# WATER CONSERVATION PLAN

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**PHASE I**

Applies during periods when a normal water supply is available

**PHASE II**

Applies during periods when there is a water supply shortage

**PHASE III**

Applies during periods when there is a severe water supply shortage

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The City of Porterville water system is municipally-owned with more than 14,800 service connections, 99% of which are metered, serving a population of over 51,500, with approximately 1,100 service connections outside the city limits. Water supplies for the City system are produced entirely from groundwater underlying the City, which is recharged from rainfall and runoff of the Western Sierra Nevada. The major stream contributing to recharge of the Tule Basin Aquifer underlying Porterville is the Tule River.

Storage capacity represents over six million gallons within the distribution system and three hillside reservoirs, two with a capacity of three-million gallons and one with a capacity of three hundred thousand gallons.

A telemetry system controls the operation of 22 of the City's 35 active well pumps to maintain system pressure under varying loads. The water levels in the reservoirs are also monitored and controlled by the computerized telemetry control system.

Water conservation and awareness have always been areas of concern for the Porterville community. Less than normal rainfall and runoff makes efforts to promote water conservation a high priority. In addition to the benefits of conserving water as a limited natural resource, additional benefits accrue to the community in the form of a reduced impact on the Wastewater Treatment Plant and a reduction in energy costs when water supplies are conserved.

It is vitally important that the Water Conservation Plan be a joint partnership between the City and the General Public in order to achieve optimal effect. The Plan has been developed in three phases with each phase defined in terms of the available water supply:

- **Phase I**: Applies during periods when a normal water supply is available.
- **Phase II**: Applies during periods when there is a water supply shortage.
- **Phase III**: Applies during periods when there is a severe water supply shortage.

Actions within each phase have been defined as either actions to be undertaken by the City or by the General Public. Due to the number of variables which affect the water conditions in existence at any one point in time, a City staff analysis of those variables will be utilized in determining the transition of the City from one phase to a more (or less) stringent phase. At such time as staff determines that water supply conditions warrant a phase change, staff will present the request to the City Council for their approval.

This plan differs from other valley community plans because the City of Porterville is in a more favorable position of having almost all of its water customers metered, which allows the City to basically control the water conservation program.
CITY WATER SYSTEM

The City has always been diligent in its efforts to provide sufficient safe and affordable drinking water to the residents of the community. Water conservation has long been a permanent part of the City’s water resource management program. Efforts to that end include:

NEW WELLS:

Over the past five years three new wells have been added to the City water system in order to serve the needs of the community. Two additional wells are planned for completion within the next few years.

TELEMETRY SYSTEM:

This system controls the operation of the well pumps to maintain system pressure under varying loads. Water levels in the reservoirs are also monitored and controlled by the computerized telemetry control system. Water is usually pumped to the reservoirs during the off-peak usage hours for later use by consumers. This system was designed for use by the City’s most efficient and productive wells with additional energy cost savings.

RESERVOIRS:

The City currently operates and maintains three hillside reservoirs - two (2) with a capacity of three-million-gallons and one (1) with a capacity of 305,000 gallons. The two largest reservoirs are usually filled during off-peak hours and then release water during the high usage hours. There is also a 300,000 gallon reservoir located at the Airport which is also part of the City system, the reservoirs increase the City’s ability to maintain system pressure during peak demand and fire flow situations. Site acquisition has been accomplished for the City's third proposed three-million gallon reservoir.

METERIZATION PROGRAM:

With over 99% of all service connections metered, the City has a goal of 100% meterization. All new connections are required to have meters.

UTILITY BILLING NOTICE:

The City's computerized utility billing system provides consumers with their current and past water usage history for comparison purposes. While variations may be attributable to a change known to the consumer (ie; additional persons in the home, addition of a swimming pool), it may also be the result of an undetected leak or other controllable occurrence.
WATER AUDIT/LEAKAGE DETECTION & REPAIR PLAN:

The City will continue in its proactive plan to audit water supply usage. Upon detection of the source of any leakage, corrective action will be taken immediately in order to promote the efficient use of the existing water supply and in turn reduce the energy required to operate the system.

NEW WATER LINE TESTING:

The City requires full pressure and leak testing of all newly constructed water lines.

FIRE HYDRANT TESTING:

The City Fire Department schedules their annual fire hydrant testing program during the early spring and late fall to avoid the peak water use season. Such testing is required to maintain the integrity of the fire protection system.
PHASE I

Applies during periods when a normal water supply is available

The effectiveness of any voluntary plan ultimately depends on the public's awareness of the need for the plan. Local residents have a history of commitment to their community and support of the public welfare. It is a reliance upon this tradition that makes the distribution of public information the cornerstone of the City's Water Conservation Plan.

ACTIONS BY THE CITY:

I. Public information Program

A. Distribution of suggestions for residential, commercial and industrial water conservation and awareness.

B. Coordination of public information with the local news media.

C. City participation in Water Awareness Month (May).

D. Lawn and Landscape Watering Guides will be made available upon request.

E. City staff will coordinate with local nurseries to compile a list of low-water using trees and plants. The list will be made available at City Hall, the Corporation Yard, and the Parks & Leisure Services Department for local residents.

F. Coordination with local schools to encourage young people to become aware of local water issues and conditions.

II. Project Review Committee

A. The City’s Project Review Committee (PRC) will include the evaluation of all submitted projects for water use and conservation efforts. The goal of City staff in cooperation with the developer will be to voluntarily reduce consumption of water used in the project.

B. City staff will assist the developer in familiarization with the Xeriscape Concept, combining creative landscaping and efficient irrigation to save water and promote attractive alternatives to traditional, high-water use landscapes.
III. City Landscapes and Watering Schedules

A. City parks, median islands, and landscaped public facilities will be watered during late night or early morning hours to the greatest extent possible.

B. All new landscaping projects undertaken by the City will incorporate conservation design.

IV. Retrofit Bathroom Facilities

Water saving kits which contain toilet water conservation and low-flow shower head devices will be made available to City water consumers, both residential and commercial, upon request, as funds are available.

V. Fire Hydrant Testing

The City's fire hydrant testing program will be scheduled during non-peak water usage times to the greatest extent possible without impairing the integrity of the City's fire protection service.

ACTIONS BY THE GENERAL PUBLIC:

A. The general public will be encouraged to utilize those water conservation measures contained within the City's public information program.

B. Voluntary Odd/Even watering program is encouraged as follows:

1. No watering on Mondays

2. *Addresses ending in an Odd number will water on Tuesday, Thursday and Saturday; and*

3. *Addresses ending in an Even number will water on Wednesday, Friday and Sunday.*

C. Advise Public to turn off sprinklers on rainy days.
PHASE II

Applies during periods when there is a water supply shortage

When water supply conditions start to deteriorate it would be incumbent upon the City to implement mandatory water conservation provisions.

ACTIONS BY THE CITY:

I. Public Information Program

The City will pursue a more aggressive distribution of information than its efforts initiated in Phase I to promote public awareness of the need to conserve water with a stronger emphasis on the water shortage condition.

II. Water System Pressure Reduction

The City's water system may experience reduced water pressures during high usage periods. This may deter water use for nonessential activities and encourage scheduling of landscape watering to late nights or early mornings.

III. City Landscapes and Watering Schedules

All City parks, median islands and public facility landscapes will be watered during the late night or early morning hours to reduce impact on the water system during peak usage hours.

IV. Leak Detection - Water Waste

The City will continue in its proactive plan to audit water supply usage. All City staff will be reminded of the necessity of reporting any evidence of leaks or water waste for immediate action. There will be an emphasis on coordinated community efforts to reduce water waste.

V. Waste of Water Notices

City staff will be equipped to issue “Waste of Water” notices to consumers identified as misusing water.

VI. Voluntary Odd/Even Watering days

Increase Public education on program initiated from phase I

VII. Continuation of all Conservation programs from Phase I
ACTIONS BY THE GENERAL PUBLIC:

I. Conservation Efforts:

The general public will be strongly encouraged to utilize those water conservation measures contained within the City's public information program.

II. Restaurants:

Notices will be sent to all restaurants within the City limits requesting support of water conservation efforts by serving water to customers upon request only.

III. Lawn and Landscaping Watering:

All residential, commercial and industrial landscape watering should be reduced to a minimum and avoid watering between the hours of 5 a.m. to 10 a.m. and 5 p.m. to 10 p.m.

IV. Vehicle Washing and Sidewalk Hosing:

A. Vehicle washing should be accomplished either by automatic car washes that recycle water or with buckets and hoses equipped with a shut-off nozzle.

B. Per Section 25-5 of the City Municipal Code, “The consumer shall use reasonable care to prevent the waste of water, shall not allow water to run or waste from his property onto streets or highways, shall not use water in washing sidewalks, building entrances or lobbies or other properties to such excess that water shall flow in street gutters beyond the frontage of the properties occupied by them.”
PHASE III

Applies during periods when there is a severe water supply shortage

ACTIONS BY THE CITY:

I. Public Information Program:

The utility billing system will begin to notify customers of restrictions on water use. The program to promote public awareness will be intensified with emphasis placed on communicating the mandatory water conservation requirements to the public.

II. Rate Structure Enhancement:

A 20% rate increase on all residential and landscape accounts will go into effect. This rate increase will encourage water conservation and will also serve as a provision to recover the lost revenues from water conservation.

III. City Landscapes and Watering Schedules

All City parks, median islands and public facility landscapes will continue to be watered during the late nights or early morning hours to confine impact on the water system to off-peak usage hours. If it becomes necessary, watering of City parks and median islands will be suspended and evaluated each day.

IV. Continuation of all Conservation programs from Phases I and II in addition to Phase III regulations

ACTIONS BY THE GENERAL PUBLIC:

A. Landscape watering shall not be done between the hours of 5 a.m. to 10 a.m. and 5 p.m. to 10 p.m.

B. Sidewalk and driveway washing will be prohibited.