Water allocations may change by action of the Casitas Board of Directors based on the Lake Casitas storage level or trend, water use trends, and the performance by customer classification in meeting water consumption reduction goals.

The following subsections describe the method used to assign the water allocation for each classification of water service at **Stage 1** condition:

### **Business**

- Water allocation shall be specified as an **annual** allocation based on a fiscal year (July 1<sup>st</sup> to June 30<sup>th</sup>).
- 2) Allocation assigned by recorded agreement; or
- 3) Where not defined by recorded agreement, the lesser of the historical water consumption recorded for either the 80% of the 1989-90 water use or the Fiscal Year 2012-13 water use.

## <u>Fire</u>

There is no water allocation for the Fire classification. This water use is for emergency only, and not a part of a continuing annual water use.

## <u>Industrial</u>

- 1) Water allocation shall be specified as an **annual** allocation based on a fiscal year (July 1<sup>st</sup> to June 30<sup>th</sup>).
- 2) Allocation assigned by recorded agreement; or
- 3) Where not defined by recorded agreement, the lesser of historical water consumption recorded for either the 80% of the 1989-90 water use or the Fiscal Year 2012-13 water use.

### **Interdepartmental**

- 1) Water allocation shall be specified as an annual allocation based on a fiscal year (July 1<sup>st</sup> to June 30<sup>th</sup>).
- 2) The **annual** allocations for individual Interdepartmental classification services shall be based on the Fiscal Year 2012-13 water use.

## Irrigation (Commercial Agriculture)

- Water allocation shall be specified as an **annual** allocation based on a fiscal year (July 1<sup>st</sup> to June 30<sup>th</sup>).
- 2) Qualifying acreage for each Irrigation account shall be limited to acreage that can be identified as under irrigation prior to March 1, 1992. There will be no allocation for irrigation acreage that has been expanded after March 1, 1992, except as otherwise approved in written and recorded agreement between Casitas and the property owner. Casitas' records and mapping will be the standard for the identification of lands in irrigation prior to March 1, 1992.
- 3) Allocation assignments to lands served by multiple meter services shall consider the proportion of the allocation that each meter is intended to serve. The aggregation of meter readings and allocations from multiple meters shall not be allowed except under the terms and conditions of an approved addendum to the Application for Water Service to provide an aggregation variance. The customer may apply for the aggregation of allocations and water volume for accounts serving contiguous parcels under a single ownership, subject to the conditions of the Casitas addendum to the Application for Water Service. The aggregation variance must be approved and on file for the current year during which the variance is applicable. The issuance of the aggregation variance is subject to the discretion of the General Manager.
- 4) The Stage 1 water allocation assigned to each Irrigation water account is the greater volume of either (1) the water use recorded at each meter service during fiscal year 2012-13 or (2) eighty (80) percent of recorded water volume metered to the account in fiscal year 1989-90, neither of which shall exceed a water volume of 3 acre-feet per acre applied to the qualifying acreage.
- 5) The residential water use for Agricultural/Domestic classification that is directly associated with the Irrigation shall be considered as Irrigation for purpose of allocation assignments and meeting the demand reduction requirements for Irrigation.

# **Multi-Family Residential**

- 1) Stage 1 water allocations are assigned to each existing Multi-Family Residential account by either a recorded agreement or based on the standards set in 1992 by Casitas.
- 2) The Multi-Family Residential water allocation for each account shall be distributed by either a monthly or bi-monthly scheduling of the allocation.
- 3) A part of the Multi-Family Residential allocation is provided for health and sanitation and shall be set at **84 units per year per dwelling**, distributed evenly each month as 7 units per month for each dwelling.
- 4) The essential water use portion of the allocation is not subject to adjustment by the Staged Demand Reduction Program, unless otherwise deemed by the Board to be a necessity during extreme water supply conditions or during emergencies.
- 5) The part of the Multi-Family Residential allocation that is in excess of the essential allocation shall be specified as a monthly allocation and distributed proportionally to reflect varying seasonal water use, as follows:

Month July August Sep Oct Nov Dec	Jan Feb Mar A	Apr May June
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% of Total												
Annual Allocation	.17	.17	.12	.05	.05	.05	.02	.02	.02	.10	.10	.12

The part of the Multi-Family Residential allocation that is in excess of the essential allocation is subject to adjustment by the Staged Demand Reduction Program.

- 6) Where not previously assigned a residential allocation, a residential allocation shall be based on the following:
  - a. The essential health and sanitation portion of the residential allocation shall be set at 84 units per year per year per dwelling, and be constant for each month of the year;
  - b. Non-essential portion of the annual residential allocation shall be based on a maximum limit of 1.99 acres (86,684 square feet) of irrigated landscape area and set as follows:
    - i. For the first 5,000 square feet of landscape area, 15 gallons per square foot;
    - ii. For the next 10,000 square feet of landscape area, 10 gallons per square foot
    - iii. For the next increment up to 71,684 square feet of landscape area, 3 gallons per square foot;

### **Other**

- 1) Water allocation shall be specified as an **annual** allocation based on a fiscal year (July 1<sup>st</sup> to June 30<sup>th</sup>).
- 2) Allocation assigned by recorded agreement; or
- 3) Where not defined by recorded agreement, the lesser of historical water consumption of either the 80% of the 1989-90 water use or the Fiscal Year 2012-13 water use.

### **Resale**

- Water allocation shall be specified as an **annual** allocation based on a fiscal year (July 1<sup>st</sup> to June 30<sup>th</sup>).
- 2) The Stage 1 allocation for each individual Resale customer shall be mutually agreed to by each water agency and Casitas, be incorporated into a memorandum of understanding (MOU), and assigned to provide water to supplement the Resale agency's primary source of water supply. An annual adjustment to the allocation assignment may be a condition of the MOU.
- An objective of a MOU is to achieve parity between the Resale agency customers and Casitas customers in applying similar overall water use restrictions and financial penalties in each Stage.
- 4) The Resale agency shall determine the reliability of its water sources and ensure that the annual water requirements from Casitas do not exceed their annual water allocation from Casitas.
- 5) The allocation assignment from Casitas shall not be used by the Resale agency for growth within the Resale service area, unless additional allocation for growth is authorized by written agreement with Casitas.
- 6) The Resale agency shall implement water conservation measures in accordance with the State's or California Urban Water Conservation Council's Best Management Practices, responsibly maintain water system metering and pipeline systems to reduce water losses, and when necessary or when asked to do so, implement water demand reduction measures similar to or more restrictive than those imposed by Casitas to assure the continued availability of water for health and safety purposes.

### **Residential**

1) Stage 1 water allocations are assigned to each existing Residential account by either a recorded agreement or based on the standards set in 1992 by Casitas.

- 2) The Residential water allocation for each account shall be distributed by either a monthly or bi-monthly scheduling of the allocation.
- 3) A part of the Residential Allocation is provided for health and sanitation and shall be set at **120 units per year**, distributed evenly each month as 10 units per month for each dwelling.
- 4) The essential water use portion of the allocation is not subject to adjustment by the Staged Demand Reduction Program, unless otherwise deemed by the Board to be a necessity during extreme water supply conditions or during emergencies.
- 5) The part of the Residential Allocation that is in excess of the essential allocation shall be specified as a monthly allocation and distributed proportionally to reflect varying seasonal water use, as follows:

Month	July	August	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
% of Total Annual Allocation	.17	.17	.13	.05	.05	.05	.02	.02	.02	.10	.10	.12

The part of the Residential Allocation that is in excess of the essential allocation is subject to adjustment by the Staged Demand Reduction Program.

- 6) Where not previously assigned a residential allocation, a residential allocation shall be based on the following:
  - a. The essential health and sanitation portion of the residential allocation shall be set at **120 units per year**, and be constant for each month of the year;
  - b. Non-essential portion of the annual residential allocation shall be based on actual irrigated landscape area of the parcel with a maximum limit to 1.99 acres (86,684 square feet) of irrigated landscape area and set as follows:
    - i. For the first 5,000 square feet of irrigated landscape area, 15 gallons per square foot;
    - ii. For the next 10,000 square feet of irrigated landscape area, 10 gallons per square foot
    - iii. For the next increment up to 71,684 square feet of irrigated landscape area, 3 gallons per square foot;

## **Temporary**

- 1) There is no water allocation assigned for the Temporary classification. Temporary water service is not property related on a permanent basis.
- 2) Temporary water use is limited for a short-term of six months or less, for such purposes as construction projects, or short-term water supply emergencies, or temporary backup water to non-metered agricultural parcels.
- 3) Temporary meters that are issued to serve supplemental commercial irrigation shall be temporarily allocated water based on the allocation assignment provided at the time of the application for the Temporary service based on the same water use standards as provided for the Irrigation classification, and reduced by Stage conditions,. The allocation does not extend beyond the period of the temporary water service application of six (6) months, unless the Casitas Board of Directors approves a limited continuance of the temporary service.

# 4.4 Allocation Adjustments.

A Casitas customer may request the reconsideration of their initial assigned Stage 1 water allocation within 60 days of the adoption of the WEAP where the request does not include a consideration for either an expansion in the area of use or new construction. The customer shall submit a water allocation adjustment application in order to have their request considered by the General Manager of

the District. The information contained on the application may be subject to an audit and, if necessary, additional documentation may be required in order to substantiate the requested adjustment.

Adjustments to water allocations that have been assigned through a recorded Water Service Agreement between the property owner, or prior property owner, and Casitas must proceed through an amendatory agreement, will be subject to the capital facility charges for the amount of water provided as the allocation adjustment, and subject to the availability of water allocations.

Adjustments to water allocations will not be granted in amounts that exceed 80 percent of the FY 1989-90 metered usage of water by the meter service account without prior Board approval.

## 4.5 Standards for a Water Allocation Adjustment.

Water allocation adjustments may be considered by Casitas during initiation of the WEAP that appropriately assigns a Stage 1 allocation, to ensure that the needs of the water customer are reasonably balanced against the purpose of this Plan.

Water allocations may be considered for adjustment for:

- a. Correction of irrigable area square footage;
- b. Correction of number of dwelling units (Multi-family accounts only);
- c. Exemption granted for a licensed in-home childcare or elderly care facility;

Water allocations will not be adjusted to accommodate:

- a. Pools, ponds, spas, or hot tubs;
- b. In-home businesses or hobbies that use an increased amount of water;
- c. Gardens and orchards;
- d. Homeowner's Association requirements for turf areas in excess of that water allocation specified by Casitas for a Residential classification;
- e. Where an allocation has been assigned through a recorded agreement.

Agricultural Irrigation Allocation Adjustment Standards:

- a. Limited to acreage planted in commercial agricultural production prior to March 1, 1992. Casitas shall also consider the assignment of an appropriate allocation to lands that are verified as being in a crop rotation status, or temporarily in a fallowed state, having been in a planted status prior to March 1, 1992.
- b. Comparative (same crop type and average use of various parcels) crop usage in FY2012-13 for full irrigation, not to exceed 3 AF/AC/YR, which is located within a 1-mile circumference of the parcel seeking the appeal for a change in water allocation.

## 4.6 Appeals Process.

Customers that are denied an adjustment of water allocation may request a review of the request by submitting a written appeal to the Casitas Water Resources Manager stating the nature of the appeal. The appeal shall be reviewed by the Casitas Water Resources Manager and a recommendation shall be reported to the General Manager. The decision of the General Manager shall be reported to the customer in written form. If the customer is not satisfied with the General Manager's decision, the customer must request within 10 days that the appeal be placed on the agenda of the Casitas Board of Directors. The determination by the Board of Directors shall be final.

## 4.7 Availability of Allocations.

The determination of supplies being available for issuance of new allocations of water shall be made upon staff recommendation at a regular Board of Directors meeting. The determination that water is or is not available shall be within the determination of the Board of Directors. The determination that a supply is available shall be based upon more detailed information about existing supplies, the availability of new supplies, new water supply projects, or contracts or proposed contracts for additional supplies where, in the opinion of the Board of Directors, the supply of water is definite enough to provide the assurance to the County of Ventura that there is a forty year supply.

## 4.8 Allocation for New or Expanded Water Uses.

A customer may request a change to a water allocation assignment for the purposes of obtaining new or expanded use of water that is associated with a new building permit, new or existing conditional use permit, or agricultural irrigation acreage expansion. The approval of an addition or change to the water allocation for new and/or expanded water allocation is subject to Casitas' discretion on the limits of available water allocation and subject to the charges for new and/or expanded water allocation.

When the Board of Directors determine that additional new water supplies are available, either from the safe yield of the existing CMWD project supply or additional new supplies, supplies shall be allocated in accordance with the following criteria:

- a) No single property owner or applicant for the given type of service (municipal, industrial or agricultural) shall receive a new water allocation greater than 10 percent of the total new available supply or the minimum standard residential allocation, whichever is greater. If the applicant's allocation requirements are not fully met, the applicant may maintain a position of priority until more water is available.
- b) All applicants seeking an allocation shall provide Casitas with a detailed description of the project, the use of water for which the water is sought, and information on peak flow and annual water requirements. Casitas shall determine meter size and amount of allocation based upon reasonable and necessary needs and Casitas' Rates and Regulations.
- c) The amount of water to be allocated shall be at Casitas' sole discretion. The assignment of an allocation shall be limited to the availability of water from the Lake Casitas safe yield, and be based on current water demand factors as adopted by the District and as amended. The amount of water required for the project may be calculated and submitted for the consideration of Casitas by a civil engineer, registered in the State of California, representing the project proponent.

# **SECTION 5: STAGED DEMAND REDUCTION IMPLEMENTATION**

# 5.1 Staged Demand Reduction Principles.

The primary source of water that is available to the Casitas Municipal Water District is the amount of water stored behind Casitas Dam, forming Lake Casitas. The quantity of water stored in Lake Casitas is dependent upon the local hydrology, watershed conditions, diversions from the Ventura River, and the outflow from lake evaporation and water deliveries to beneficial uses. There may be times during which Casitas must consider implementing staged water demand reductions to ensure a sustainable water supply and prevent a complete depletion of water supply in Lake Casitas.

The District has assigned five stages of water storage in Lake Casitas that serve as a guidance to triggering the implementation of water use reduction goals and measures. The overarching goals of the Staged Demand Reduction Program are:

1) conserving the water supply for the greatest priority and public benefit; and

2) mitigating the effects of a water shortage on public health, safety, and economic activity.

### 5.2 Water Resource Conditions and Actions.

The General Manager shall report to the Board of Directors each year (*April*) with an assessment of the current water storage in Lake Casitas and local groundwater basins, current water use trends, predicted weather conditions, and an evaluation of current water use reduction goals. The time of the reporting can be each April, as the rainfall season is ending and water resources can be evaluated at the maximum for the year, or as Lake Casitas storage reaches a change in Stage action level. The Board of Directors may, at their sole discretion, declare that a Stage condition of water supply in Lake Casitas exists and implement the appropriate demand reduction goals and measures in response to current and/or predicted water availability conditions. Casitas shall make such determinations public and follow with appropriate and timely notification of all customers. Casitas has established the implementation of various Stages of action based on the amount of water in storage in Lake Casitas, as shown in Table 3. An action to declare and implement a Stage may be by either an action by Casitas Board of Directors based on unanticipated changing lake supply conditions or by the following schedule in Table 4.

Stage	Stage Title	Lake Casitas	Lake Casitas Storage
		Storage - %	Action Level
		-	(acre-feet)
1	Water Conservation	100% - 50%	237,761 to 118,880
2	Water Shortage Warning	50% - 40%	118,880 to 95,104
3	Water Shortage Eminent	40% - 30%	95104 to 71,328
4	Severe Water Shortage	30% - 25%	71,328 to 59,440 65,000
5	Critical Water Shortage	25% - 0%	59,440 to 3,000

Table 3 – Stage Conditions

#### Table 4 - Stage Action Schedule

Target Dates	Action
June - April	Monitor water demands, rainfall, reservoir level trend, groundwater trends, and diversion and runoff amounts.
Early April	Staff presents water status report and a recommendation to the Casitas Board of Directors. Publish a notice of a public hearing if changes are recommended.
Late April	Casitas Board of Directors formally declares a Stage, and/or water shortage emergency, adopts recommendations for demand reduction actions.
May	Customer Notification of change in Stage, allocation, and conservation surcharge.
June	Stage demand reduction actions are effective and are implemented.

### 5.3 Demand Reduction Goals and Measures.

The demand reduction goals and measures begin with Stage 1, where reasonable and appropriate water allocation assignments are made to each Casitas service connection and the end water users are implementing the Best Management Practices that conform to State requirements for water conservation and water use efficiency measures. Upon determination of a Stage 2 condition and continuing through Stage 5 conditions, the primary actions to achieve the demand reduction goal is the adjustment of allocations that were made available for each classification during Stage 1 by a reduction of the allocation during the duration of the declared Stage condition.

## 5.4 Stage Adjustments to Allocations.

The five stages of storage in Lake Casitas and the initial guideline for water allocation adjustments for each classification at each Stage are presented in Table 5. Upon recommendation of the General Manager and approval of the Board of Directors at the onset of a specific Stage, the District shall apply appropriate demand reduction factors to the allocations for each customer classification, as deemed necessary. The Board of Directors retain the sole discretion to make allocation changes as a result of declaring a change in Stage, or during any Stage, that are more or less severe than that provided in Table 5. Examples of applying this discretion may include, but not be limited to, the change in any water resource conditions or the demand reduction goals are not being attained by the customer classification.

Demand Reduction Stage	1	2	3	4	5
Volume Range of Lake Casitas	254,000 to	127,000 to	100,000 to	75,000 to	65,000 to
C	127,000	100,000	75,000	65,000	3,000
% Lake Storage	100% -	50% -	40% -	30% -	25% - 0%
	50%	40%	30%	25%	
Water Use Reduction Response Goal	20%	20%	30%	40%	50%
Residential & Multi-Family Residential					
Essential Use	0%	0%	0%	0%	0%
Non-essential Use	20%	20%	30%	40%	50%
Business	20%	20%	30%	40%	50%
Industrial	20%	20%	30%	40%	50%
Other	20%	20%	30%	40%	50%
Resale	20%	20%	30%	40%	50%
Irrigation	20%	20%	30%	40%	50%
Interdepartmental	20%	20%	30%	40%	50%

Table 5 – Staged Water Demand Reductions for Water Classifications

Note: Initial Stage 1 Allocations include a 20% reduction from the 1989-90 demands.

Essential Use Allocations will remain the same and not adjusted, except as otherwise determined by the Board to be a necessity to preserve water supply during extreme conditions. The measures to achieve the demand reduction goal may be selected from a menu of options as provided in Table 6, or should water supply conditions become worse than anticipated the Casitas Board may adopt more stringent requirements as deemed necessary.

# 5.5 Customer Notification.

The customers of each and every classification shall be notified in a timely and appropriate manner of any and all actions to declare and implement Demand Reduction Stage. The methods of communication to the customer shall be through direct mailings, public meetings, and billing information that provides the customer the comparison of water use with allocation.

## 5.6 Water Rates and Conservation Penalty.

The Casitas Board of Directors shall annually consider the setting or adjustment of water rates that reflect the cost of water service, consistent with State law. Casitas has implemented a r tiered inclining rate structure for the Residential and Multi-family Residential classifications that represents the proportional cost of service that is attributable to the parcel that is served water.

The Casitas Board of Directors shall annually set the Conservation Penalty for each classification that will be applied to each individual customer billing for each unit of water that is in excess of the

customer's allocation, or the adjusted allocation pursuant to a change in Stage. The Conservation Penalty is a regulatory fee that is imposed to curtail the potential for adverse effects of excessive water consumption. Upon determination of a change in Stage, or at such time the Board deems that the customer response does not appear to attain the desired demand reduction goals, the Board may consider the modification of the Conservation Penalty. Revenues recovered from the Conservation Penalty will supplement Casitas' water conservation costs and provide revenue for water shortage related projects.

Implementing changes to the WEAP will require utility billing system software changes to incorporate the Stage allocations as directed by the Board, as well as including the water use information and Conservation Penalty into the normal billing process.

## 5.7 Appeals for Exception to Staged Adjustments of Allocation.

A Casitas customer may request consideration of an exception to the staged adjustments of allocation based on the following findings being present:

- 1) The Staged adjustment would cause a condition affecting the health, sanitation, fire protection, or safety of the applicant or the public;
- 2) Strict application of the allotment provisions imposes a severe or undue hardship on a particular business, or renders it infeasible for a business or class of business to remain in operation;
- 3) Hospitals and health care facilities using industry best management practices are eligible for an exception;
- 4) The business has already implemented environmental sustainability measures reducing water consumption to the maximum extent possible.

An exception must be presented to the District in writing with supporting documentation or substantial evidence demonstrating the need for an exemption. The exemption application will be reviewed, approved or denied, by the Casitas Water Resources Manager. Customers that are denied an exemption may request a review of the request by submitting a written appeal to the Casitas Water Resources Manager stating the nature of the appeal. The appeal shall be reviewed by the Casitas Water Resources Manager and a recommendation shall be reported to the General Manager. The decision of the General Manager shall be reported to the customer in written form. If the customer is not satisfied with the General Manager's decision, the customer must request within 10 days that the appeal be placed on the agenda of the Casitas Board of Directors. The determination by the Board of Directors shall be final.

There is no consideration by staff or the Board of a customer's appeal for financial relief or an adjustment to the conservation penalty on the basis of the leakage or leakage event occurring on the customer's water plumbing. The Board may consider a customer's appeal in the event of a natural occurrence such as a fire, earthquake, flood or landslide.

# SECTION 6: EXPORT OF CASITAS WATER

Water Code Section 71611 authorizes Casitas to sell water under its control for use only within the jurisdictional boundaries of the Casitas Municipal Water District. The unauthorized export and use of Casitas water beyond the Casitas district boundaries can have significant negative impacts on the Casitas water supply reliability, and therefore shall be prohibited unless specifically authorized in writing by the Casitas Board of Directors. All customers receiving Casitas water into water conveyance systems which cross Casitas boundaries shall meet the following requirements as a condition of service:

- 1) Customers shall submit to Casitas a certified report on the last day of each month that demonstrates that no Casitas water was transported or used outside Casitas boundaries during the prior month without written approval by Casitas.
- 2) Customer shall install and maintain approved metering devices and shall be required to account for all Casitas water delivered in the customer's system.
- 3) In the event Casitas water is exported during any month, the customer shall be billed for exported water at five (5) times the Casitas rate for the Temporary Service classification.
- 4) In the event the customer fails to comply with the conditions of service stated in the above (1) and/or (2), all water purchased in excess of the allocation shall be considered exported water and shall be billed in accordance with the foregoing.
- 5) This Section, Export of Casitas Water, is in effect at all times.
- 6) The exceptions to the export are during a declaration by the Board of Directors of surplus water, and limited to the surplus water or exchange agreement between the Board of Directors and other party.

Continuing or reoccurring violations of this section by any Casitas customer may result in the restriction or disconnection of water service to the customer.

Water	Key Casitas Communications and	Customer Demand Reduction Measures	Penalties And
Shortage Condition	Actions	Neuron measures	Rates
Supply Range 100% - 50% Demand Reduction 0% (80% of 1989 use)	<ul> <li>Initiate public information and advertising campaign.</li> <li>Publicize ways to reduce water consumption.</li> <li>Coordinate conservation actions with other water purveyors and cities.</li> <li>Perform water audits and promote water efficient use/conversions.</li> <li>Conduct water workshops.</li> <li>Temporary staffing for public</li> </ul>	<ul> <li>Water conservation practices requested of all customer classifications.</li> <li>Adhere to Water Waste Prohibition Ordinance.</li> <li>Adhere to assigned water allocation or less.</li> </ul>	<ul> <li>Consider and implement Conservation Penalty for water use in excess of allocation.</li> <li>Consider rates for revenue stabilization and cost of service.</li> </ul>
Stage 2	<ul> <li>inquiries, as needed.</li> <li>Declare Stage 2</li> <li>Implement demand reductions for each customer classification.</li> </ul>	<ul> <li>Continue all Stage 1 measures.</li> <li>Landscape watering restricted to two (2) watering days per week.</li> </ul>	Consider and implement Conservation Penalty for water use in excess of
Supply Range 50% - 40% Demand Reduction From Stage 1 Allocation 20%	<ul> <li>Intensify public information campaign.</li> <li>Optimize existing water resources.</li> <li>Intensify leak detection.</li> <li>Develop appeals staffing.</li> <li>Consult with major customers to develop conservation plans and water use audits.</li> </ul>	<ul> <li>Require water audits for large water users; implement recommendations of the water audits.</li> <li>Businesses display "save water" signage.</li> <li>Increase public information.</li> </ul>	<ul><li>allocation – response to reduced allocation.</li><li>Consider rates for revenue stabilization and cost of service.</li></ul>
Stage 3 Supply Range 40% - 30% Demand Reduction From Stage 1 Allocation 30%	<ul> <li>Declare Stage 3</li> <li>Implement demand reductions for each customer classification.</li> <li>Expand and intensify public information campaign.</li> <li>Provide regular briefings, publish monthly consumption report.</li> <li>Hire additional temporary staff in customer service, conservation, and water distribution. Water waste enforcement.</li> <li>Moratorium on new service connections.</li> </ul>	<ul> <li>Continue with Stage 1 and 2 measures.</li> <li>Reduced water allocations.</li> <li>Landscape watering restricted to one (1) watering day per week.</li> <li>No landscape changes unless xeriscape.</li> </ul>	<ul> <li>Consider and implement Conservation Penalty for water use in excess of allocation – response to reduced allocation.</li> <li>Consider rates for revenue stabilization and cost of service.</li> </ul>
Stage 4 Supply Range 30% - 25% Demand Reduction From Stage 1 Allocation 40%	<ul> <li>Declare Stage 4</li> <li>Implement demand reductions for each customer classification.</li> <li>Continue to provide regular media briefings.</li> <li>Scale up appeals</li> <li>Open drought information center.</li> </ul>	<ul> <li>Continue with Stage 1 through 3 measures.</li> <li>Reduced water allocations.</li> <li>Landscape watering restricted to one (1) watering day per week.</li> <li>Implement restrictive Irrigation delivery schedule.</li> <li>Minimal water for large landscapes.</li> <li>Prohibit the unnecessary draining and refilling of pools.</li> <li>Implement restrictive Irrigation delivery schedule and quantities greater than 60%.</li> </ul>	<ul> <li>Consider and implement Conservation Penalty for water use in excess of allocation – response to reduced allocation.</li> <li>Consider rates for revenue stabilization and cost of service.</li> </ul>
Stage 5 Supply Range 25% - 0% Demand Reduction From Stage 1 Allocation 50%	<ul> <li>Declare Stage 5</li> <li>Implement demand reductions for each customer classification.</li> <li>Minimize outdoor water use and non-essential uses.</li> <li>Implement aggressive public outreach and education program.</li> <li>Implement crisis communications plan.</li> <li>Coordinate with State and local agencies to address enforcement challenges.</li> <li>Water Shortage Emergency declaration to be considered.</li> </ul>	<ul> <li>Continue with Stage 1 through 4 measures.</li> <li>Reduced water allocations.</li> <li>Rescind Temporary meters issued.</li> <li>No turf irrigation.</li> <li>Implement restrictive Irrigation delivery schedule and quantities greater than 50%.</li> </ul>	<ul> <li>Consider and implement Conservation Penalty for water use in excess of allocation – response to reduced allocation.</li> <li>Consider rates for revenue stabilization and cost of service.</li> </ul>