

**WHITE PAPER**

**Prepared by Merced County Association of Governments**

**DISCUSSION OF  
SAN JOAQUIN VALLEY WASTEWATER NEEDS**

**An Effort of the San Joaquin Valley Wastewater Task Force**



**July 2003**

# San Joaquin Valley Wastewater Needs White Paper

## Table of Contents

Executive Summary	1
Introduction	5
Description of Area	6
Clean Water Act Overview	7
Porter-Cologne Act Overview	7
Discharges to Water Bodies	7
Discharges to Land	8
Determination of Beneficial Uses	9
Determination of Impaired Water Bodies / Total Maximum Daily Load Standards	9
Water Quality Approach versus Technology Based Approach	10
Significance of Basin Plans	10
Implications for the Valley	12
Beneficial Uses – Discharges to Water Bodies	12
Beneficial Uses – Discharges to Land	13
Determination of Impaired Water Bodies Total Maximum Daily Load Standards	13
Significance of Basin Plans	14
Economic Impacts	16
Recommendations	17
Attachments	
Map - San Joaquin Valley Regional Location	A
San Joaquin Valley Wastewater Task Force Participants	B
Map – Basin Plan Locations	C
Definitions	D
Case Studies	E

## EXECUTIVE SUMMARY

Wastewater infrastructure needs have increasingly been identified in central Valley forums as a critical barrier to attracting business and new jobs to the Valley, as well as accommodating the housing demands of a burgeoning population.

Requirements being placed in municipal wastewater discharge permits are believed to be overly stringent, and will force many publicly owned treatment works to install costly technologies to comply with permit requirements.

The installation and operation of such advanced treatment will not result in any tangible environmental benefits. However, as can be seen on the following page, total capital costs (along with increases in operation and maintenance costs) will in some cases triple service charges for residential, commercial and industrial customers.

In addition, Valley residents already have the lowest median household incomes in the State. They also already pay some of the highest sewer user rates in the State.

It is unreasonable to ask these ratepayers to fund treatment facilities that will result in no measurable environmental benefit.

### WATER TREATMENT

**Editorial: Too-clean water**

**Agency's action is bewildering and costly**

**Vacaville Reporter - 3/20/01**

Where is the public safety, where is the benefit to the local environment or economy, from the onerous requirements being heaped on Vacaville's wastewater treatment plant expansion?

The Central Valley Regional Water Quality Control Board last week renewed an operating permit for Vacaville's Easterly Wastewater Treatment Plant, which is undergoing a major expansion, to better meet the demand today and into the next three decades. City officials were worried that some new requirements might be forthcoming.

What they did not expect was an edict to create the cleanest wastewater in the nation, at a cost that could double the monthly sewer and water bill for Vacaville residents and raise the cost of a new home by \$12,000.

In effect, this regulatory agency, wants the water coming out of the city sewer plant to be cleaner than the water coming out of kitchen tap in local homes.

The ruling imposes the strictest wastewater quality regulations anywhere in California, city officials argue, and perhaps anywhere in the country.

So where is the benefit? The plant discharges water into Alamo Creek, a source for farmers. It mixes with chemicals and agricultural additives before being applied to crops. What is not used by farmers heads to the delta.

The sewer plant project is an \$86 million expansion plan. The price tag could jump to \$117 million with additional treatment requirements. Given what the agency piled on last week, the total cost to taxpayers could top \$200 million.

The city must appeal the agency's pointless and arduous new requirements. If the state water board supports them, the case must go to court.

Our water and sewer bills and the cost of housing in Vacaville are already too high.

**POTENTIAL COSTS TO COMPLY WITH PERMIT REQUIREMENTS:**

<b>Agency</b>	<b>Potential Cost*</b>
Ceres	\$4.2 million
Clovis	-
Dinuba	\$12.5 million
Fresno/Clovis Regional Reclamation Facility	\$30 million
Lathrop	\$40 million
Lodi	\$40 million
Merced	\$49 million
Porterville	\$8 million
Stockton	\$121 million
Tracy	\$67 million
Tulare	\$38.6 million
Turlock	\$25 million
<u>Visalia</u>	<u>\$36.8 million</u>
<b>Total</b>	<b>\$472.1 million</b>

*\*Details can be found in the case studies – Attachment E*

**VALLEY MEDIAN HOUSEHOLD INCOMES  
AND  
SEWER USER CHARGES**

County	Median Household Income *	Per Capita Income County Rank **	Monthly User Charge Highest Rate ***	Connection Fee Highest Rate ***
Fresno	\$34,725	49	\$33.55	\$3,883
Kern	\$35,446	48	\$35.95	\$2,855
Kings	\$35,749	46	\$22.00	\$2,519
Madera	\$36,286	52	\$60.33	\$539
Merced	\$35,532	54	\$21.32	\$3,525
San Joaquin	\$41,282	39	\$19.70	\$6,100
Stanislaus	\$40,101	42	\$25.65	\$4,978
Tulare	\$33,983	57	\$35.00	\$3,938

\* Source: United States Bureau of the Census, Census 2000  
<http://www.census.gov>

\*\* Source: United States Bureau of the Census, Census 2000; Geographic Comparison Table - Income and Poverty in 1999; <http://factfinder.census.gov>

\*\*\* Source: Wastewater User Charge Survey Report FY 1999-2000, May 2000, State Water Resources Control Board

Communities have formed various coalitions throughout the Valley to discuss *reasonable and workable* solutions to these barriers. This report presents a summary of that effort, and makes the following recommendations:

1. The State Water Resources Control Board **assign “high priority” rankings to San Joaquin Valley (Region 5) Basin Plan Amendments** for dissolved oxygen, temperature, pH, electrical conductivity, and receiving water turbidity; address existing and probable future beneficial uses, and protection of groundwater recharge use.
  - A. Update San Joaquin Basin Plan for dissolved oxygen and temperature. Estimated total cost and time to accomplish: Estimated total cost and time to accomplish: \$2 million, 36 months.
  - B. Update Tulare Lake Basin Plan for dissolved oxygen, temperature, pH, electrical conductivity, and receiving water turbidity. Estimated total cost and time to accomplish: \$2 million, 36 months.
  - C. Establish an interim permitting policy for use during period of Basin Plan amendments.
  - D. EPA should provide more flexibility to Regional Water Quality Control Boards to remove or change uses that are not existing or probable future beneficial uses.
  - E. The Regional Water Quality Control Board should recognize that the **use of reclaimed water** in semi-arid areas is of an **overriding environmental benefit** and should encourage, rather than hinder, that practice.
2. The RWQCB perform an **analysis of the economic consequences versus the environmental benefits** of NPDES permit requirements during the permit issuance process.
3. The State Water Resources Control Board **establish an Effluent Dominated Water Body (EDWs) policy.**
4. Where a **compliance schedule** is included as part of a discharger’s NPDES permit, **allow sufficient time (a minimum of three years) to weigh and evaluate appropriate alternatives.**
5. **Funding for San Joaquin Valley Basin Plan amendments** be provided in the State budget.
  - A. Allocate funds in the State budget for Basin Plan Amendments with incentives for 50% match commitments from dischargers.

- B. Provide funds in the State budget for five additional staff to the Central Valley Regional Water Quality Control Board to assist in the development of Basin Plan amendments.
6. Offer **increased funding opportunities** for Valley communities to assist with the **capital costs** of improvements to wastewater facilities. We propose a funding program that would:
- Provide grant and loan funding (a 50/50 grant/loan split would be reasonable)
  - Make all project costs eligible including, but not limited to, planning, land acquisition, and construction
  - Confine the program to Central Valley (San Joaquin County to Kern County) applicants, dependent on unemployment figures and/ or poverty rates
  - Raise the population limits to 100,000 instead of 20,000
  - Be administered by the Department of Housing and Community Development

## **INTRODUCTION**

Wastewater infrastructure needs have increasingly been identified as a critical barrier to attracting business and new jobs to the Central Valley, as well as accommodating the housing demands of a burgeoning population. The San Joaquin Valley Wastewater Task Force was convened in December 2000 for the purpose of identifying wastewater infrastructure needs of the San Joaquin Valley and strategizing potential solutions to these needs, resulting in Merced County Association of Governments authoring the August 2001 San Joaquin Valley Wastewater Needs White Paper. This serves as an update to those previous efforts.

The original meetings were outgrowths from Governor Davis' Central Valley Economic Summits and the Central Valley Empowerment Initiative, with the 2001 White Paper being developed at the request of Governor Davis' staff. A series of meetings took place during the time period December 2000 to August 2001. A wide range of stakeholders attended these workshops, including community representatives from San Joaquin County to Kern County, as well as an array of state and federal regulatory and funding agencies. Also attending were legislative representatives from the offices of Governor Gray Davis, Assemblymembers Roy Ashburn, Dennis Cardoza, Sarah Reyes, and Dean Florez, State Senators Dick Monteith, Charles Poochigian, and Jim Costa, Congressmen Gary Condit, Bill Thomas, Cal Dooley, and George Radanovich, and Senators Barbara Boxer and Dianne Feinstein.

A wide range of stakeholders including community representatives from San Joaquin County to Tulare County also attended the second round of meetings which took place from May to June 2002. In attendance as well were an array of state and federal regulatory and funding agencies and legislative representatives from the offices of Congressman Dennis Cardoza.

At the core of these meetings was the need for a coordinated response to wastewater issues that will impact the Valley for years to come. It was recognized that a high quality, reliable water supply, as well as conscientious wastewater discharge practices are critical to the San Joaquin Valley's future.

This report gives an overview of Valley communities' challenges in balancing compliance with water quality regulations versus the environmental benefits and the economic costs of doing so. The report describes the history and decisions that have made these regulations important and explains some of the unresolved issues.

*Description of Area*

California’s San Joaquin Valley region (also known as the Central Valley) consists of the counties of Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare. The Valley Basin includes two major watersheds-the Sacramento River on the north and the San Joaquin River on the south-plus the Tulare Lake Basin. The combined watersheds extend nearly 500 miles from northwest to southeast and range from about 60 to 100 miles wide. A map of the region is included as Attachment A.

The Valley accounts for 50 percent of the state’s agricultural output, and is known as the richest agricultural region in the world. Its population is also growing at a faster rate than California as a whole. This is attributed to relatively low living costs and a population with high birth rates. This trend is likely to continue. The region accounts for 10 percent of California’s population, greater than that of 21 individual states.

Valley Unemployment Rates Year 2002		
	% Rate	Statewide Ranking (58 being worst)
Fresno	14.4	53
Kern	11.8	49
Kings	14.5	55
Madera	12.7	50
Merced	14.4	53
San Joaquin	10.0	43
Stanislaus	11.4	48
Tulare	15.5	56
CA	6.7	

Source: CA Employment Development Department, Labor Market Information Division

The single greatest common denominator among the counties that make up the Valley continues to be the chasm between the richness of this agricultural center of the world and the poverty of its residents. Unemployment rates are the highest in the state, with associated high rates of poverty and public assistance.

These unique challenges have received both State and Federal attention.

Governor Davis has hosted two Central Valley Economic Summits; water, energy, agriculture, education and economic development have been central themes.

Executive Order No. 13173 designated the Central San Joaquin Valley Empowerment Initiative. The Initiative, one of only two in the nation, has taken a regional and comprehensive approach to the economic development of the Valley; its five-pronged approach includes business, infrastructure, education, health, and housing.

For decades, the area between Stockton and Bakersfield has been California's hidden ghetto, a region of entrenched rural poverty curtained off by the coastal ranges. If the region broke off from California, its population would be larger than that of 21 other states, but it would be the second poorest, after Mississippi.

- California’s Future May Hinge on Enriching a Hidden Ghetto, San Jose Mercury News, July 28, 2001

### *Clean Water Act Overview*

Congress enacted the Clean Water Act in 1972. Its primary features include:

- **Regulates discharges** to water bodies under the National Pollutant Elimination Discharge System permit program. NPDES permits are good for no more than five years, at which point dischargers must have their permits renewed.
- Requires states to adopt water quality standards, specifying a “**beneficial use**” of each water body, and standards for how clean water bodies must be to meet the designated beneficial uses. These beneficial uses include drinking water supply, industrial supply, wildlife, and recreation.
- Requires states to identify all the water bodies that do **not** meet applicable water quality standards, and for those “**impaired**” **water bodies**, establish how much of a pollutant a water body can tolerate on a daily basis and still meet relevant water quality standards, referred to as *Total Maximum Daily Loads* (TMDLs).
- Requires states to carry out a continuing planning process; the resulting water quality management plans form the basis for states’ regulatory programs. California’s continuing planning process consists of the statewide water quality control plans and the nine regional basin plans. **Basin plans** provide the regulatory framework for controlling the activities and factors that affect water quality in the State.

### *Porter-Cologne Act Overview*

Primary features of the Porter-Cologne Act:

- Unlike the Clean Water Act, does not distinguish between point and non-point sources of water pollution.
- Regulates discharges to dry land.
- Is a water quality-based approach to pollution control, as opposed to technology standards-based.
- Gives the State Water Resources Control Board ultimate authority over water quality policy. Also establishes nine Regional Water Quality Control Boards to oversee water quality, set waste discharge requirements for categories of discharges, and issue individual permits, in accordance with Basin Plans.

### *Discharges to Water Bodies*

The Clean Water Act recognizes two types of water pollution: that discharged by “point sources” and that discharged by “nonpoint sources”. Point sources include factories, wastewater

treatment plants, and any other “discernible confined discrete conveyance”. Nonpoint sources include all other sources, such as storm water, erosion, and natural runoff.

The Clean Water Act created two overlapping approaches to regulating water quality, one of which regulates discharges from sewers, factory pipes, and other point sources. Cities and industries were required to clean up the waste water they discharged from their point sources, which were mostly sewer outfalls and an assortment of other pipes and ditches. A sizeable portion of water pollution came from these sources, the pollution was orderly in the sense that it was already contained in a pipe or channel, there was little ambiguity about who caused the pollution, and workable treatment technologies existed.

The Clean Water Act also included a second, conceptually different and broader approach to cleaning up our water, which seems to require states to establish the total amount of each category that each water body can absorb each day without becoming “polluted” and to somehow ensure that that limit is not exceeded. This requirement leads in the direction that states regulate and clean up water pollution from all other sources. This may include runoff and irrigation return flows from farms, runoff from forestry operations, and runoff from urban areas. This can be fairly characterized as a major escalation of water quality control efforts, and stems from Section 303(d) of the Clean Water Act (further discussed on page 9).

***The Clean Water Act recognizes two types of water pollution:***

- ***“point source” discharges (from water treatment plants, factories, and others); and***
- ***“nonpoint source” discharges (all others such as storm water, erosion, and natural runoff)***

The Clean Water Act regulates discharges to water bodies under the National Pollutant Discharge Elimination System permit program. NPDES requires point sources of discharges to obtain permits and to treat their discharge to specified standards. NPDES focuses on the treatment of effluents from point sources before they get into streams and other water bodies. NPDES permits are good for no more than five years, at which point dischargers must have their permits renewed. EPA provides the state with funding to carry out the NPDES program; the State Water Resources Control Board and Regional Water Quality Control Boards issue and enforce the NPDES permits.

### *Discharges to Land*

The Regional Board also regulates discharges to land via California’s Porter-Cologne Act. Most wastewater treatment facilities in the Central Valley use some form of land disposal. Currently, over 1335 facilities in the Central Valley discharge to land in a manner that allows percolation into the groundwater. To regulate these dischargers, the Regional Board employs both individual and general (region-specific and statewide) waste discharge requirements (WDRs). Of particular importance to the Regional Board’s activities is the Anti-Degradation Policy which essentially mandates that existing uses must be fully protected.

### *Determination of Beneficial Uses*

The Clean Water Act requires states to adopt water quality standards, specifying a “beneficial use” of each water body, and standards for how clean water bodies must be to meet the designated beneficial uses. These beneficial uses include drinking water supply, industrial supply, wildlife, and recreation.

Beneficial uses that are not attained are typically dubbed “potential” uses in Basin Plans. For instance, small agricultural drains are used primarily for agricultural return flows and dairy wastewater, and never reach a river. These waters have been assigned a lower standard of water quality than waters assigned a municipal drinking water supply use, with potential drinking water intakes. However, the Porter-Cologne Act does not define or use the term “potential” when referring to possible beneficial uses. Instead, Porter-Cologne refers to “past, present and **probable** future uses”.

Water quality requirements are now being implemented in permits to protect **all** potential beneficial uses, regardless of past, present and probable future uses in the actual receiving water. This blanket approach to beneficial use protection undermines Porter-Cologne’s intent of water quality management, and in some instances results in over-protection.

### *Determination of Impaired Water Bodies/Total Maximum Daily Load Standards*

Clean Water Act Section 303(d) requires states to identify all the water bodies that do not meet applicable water quality standards, and for those “impaired” water bodies, states must establish *Total Maximum Daily Loads* (TMDLs). TMDLs are documents that describe the maximum amount of specific pollutants that can be allowed in a water body without exceeding a water quality standard. TMDLs apportion the specified amount of allowable pollutant load among sources of that pollutant. The TMDL is supposed to be an objective, quantitative standard against which water quality can be measured.

This section of the Clean Water Act was essentially ignored for years. The EPA and the states were fully occupied with developing the NPDES standards and permit program for point sources. However, environmental lawsuits and the courts have breathed life into Section 303(d).

***Total Maximum Daily Loads (TMDLs) define how much of a pollutant a water body can tolerate on a daily basis and still meet relevant water quality standards. The TMDL is supposed to be an objective, quantitative standard against which water quality can be measured.***

TMDLs in California are developed either by Regional Water Quality Control Boards or by U.S. EPA. TMDLs developed by Regional Water Quality Control Boards are generally designed as Basin Plan amendments (discussed below) and include implementation provisions.

Questions have arisen over California’s process for determining impaired water bodies. California has over 1,000 pollutant/water body combinations on its 303(d) impaired water bodies list. Other states’ impaired water body listings are primarily for sediment and nutrients (nitrogen and phosphorus). California has listed waters as impaired due to trash, exotic species, and algae.

Litigation has thus far determined where and when Total Maximum Daily Loads will be developed in California. The State Board issued guidelines for the regions to use in preparing the list, but the guidelines do not identify any criteria for prioritizing the impaired waters, establishing TMDLs, or standards for removing water bodies from the list. This approach has met with considerable difficulty in implementation. Beneficial use determinations for water bodies are highly variable and information on the biological conditions of waters is insufficient.

### *Water Quality Approach versus Technology Based Approach*

When Congress passed the Clean Water Act in 1972, it adopted the strategy that water pollution was a national problem requiring federal intervention. Water should simply be clean, and nationwide technology requirements for urban and industrial point sources were the tool chosen to obtain clean water.

Unlike the Clean Water Act, California's Porter-Cologne Act of 1969 does not distinguish between point and non-point sources of water pollution. Instead, California's water pollution control law focuses on discharges to water bodies, and regulates the quality of those discharges and the receiving waters. This water quality based approach contrasts with the technology based effluent limits imposed by the Clean Water Act's NPDES program. Under the latter, it is up to EPA or the state to determine the quantities of pollutants that can be tolerated in a water body, and to assign portions of the total allowable pollutant load to the various sources.

Many states, including California, have argued that water pollution control should remain a standards-based proposition implemented by the states. In response, Congress inserted Section 303 into the Clean Water Act as a backstop provision. Section 303 requires states to prepare a list of waters that don't meet water quality standards *after* implementation of the technology-based controls.

### *Significance of Basin Plans*

The *Basin Plan* is a document that describes how a Regional Water Quality Control Board will manage water quality.

Each Regional Water Quality Control Board is responsible for preparing and periodically updating Basin Plans (water quality control plans). Each Basin Plan establishes:

1. beneficial uses of water designated for each water body to be protected;
2. water quality standards, known as water quality objectives, for *both surface water and groundwater*; and

***The Regional Water Quality Control Boards establish regional water quality plans, called Basin Plans.***

***Basin Plans designate legally-binding beneficial uses of water for water bodies, assign water quality criteria to protect those uses, and establish appropriate implementation programs.***

3. actions necessary to implement and maintain these standards in order to control non-point and point sources of pollution.

Total Maximum Daily Load standards and waste discharge requirements must be formally incorporated into the Basin Plan to be part of the basis for Regional Water Quality Control Board actions. Basin Plan amendments are adopted through a public process that requires approval of the Total Maximum Daily Load standards by the Regional Water Quality Control Board, State Water Resources Control Board, Office of Administrative Law, and U.S. EPA.

Basin Plan waste discharge requirements govern the permit requirements that are being contested and litigated throughout California. Amendments to Basin Plans are required to reflect the scientific standards of conditions needed to protect beneficial uses of waters. Until these amendments are completed, these standards cannot be implemented through waste discharge requirements or NPDES permits.

## IMPLICATIONS FOR THE VALLEY

### *Beneficial Uses – Discharges to Water Bodies*

California is experiencing a serious backlog of National Pollutant Discharge Elimination System (NPDES) discharge permits. Requirements being placed in municipal NPDES permits are believed to be overly stringent, and will cause many publicly owned treatment works to install costly technologies to comply with permit requirements set to protect uses that are **not existent or are not probable future uses of the waters**. Nearly every permit issued in California to a major discharger is being appealed either by the discharger, by trade associations, or by environmental groups.

The tributary rule, never adopted as a regulation by the U.S. EPA., is being routinely applied. Upstream waters are being required to meet all of the requirements of the designated downstream waters, without regard to past, present and probable future uses in the actual receiving water. Pollutants actually reaching the downstream water from the discharge are often minimal, while the costs and energy demand to meet end of pipe limitations are enormous.

As the case studies for the cities of Merced and Turlock (see Attachment E) clearly demonstrate, many small agricultural drains never reach a river yet are being assigned a municipal drinking water supply use. This holds true even when the water body is an agricultural slough, used primarily for agricultural return flows and dairy wastewater, or is a concrete-lined flood control channel with no legal public access. This comes at a price of at least \$64 million in improvements to the Merced and Turlock facilities alone.

Even though *there are no existing or planned drinking water intakes from these waters*, U.S. EPA has ruled that dischargers to these waters must meet the new human health criteria under the California Toxics Rule, which are intended to protect people drinking 2 liters of water a day from those water bodies for 70 years. No measurable public health benefit will result from these expenditures until such time that these waters are actually, if ever, used as a municipal water supply.

Moreover, in some cases, substances that can be pollutants when discharged to a body of water can be beneficially reused for irrigation. For example, recycled water may contain higher levels of nutrients, such as nitrogen, than potable water. Application of recycled water for agricultural and landscape irrigation can provide an additional source of nutrients and lessen the need to apply synthetic fertilizers.

*In Merced's case, treated effluent discharged to an agricultural drain never reaches the San Joaquin River because it is used by a ranch for irrigation in the spring and summer, and used by a duck club for ponds in the fall and winter. However, the Basin Plan regulations for the San Joaquin River are applied to the agricultural drain.*

*The receiving water temperature, pH, and turbidity changes were designed to protect "high Sierra trout streams", not agricultural drains.*

**–Stevan Stroud, former City Engineer,  
for the City of Merced**

**It is unreasonable, and contrary to the Water Code (Section 13242(a)), to ask current ratepayers to fund treatment facilities now to protect a use which does not currently exist nor is probable in the future.**

#### *Beneficial Uses – Discharges to Land*

Valley communities maintain that the manner in which the Regional Board is interpreting existing basin plans as they relate to groundwater is unnecessarily stringent and therefore impose an undue compliance burden.

As is the case with dischargers to water bodies, Valley communities maintain the Regional Board is protecting beneficial uses that currently do not exist. The Regional Board is requiring wastewater be treated to drinking water standards before it can be discharged to land causing communities to spend significant amounts of money on improvements in order to comply with their WDRs. Yet these efforts will not result in any measurable environmental benefits.

In City of Dinuba's case (see case study in Attachment E), the entire upper aquifer to which the treatment plant discharges is already contaminated with nitrates and pesticides due to past farming practices, making the water unfit for drinking. Yet Dinuba is still being required to treat its wastewater to drinking water standards being allowed to discharge to land. So the question becomes – what beneficial use is the Board trying to protect by requiring wastewater treatment plants to produce drinking water for disposal into an aquifer already contaminated?

For some communities currently being allowed to reuse treated water for irrigation purposes, the Regional Board has been requiring construction of lined storage ponds to store treated water during the winter months instead of permitting discharge to percolation ponds. This practice necessitates the build out of storage ponds over a considerable amount of land because of the volume of treated water these facilities normally release. In order to comply with these requirements the City of Porterville and the City of Visalia would have to ***construct 1370 acres of storage ponds at a price tag of \$89.8 million for these two communities alone.***

These requirements may force dischargers to forgo water reclamation/reuse when possible because of the extreme costs associated with land disposal ***thereby undermine the State's goal of promoting reclamation and reuse whenever possible.***

#### *Determination of Impaired Water Bodies / Total Maximum Daily Load Standards*

California lacks sufficient data to determine which water bodies are clean and which need Total Maximum Daily Loads. Federal law demands that the Regional Water Quality Control Boards and the State Water Resources Control Board develop Total Maximum Daily Loads, yet, they have received little or no additional funding to carry out these mandates.

Based on the most recent Watershed Management Initiative Plan for the Central Valley Regional Water Quality Control Board, there are 89 water bodies on the Federal Clean Water Act Section 303(d) list registered as impaired for 217 pollutants.

Although the Regional Board considers addressing the problems in these water bodies as a high priority, funding for TMDL-related work is just not being made available. The Watershed Management Initiative Plan estimates funding needs for TMDL-related work to be over \$11.5 million for FY 01/02, over \$16.5 million for FY 02/03, and over \$12.5 million for FY 03/04. The Regional Board estimates it will obtain from \$1.5 million to \$2 million in funding to perform the work, resulting in a TMDL funding deficit of over \$10 million per year.

Because of the slow progress in completing TMDL-related work, there is a need for an interim permitting strategy. National Pollutant Discharge Elimination System permits are due for renewal every five years. The Clean Water Act prohibits new or additional discharges into these impaired waters, with significant consequences for developers and growing communities.

### *Significance of Basin Plans*

Valley communities maintain that the existing Basin Plan standards are unnecessarily stringent for the protection of current designated beneficial uses and therefore impose an undue compliance burden.

Publicly owned treatment facilities were not designed to treat for the types of toxic pollutants being regulated today. In order to comply with the requirements being imposed via NPDES permits, communities would have to install costly technologies. These additional treatment technologies are extremely expensive and consume large amounts of energy.

Basin Plan Amendment (BPA) development is a time consuming process and both staff positions and resources are limited. According to the most recent Watershed Management Initiative Plan for the Central Valley Regional Water Quality Control Board, only 0.6 person years were available for basin planning activities for fiscal years 2001-02 and 2003-04. The limited staff that was budgeted was focused on conducting the triennial review. Other than triennial reviews, basin planning resources are used to train staff and other interested parties and to ensure

***The SWRCB currently does not have formal criteria for setting priorities for TMDL-related work...***

***In 1997, an ad hoc workgroup of staff from the RWQCBs, SWRCB, and USEPA developed 303(d) listing guidelines that included the following criteria for priority ranking...***

- ***Water body significance (extent of beneficial uses, size of water body)***
- ***Degree of impairment or threat***
- ***Conformity with related activities in the watershed***
- ***Potential for beneficial use protection***
- ***Degree of public concern***
- ***Available information***

***- State's Effort to Comply with the Federal Clean Water Act Section 303(d), Report to the Legislature, State Water Resources Control Board, January 2001***

consistency in basin plan amendments *which are typically funded through other programs and by stakeholders.*

Until an updated BPA is adopted, NPDES permits will continue to be written with the existing basin plan criteria.

Regional Board staff is working with a discharger coalition led by the City of Roseville to develop a Basin Plan Amendment for pH and turbidity receiving water requirements for the Sacramento and San Joaquin watersheds. The Amendment will include scientific assessments and water quality objectives protecting beneficial uses, and an evaluation of the economic impacts. A memorandum of understanding and cost sharing agreement was finalized in May 2001. Currently, the technical studies are still being conducted by consultants.

As described in the table on the below, Valley dischargers are contributing \$686,000, including approximately \$225,000 for Regional Water Quality Control Board staff time, to the costs of this effort. Although only ten dischargers are participating in the cost, all dischargers in the Sacramento and San Joaquin watersheds will benefit from this Basin Plan Amendment.

<b>Valley Community Contributions To Basin Plan Amendment for pH and Turbidity Sacramento and San Joaquin Basins May 2001</b>	
South Placer Wastewater Auth.	\$263,532
City of Merced	\$97,844
City of Lathrop	\$24,941
UC Davis WWTP	\$35,711
City of Vacaville	\$139,266
City of Auburn	\$29,083
Nevada County Sanitation Dist.	\$29,912
Placer County	\$35,711
Sacramento County	\$15,000
City of Yuba City	\$15,000
<b>Total</b>	<b>\$686,000</b>

*Basin Plan Amendment development is a time consuming process and both staff positions and resources are limited. According to the most recent Watershed Management Initiative Plan for the Central Valley Regional Water Quality Control Board, only 0.6 person years were available for basin planning activities for fiscal years 2001-02 and 2003-04. The limited staff that was budgeted was focused on conducting the triennial review.*

*“Staff is pursuing the option of forming a partnership with interested stakeholders to support [the basin plan amendment] effort. The additional resources provided by the discharger community will speed up the BPA process, and will provide a greater opportunity to address the specific concerns of all interested parties.*

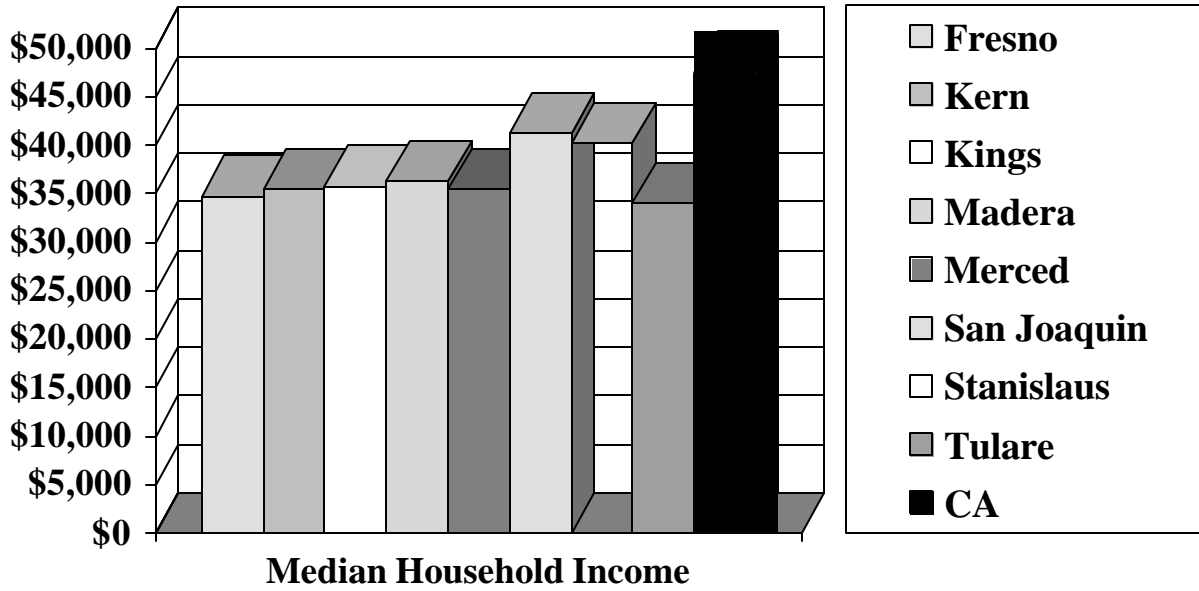
*Until an updated BPA is adopted, NPDES permits will continue to be written with the existing pH and turbidity criteria. The cost of compliance with existing criteria may be greater than the costs of processing a BPA, especially if the costs are shared amongst many dischargers.”*

*-Excerpt from April 17, 2001 letter from Val Connor, Senior Environmental Specialist, California Regional Water Quality Control Board, Central Valley Region*

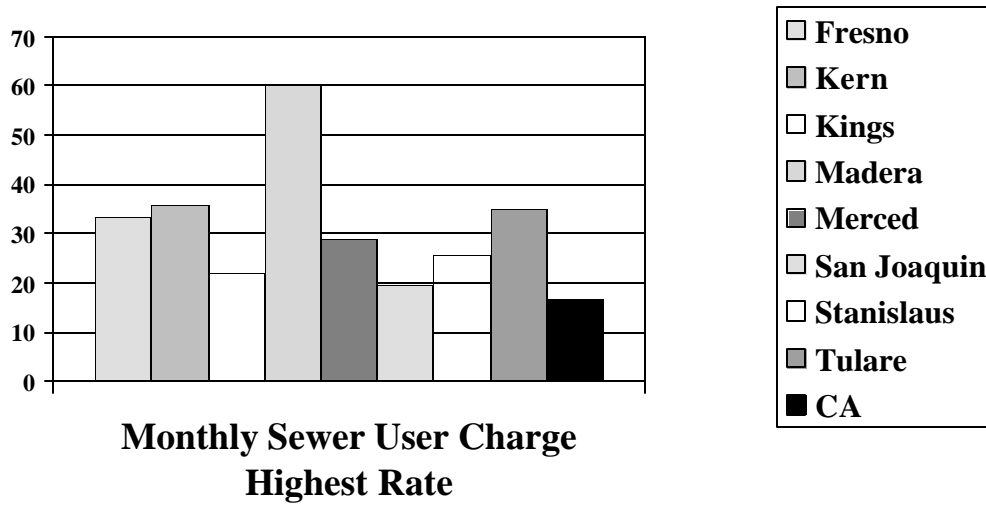
*This type of local and State collaboration is mutually beneficial to resolving Valley wastewater issues, and should be encouraged.*

*Economic Impacts*

The impacts of wastewater discharge requirements upon Valley residents are enormous. Median household incomes are already lower than the State average; monthly sewer user charges in the Valley also exceed the State average.



Source: United States Bureau of the Census, Census 2000



Source: Wastewater User Charge Survey Report FY 1999-2000, May 2000, State Water Resources Control Board

## RECOMMENDATIONS

Valley communities maintain that the installation and operation of advanced treatment required to over-protect some water bodies will not result in any tangible environmental benefits. The advanced treatment, however, will result in service charges for residential, commercial, and industrial users sometimes being tripled for some Valley communities.

Valley communities recognize the complexity of the issues identified herein and thereby propose:

1. The State Water Resources Control Board **assign “high priority” rankings to San Joaquin Valley (Region 5) Basin Plan Amendments** for dissolved oxygen, temperature, pH, electrical conductivity, and receiving water turbidity; address existing and probable future beneficial uses, and protection of groundwater recharge use.
  - A. Update San Joaquin Basin Plan for dissolved oxygen and temperature. Estimated total cost and time to accomplish: \$2 million, 36 months.
  - B. Update Tulare Lake Basin Plan for dissolved oxygen, temperature, pH, electrical conductivity, and receiving water turbidity. Estimated total cost and time to accomplish: \$2 million, 36 months.
  - C. Establish an interim permitting policy for use during period of Basin Plan amendments. It is acknowledged that Clean Water Act provisions would seem to provide a barrier to an interim permitting policy. Provisions of the Statewide Implementation Plan which provide flexibility and allow for implementation of interim requirements while additional studies are being completed should be fully utilized.
  - D. EPA should provide more flexibility to Regional Water Quality Control Boards to remove or change uses that are not existing or probable future beneficial uses, or uses that may have been misapplied through the application of a tributary rule or other state policy. Where potential uses are maintained, flexibility should be allowed in the application of Basin Plan criteria.
  - E. The Regional Water Quality Control Board should recognize that the use of reclaimed water in semi-arid areas is of an overriding environmental benefit and should encourage, rather than hinder, that practice. The benefits derived far exceed the potential to introduce additional salts into the groundwater and is in compliance with the State’s policy of encouraging water reclamation and reuse.
2. The RWQCB perform an **analysis of the economic consequences versus the environmental benefits** of NPDES permit requirements during the permit issuance process.

3. The State Water Resources Control Board **establish an Effluent Dominated Water Body (EDWs) policy**. Requirements currently being imposed on dischargers to EDWs are nonsensical. Due to imposition of the tributary rule, NPDES permit requirements are protecting uses that are non-existent nor probable in the future. A policy addressing EDWs specifically should be established by the SWRCB.
4. Where a **compliance schedule** is included as part of a discharger's NPDES permit, **allow sufficient time (a minimum of three years) to weigh and evaluate appropriate alternatives** – it is critical that the discharger not be required to immediately the design and implementation of costly treatment systems.
5. **Funding for San Joaquin Valley Basin Plan amendments** be provided in the State budget.
  - A. Allocate funds in the State budget for Basin Plan Amendments with incentives for 50% match commitments from dischargers.
  - B. Provide funds in the State budget for five additional staff to the Central Valley Regional Water Quality Control Board to assist and work with dischargers in the development of Basin Plan amendments.

We applaud the efforts of Senator Dean Florez and his authorship of Senate Bill 472 which recommends appropriation of \$1.05 million for an amendment of a “Central Valley” Basin Plan. (Unknown at this writing whether this is meant to be the San Joaquin Basin Plan or the Tulare Basin Plan.)

6. Offer **increased funding opportunities** for Valley communities to assist with the **capital costs** of improvements to wastewater facilities.

Problems with existing funding sources would need to be taken into account in fashioning a new program. Among these are:

- Awards are too small to meet wastewater infrastructure standards mandated by the State;
- Different funding sources are difficult to use in tandem;
- Population requirements are prohibitive (most grants are limited to a maximum of 20,000 population);
- Paperwork requirements are prohibitive; and
- Funding cycles are difficult to coordinate within the time limits imposed by Water Boards to make wastewater infrastructure improvements.

We propose a funding program that would:

- Provide grant and loan funding (a 50/50 grant/loan split would be reasonable)
- Make all project costs eligible including, but not limited to, planning, land acquisition, and construction

- Confine the program to Central Valley (San Joaquin County to Kern County) applicants, dependent on unemployment figures and/ or poverty rates
- Raise the population limits to 100,000 instead of 20,000
- Be administered by the Department of Housing and Community Development

## **Attachment A**



State of California  
(Central Valley Counties Shaded)

## **Attachment B**

**SAN JOAQUIN VALLEY WASTEWATER TASK FORCE PARTICIPANTS –  
AUGUST 2001 WHITE PAPER AND JUNE 2003 UPDATE**

City of Atwater  
City of Ceres  
City of Clovis  
City of Dinuba  
City of Lathrop  
City of Lindsay  
City of Livingston  
City of Lodi  
City of Manteca  
City of Mendota  
City of Merced  
City of Modesto  
City of Newman  
City of Porterville  
City of Stockton  
City of Taft  
City of Tracy  
City of Tulare  
City of Turlock  
City of Visalia  
Tulare County  
Fresno/Clovis Regional Reclamation Facility

Merced County Association of Governments

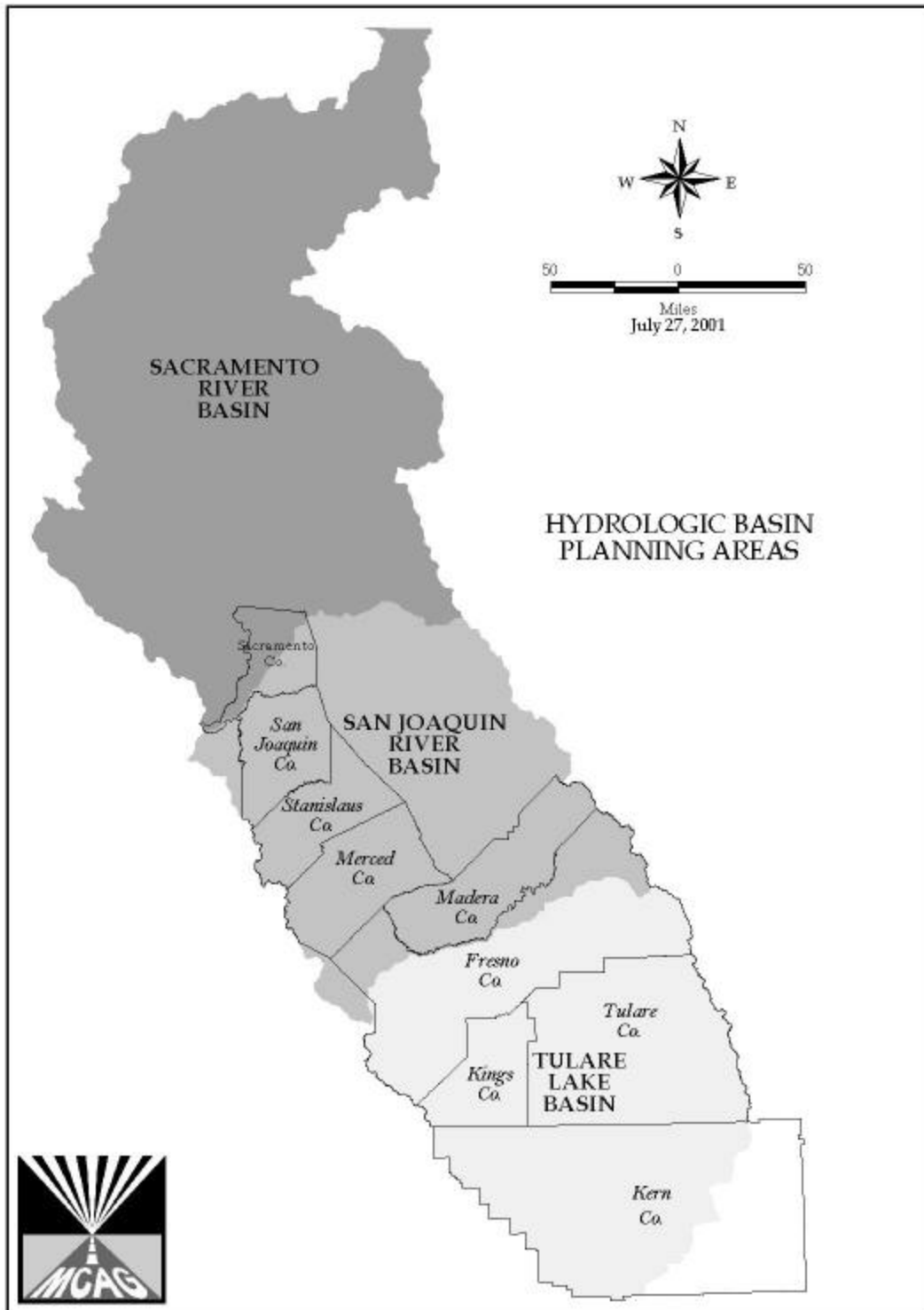
California Department of Water Resources  
California Department of Trade and Commerce  
California Department of Housing and Community Development  
California Department of Food and Agriculture  
California Water Resources Control Board  
California Regional Water Quality Control Board  
California Department of Health Services  
California Environmental Protection Agency  
California Treasurers Office, Debt and Investment Advisory Commission

U.S. Department of Commerce, Economic Development Administration  
U.S. Department of Agriculture, Rural Development

Brown & Caldwell Engineering  
California League of Food Processors

California Association of Sanitation Agencies  
Carollo Engineers  
Larry Walker Associates  
Law Offices of Patrick Riddle  
Law Offices of Somach, Simmons, and Dunn  
League of California Cities  
Manufacturers Council of the Central Valley  
Stanislaus Food Products

## **Attachment C**



## **Attachment D**

## DEFINITIONS

### **Anti-Degradation Policy -**

Policy requiring the reductions in water quality be justified as necessary to accommodate important social and economic development.

### **Basin Plan -**

Each of the nine Regional Boards has adopted a Basin Plan. The Basin Plan identifies the existing and designated beneficial uses, the water quality objectives, and programs of implementation to protect the waters within the respective jurisdiction.

### **Beneficial Use -**

Those uses identified in State and Regional Water Quality Control plans. Examples include municipal and domestic supply, agricultural supply, industrial process supply, cold freshwater habitat, warm freshwater habitat, wildlife habitat, and migration of aquatic organisms.

### **Best Management Practices -**

methods, measures, or practices selected by an agency to meet its nonpoint source control needs. BMPs include but are not limited to structural and nonstructural controls and operation and maintenance procedures. BMPs can be applied before, during, or after pollution producing activities to reduce or eliminate the introduction of pollutants into receiving waters.

### **California Toxics Rule (CTR) -**

Contains water quality criteria that are applicable to water bodies in California. These criteria supplement those in the National Toxics Rule.

### **Clean Water Act (CWA) –**

Administered by the U.S. Environmental Protection Agency. Regulates pollution in surface waters of the United States. Key message: all discharges to surface waters are illegal unless authorized by a permit.

### **Effluent Dependent Water Body (EDW) -**

A water body that has increased flow because it receives discharge of treated municipal wastewater. The limited flow of these water bodies also limits the dilution capacity.

<b>Load Allocations -</b>	The portion of a receiving water's loading capacity that is attributed either to one of its existing or future nonpoint sources or pollution or to natural background sources. Load allocations are best estimates of the loading, which may range from reasonably accurate estimates to gross allotments, depending on the availability of data and appropriate techniques for predicting the loading. Wherever possible, natural and nonpoint source loads should be distinguished.
<b>Municipal and Domestic Supply Beneficial Use -</b>	Typical Basin Plan definition: uses of water for community, military, or individual water supply systems, including, but not limited to, drinking water.
<b>National Toxics Rule (NTR) -</b>	Contains water quality criteria that are applicable to water bodies in California. Promulgated by U.S. EPA in 1992, amended in 1995.
<b>National Pollutant Discharge Elimination System (NPDES) -</b>	the wastewater discharge permit system established by the Clean Water Act. Permits regulate the discharge of wastewater from municipal and industrial point sources, as well as certain concentrated animal feeding operations. Regional Water Quality Control Boards administer the NPDES permit program with U.S. EPA oversight.
<b>Non-Point Source Pollution -</b>	pollution that is not discharged from a point source. Some examples include agricultural lands and residential areas (excess fertilizers, herbicides, and insecticides); irrigation practices (salts); livestock, pet wastes, and faulty septic systems (bacteria and nutrients).
<b>Point Source Pollution -</b>	any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, from which pollutants are or may be discharged. As defined in the Clean Water Act, this term does not include agricultural stormwater discharges and return flows from irrigated agriculture.

**Porter-Cologne  
Water Quality Act -**

Part of the California Water Code. Directs the State Water Resources Control Board and Regional Water Quality Control Boards to protect the quality of California's waters.

**Statewide**

**Implementation Plan (SIP)** – Applies to discharges of toxic pollutants to inland surface waters, enclosed bays and estuaries. Establishes:

1. implementation provisions for criteria in the federal National Toxics Rule and California Toxics Rule, as well as objectives adopted in Regional Water Quality Control Board Basin Plans
2. monitoring requirements for dioxin
3. chronic toxicity control provisions

Adopted by the State Water Resources Control Board on March 2, 2000. Formal title is "Policy for the Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries in California".

**Total Maximum Daily  
Loads (TMDLs) -**

Set in the Clean Water Act, establishes the loading capacity of a water body. A numeric value is developed that represents the assimilative capacity of a water body to absorb a pollutant. The TMDL is the sum of the load allocations for nonpoint sources and natural background pollutants, the wasteload allocations for point sources, and a margin of safety.

**Tributary Rule -**

Simply stated, assigns the beneficial uses of major rivers to their tributaries.

**Triennial Review -**

The California Water Code and federal Clean Water Act require the State and Regional Board to periodically review and update Basin Plans. The Clean Water Act further requires that states modify and adopt new standards as appropriate. Conducted every three years.

**Water Quality  
Objective (WQO) -**

Defined in the California Water Code (Section 13241) as “the allowable limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area”. The California Water Code water quality objectives are equivalent to the Clean Water Act’s water quality criteria.

**Water Quality  
Standard (WQS) -**

The Clean Water Act requires states to develop water quality standards for all waters and to submit them to U.S. EPA for approval. The designated beneficial use for a water body, together with the water quality objective, forms the water quality standard.

**Wasteload Allocations -**

The portion of a receiving water’s loading capacity that is allocated to one of its existing or future point sources of pollution. WLAs constitute a type of water quality-based effluent limitation.

## **Attachment E**

## WASTEWATER NEEDS – COMMUNITY CASE STUDY

<b>NAME OF COMMUNITY:</b>	City of Ceres (Stanislaus County)
<b>POPULATION</b>	34,609 (2000)
<b>MEDIAN INCOME</b>	\$30,876
<b>CURRENT SEWER USER RATE:</b>	\$10.80 (set in 1993)
<b>TOTAL POTENTIAL COSTS IN NEXT 5 YEARS TO COMPLY WITH REQUIREMENTS</b>	\$4.2 million capital costs; \$3.5 million operating costs

For the past 10 years, Ceres has negotiated with the Regional Board regarding permit issues. The City's original plan was to upgrade the system from aerated lagoons with discharge to percolation ponds, to building a new tertiary facility with surface discharge to the San Joaquin River (circa 1991). Regional Board staff have advised over a period of several years that it would prefer Ceres to continue to discharge to its percolation ponds. Board reasons for this preference as opposed to land discharged has ranged from heavy metals to salt requirements.

Running short on capacity, the City has shelved the tertiary treatment/surface discharge plans due to the extreme cost that would be required by the reverse osmosis treatment that would be necessary to meet discharge requirements. In 1998, staff submitted a land disposal option to the City Council for approval. This became the City's primary goal for disposal, and staff began working toward designing the infrastructure and acquiring additional property. The Regional Board then advised the City that it had changed its position due to its Anti-Degradation policy, and was no longer in favor of the City adding conventional percolation ponds for effluent disposal. To sum up the Regional Board's message to the City of Ceres: *we don't want you in the river, and we don't want you to discharge to land either.*

The Regional Board has most recently advised that it would support discharge to new percolation ponds at agronomic rates, which would be 19% of the volume that would be disposed of conventionally, with the rationale that more percolation ponds would degrade the groundwater. This rationale is difficult to comprehend, given that the new percolation ponds were to be built directly across the street from the existing percolation ponds, and up until 1993, the land had been permitted by the Board for seasonal discharge. Therefore, the Regional Board is now prohibiting a practice which has been permitted for over 20 years, basically on the same plot of land.

**WASTEWATER NEEDS – COMMUNITY CASE STUDY**

<b>NAME OF COMMUNITY:</b>	City of Clovis (Fresno County)
<b>POPULATION</b> (please list source used, i.e., per 2000 Census)	75,977 (Dept. of Finance)
<b>MEDIAN INCOME</b> (please list source used)	\$42,283 (2000 Census)
<b>CURRENT WASTEWATER/SEWER USER RATE:</b>	\$15.88/mo. for a single family residence
<b>TOTAL POTENTIAL COSTS IN NEXT 5 YEARS TO COMPLY WITH REQUIREMENTS</b>	Undetermined pending resolution of ability to beneficially reuse reclaimed water within the corporate limits
<p><b>PROBLEM STATEMENT</b> <i>Briefly (in one or two sentences) state the problem your community has with the current NPDES permitting scheme.</i></p> <p>Local Regional Water Quality Control Board staff member’s opposition to the use of reclaimed water for irrigation purposes within the corporate limits.</p>	
<p><b>DESCRIBE THE NATURE OF YOUR COMMUNITY’S WASTEWATER NEEDS OR DIFFICULTY IN COMPLIANCE WITH BASIN PLAN</b></p> <p>In 1993 the City adopted a new General Plan that identified growth areas. In 1994, the City undertook an update of both the City’s Seer and Water Master Plans. A primary element of the Water Master Plan was the preparation of a water budget for the community both at the current time and as the community approached buildout of the proposed General Plan area. The water budget examined all of the water sources available to the City and estimated future buildout demand. The Water Budget illustrated that the City and the Fresno/Clovis Metropolitan area had long been overdrafting the underlying groundwater supplies. Pumping for domestic use was occurring at a rate that was significantly higher than actual recharge. Consequently, the local groundwater table has been dropping rapidly over the last 50 plus years.</p> <p>To reverse this trend, the City’s Water Budget calls for the City to pursue groundwater recharge, the construction and implementation of a surface water plant, and reuse of reclaimed water. To fully serve the Community’s water demands at buildout and not overdraft the available groundwater supplies, the City must meet about 20 of the community’s demands by utilizing reclaimed water.</p> <p>Initially (beginning in 1993) and up until December of 2002, the local RWQCB staff had expressed support and encouragement regarding the City’s plan to reclaim water for reuse by the community to meet irrigation needs. The RWQCB staff participated in the development of the City’s Wastewater Master Plan Update that incorporated the goal of utilizing reclaimed water within the City for irrigation. The RWQCB staff unexpectedly reversed their position in December of 2002 and indicated that while they realized that the metro area is overdrafting, that is not an issue of significant concern for them. Rather, they are primarily concerned that the reclaimed water may contain a higher level of salts and could contribute to the degradation of the underlying groundwater. This is inconsistent with the Tulare Lake Basin Plan, which in Chapter IV indicates,</p>	

“The elimination of overdraft is an important step in managing the rate of salinity increase in the groundwater.” In addition, it states with regard to wastewater reclamation that “Discharges to surface water and evaporation of reclaimable wastewater will not be acceptable permanent disposal methods where opportunity exists to replace an existing use or proposed use of fresh water with reclaimed water.” In addition, SWRCB Resolution No. 77-1 states, “The State Board and the Regional Boards shall (1) encourage reclamation and reuse of water in water-short areas of the State.”

The City is acutely concerned about the apparent incompatible interpretation of the Basin Plan and existing State policy regarding use of reclaimed water.

**WASTEWATER NEEDS – COMMUNITY CASE STUDY**

<b>NAME OF COMMUNITY:</b>	City of Dinuba (Tulare County)
<b>POPULATION</b>	17,400 (Dept of Finance, 2001)
<b>MEDIAN INCOME</b>	
<b>CURRENT SEWER USER RATE:</b>	\$14.95 mo.
<b>TOTAL POTENTIAL COSTS IN NEXT 5 YEARS TO COMPLY WITH REQUIREMENTS</b>	\$12.5 million capital costs; \$5 million operating costs

The City of Dinuba’s wastewater treatment facility was recently upgraded to full secondary treatment capacity of 3.1 millions of gallons per day. All effluent is sent to evaporation/recharge ponds. The City consistently meets all discharge requirements regarding biological and chemical water quality constituents for the plant effluent. The Central Valley Regional Water Quality Control Board has set a requirement that the underlying groundwater under the plant shall not “contain waste constituents in concentrations statistically greater than...background water quality...”. The Board considers compliance to mean “no statistically significant increase over water quality protection standards”. The problem is that the Board is using drinking water quality standards as the basis for enforcement. In essence, they are asking wastewater treatment plants to produce drinking water. Due to past farming practices, the entire upper aquifer to which the treatment plant water is discharged is already contaminated with nitrates and pesticides (DBCP in particular) which make it unfit for drinking. So the question becomes: what beneficial use is the Board trying to protect by requiring wastewater treatment plants to produce drinking water for disposal into an aquifer already contaminated?

To comply with the Board’s requirements, the City would need to construct a reverse osmosis tertiary treatment plant to reduce nitrates and electrical conductivity. In addition, the Board will require lined sludge drying beds.

**To comply with the Board’s requirements, residential sewer user rates will increase from current rate of \$14.95 per month to \$48.28 per month.**

**WASTEWATER NEEDS – COMMUNITY CASE STUDY**

<b>NAME OF COMMUNITY:</b>	Fresno/Clovis – Fresno/Clovis Regional Reclamation Facility
<b>POPULATION</b> (please list source used, i.e., per 2000 Census)	Fresno – 441,900 Clovis – 75,977 (Dept. of Finance)
<b>MEDIAN INCOME</b> (please list source used)	\$42,283 (2000 Census)
<b>CURRENT WASTEWATER/SEWER USER RATE:</b>	Fresno - \$16.50/month Clovis - \$15.88/month
<b>TOTAL POTENTIAL COSTS IN NEXT 5 YEARS TO COMPLY WITH REQUIREMENTS</b>	\$30 - \$68 million in addition to current operating expenses and capital improvement expenses necessary to meet growth.
<p><b>PROBLEM STATEMENT</b> <i>Briefly (in one or two sentences) state the problem your community has with the current NPDES permitting scheme.</i></p> <p>The Water Code provides that it is the policy of the State that factors affecting water quality shall be regulated to attain the highest quality that is <i>reasonable</i>, taking into consideration the demands on the waters and the values involved, including economics. The Waste Discharge Requirements (discharge permit) for the Fresno/Clovis Regional Wastewater Reclamation Facility imposed groundwater limitations that will force the elimination of the current effluent disposal/reclamation operation or the expenditure of \$30 to \$68 million per year to construct and operate significant improvements to achieve compliance with these limitations.</p>	
<p><b>DESCRIBE THE NATURE OF YOUR COMMUNITY’S WASTEWATER NEEDS OR DIFFICULTY IN COMPLIANCE WITH BASIN PLAN</b></p> <p>Fresno/Clovis Regional Wastewater Reclamation Facility (RWRF) is regulated under Waste Discharge Requirements (WDR) rather than an NPDES permit; however, most of the same issues apply. Fresno and Clovis are particularly concerned with the groundwater limitations contained in the current WDR for the RWRF. The RWRF discharges 100% of the effluent from the facility to land, approximately 76,000 acre-feet annually. Approximately 8,000 acre-feet of the treated wastewater is reused each year for direct agricultural irrigation. The remainder of the treated effluent is sent to evaporation/percolation ponds. Each year approximately 30,000 acre-feet of effluent percolated to the groundwater is reclaimed through pumping and distribution to irrigation canals.</p> <p>The current interpretation of the Basin Plan requirements sets groundwater quality standards that will force the RWRF to eliminate the current effluent disposal/reclamation operation or force the expenditure of \$30 to \$68 million per year to construct and operate significant improvements to achieve compliance with these groundwater limitations. The Best Practical Treatment and Control Study and groundwater monitoring programs required under the WDR will determine the necessary improvements. Because of the extreme cost associated with continuing land disposal; practice, thereby undermining the State’s goal of promoting reclamation and reuse whenever possible. This expenditure is not justified as there is <i>no evidence that the groundwater limitations are necessary to protect the environment or beneficial uses of the groundwater.</i> The requirements will force the</p>	

RWRF to expend millions of dollars with no identified public health benefit. These requirements are not consistent with the Water Code's requirement that activities which affect the quality of waters of the State shall be regulated to attain the highest water quality which is reasonable, and that WDRs be reasonable and based on a consideration of probable beneficial uses, economics and other public interest factors.

The WDR also contains language that makes the RWRF liable for groundwater impacts over which it has no influence or control. The RWRF may potentially be held responsible for impacts to groundwater from other area land users that are not related to the RWRF's discharge.

**WASTEWATER NEEDS – COMMUNITY CASE STUDY**

<b>NAME OF COMMUNITY:</b>	City of Lathrop (San Joaquin County)
<b>POPULATION</b> (please list source used, i.e., per 2000 Census)	11,585 (2003 State Department of Finance)
<b>MEDIAN INCOME</b> (please list source used)	\$35,853 (2000 U.S. Census)
<b>CURRENT WASTEWATER/SEWER USER RATE:</b>	
<b>TOTAL POTENTIAL COSTS IN NEXT 5 YEARS TO COMPLY WITH REQUIREMENTS</b>	\$40,000,000+
<p><b>PROBLEM STATEMENT</b> <i>Briefly (in one or two sentences) state the problem your community has with the current NPDES permitting scheme.</i></p> <p>The City of Lathrop is a new city (less than 15 years) and does not currently have an NPDES permit for discharge of wastewater effluent (“recycled water”). Despite an expensive program to expand existing treatment facilities to high quality standards (safe for unrestricted re-use on land and safe for human contact), the City is precluded from even applying for an NPDES permit under the current permitting scheme.</p>	
<p><b>DESCRIBE THE NATURE OF YOUR COMMUNITY’S WASTEWATER NEEDS OR DIFFICULTY IN COMPLIANCE WITH BASIN PLAN</b></p> <p>Lathrop completed a comprehensive master plan for potable water delivery, wastewater treatment and recycled water reuse in July of 2001. The plan calls for up to three treatment facilities (called “water recycling plants” since the effluent produced is commonly known as recycled water when applied to land) that would produce high quality effluent safe for human contact. The goal is to maximize the use of land for disposal where practicable and economical and defer the need to discharge the recycled water to the San Joaquin River until absolutely necessary.</p> <p>Lathrop does not currently have a permit (NPDES permit) for the discharge of recycled water to the river. Lathrop does however, share a regional wastewater treatment facility with the City of Manteca that currently meets the majority of the existing City’s needs, but cannot meet Lathrop’s future growth, since Lathrop is limited to 14.7% of the total capacity of the Manteca plant. The Manteca facility does have an NPDES permit for discharge to the San Joaquin River, but is having problems with renewing its permit. In addition to the Manteca facility, Lathrop currently has a small treatment plant (“Wastewater Recycling Plant No. 1”). This facility will be expanded and upgraded in 2003 and 2004 to meet the high quality standards called out for in the City’s master plan and to accommodate new commercial and residential growth. The expansion will utilize ponds to store recycled water in the winter months and use the recycled water for irrigation of agricultural land and landscaping in parks and other open space during the summer. Despite Lathrop’s commitment to maximizing the use of land for disposal of recycled water and upgrade facilities to the highest treatment standards available, the State will not permit Lathrop to apply for an NPDES permit for discharge, even if this permit was restricted to a winter-only discharge to the San Joaquin River. It is reasonable to limit the NPDES permit to the winter instead of year-round because:</p>	

1. Lathrop is committed to a recycled water program that recognizes recycled water as a valuable resource and reduces the use of precious potable water for irrigation purposes,
2. While the cost of providing a separate recycled water pipeline and delivery system, along with land dedicated for recycled water disposal is expensive, providing permanent land sites for storage of recycled water becomes economically infeasible overtime, since the lands being utilized must be in urban areas where the cost of land per acre is very high, and
3. Discharge during the wet winter months when water flow in the river is highest provides the best opportunity for dilution of the recycled water and provides the least impact to water quality and to aquatic life (fish). Lathrop's master plan envisions, under buildout conditions of the City's general plan, full re-use of recycled water during the summer would be achieved with discharge only during the winter. This policy is sound and appropriate.

The City of Lathrop's concerns the basin plan are two-fold:

1. Lathrop cannot utilize percolation/evaporation ponds (ponds that let recycled water "sink" into the groundwater – much cheaper to build than storage ponds) because the City has high groundwater levels that don't allow recycled water percolate fast enough under current basin plan restrictions. The State Regional Board will no longer permit the use of percolation/evaporation ponds in Lathrop since the such ponds cannot meet the Regional Board's requirement for a five-foot minimum separation between groundwater and the bottom of the pond (commonly referred to under the State's "Anti- Degradation Policy"). This has necessitated the City to move toward the much more expensive "store and spray" method of disposal described above. Lathrop is willing to make this commitment since it is environmentally superior to percolation/evaporation. However, this high cost cannot be carried out under buildout conditions of the City in the future.
2. A proposed "outfall" (pipe used to discharge recycled water) to the San Joaquin River, even for use during the wet winter months, will not be considered by the Regional Board staff. As explained, this discharge requires the issuance of an NPDES permit. The City has been told by Board staff that ongoing studies of San Joaquin River water quality for drinking purposes and for fish are causing a very stringent view of renewals for existing permits and a policy to prohibit new discharges while these studies are going on. Board staff has indicated that any new application for discharge will not likely be recommended for approval and that even if such an application were approved, environmental groups (such as the "Deltakeeper" and the Sierra Club) would likely challenge the permit in the courts. Such a policy is inherently unfair to Lathrop, who is meeting much higher standards than other cities in the basin that already has an NPDES permit and are allowed to discharge to a river or surface watercourse. Lathrop remains committed to the highest quality of effluent/recycled water economically possible and should be allowed to discharge during the winter months for the reasons described earlier in this paper.

The inability to eventually have an NPDES permit approved for discharge to the San Joaquin River would have a devastating economic impact to Lathrop, since the City could not fully develop to its already limited potential under its adopted general plan. The "one, two punch" of the Anti-Degradation Policy and the prohibition of a surface water permit for a new discharger make it

nearly impossible for Lathrop to realize its economic potential. The City is located in San Joaquin County, which has one of the highest unemployment rates in the nation. Lathrop has built a considerable industrial employment base for its size, but cannot continue its mission to increase jobs and provide affordable housing if it is forced to continue to store recycled water (in large holding ponds) during the winter months of the year when irrigation of land cannot be achieved. The amount of water to hold and irrigate recycled water would be enormous under buildout conditions of the City. The areas needed are very large and the cost of land in the region is already inflated due to development pressures and the physical and political boundaries that already limit the City's ability to grow (such as Delta Protection Act lands). The City feels that the issues are far less scientific and technical and have become more political in nature. Recognition of a level playing field for discharge permits is all that is being asked for, with a reasonable interpretation of the Basin Plan and its related policies.

**WASTEWATER NEEDS – COMMUNITY CASE STUDY**

<b>NAME OF COMMUNITY:</b>	City of Lodi
<b>POPULATION</b> (please list source used, i.e., per 2000 Census)	60,520 (California Dept. of Finance)
<b>MEDIAN INCOME</b> (please list source used)	\$39,570 (2000 Census)
<b>CURRENT WASTEWATER/SEWER USER RATE:</b>	\$12.97/mo per 2 bedroom
<b>TOTAL POTENTIAL COSTS IN NEXT 5 YEARS TO COMPLY WITH REQUIREMENTS</b>	±40,000,000
<p><b>PROBLEM STATEMENT</b> <i>Briefly (in one or two sentences) state the problem your community has with the current NPDES permitting scheme.</i></p> <p>Unable to meet permit requirements without significant process upgrades.</p>	
<p><b>DESCRIBE THE NATURE OF YOUR COMMUNITY’S WASTEWATER NEEDS OR DIFFICULTY IN COMPLIANCE WITH BASIN PLAN</b></p> <p>The City of Lodi will need to expend approximately \$40 million in improvements to meet current discharge requirements. This amount may increase if new requirements currently proposed in other permits are applied to Lodi’s discharge.</p>	

## WASTEWATER NEEDS – COMMUNITY CASE STUDY

<b>NAME OF COMMUNITY:</b>	City of Merced (Merced County)
<b>POPULATION</b> (please list source used, i.e., per 2000 Census)	66,037 (Census) 70,907 population served by WWTP
<b>MEDIAN INCOME</b> (please list source used)	\$35,532
<b>CURRENT WASTEWATER/SEWER USER RATE:</b>	\$17.08
<b>TOTAL POTENTIAL COSTS IN NEXT 5 YEARS TO COMPLY WITH REQUIREMENTS</b>	\$14,000,000 just to bring the plant back to capacity to 10mgd \$35+ million additional will be needed to meet future needs and permit requirements
<p><b>PROBLEM STATEMENT</b> <i>Briefly (in one or two sentences) state the problem your community has with the current NPDES permitting scheme.</i></p> <p>The current basin plan must be amended as it's related to PH, turbidity, and temperature criteria. Requirements currently being imposed on dischargers to EDWs are nonsensical and a policy dealing with EDWs should be established by the SWRCB. Development of a site-specific basin plan amendment is necessary.</p>	
<p><b>DESCRIBE THE NATURE OF YOUR COMMUNITY'S WASTEWATER NEEDS OR DIFFICULTY IN COMPLIANCE WITH BASIN PLAN</b></p> <p>The City of Merced's wastewater treatment plant's NPDES permit, renewed by the RWQCB in October 2000, requires as supported by the Basin Plan: (1) restriction of PH discharge to between 6.5 to 8.5 standard units and further to not change background pH by more than 0.5 standard units, and (2) not raise background temperature by more than 5 degrees. Requirements currently being imposed on dischargers to Effluent Dominated Waters are nonsensical and a site-specific policy dealing with EDWs should be established by the SWRCB.</p> <p>About 20% of Merced's treatment plant effluent (treated to secondary standards) is used to sustain a wetland habitat area. The remaining 80% is discharged to Hartley Slough, an agricultural drain. The majority of the effluent in Hartley Slough is used for agriculture, with the remainder going to a duck club to sustain waterfowl habitat to provide feed and resting areas. Use of treated effluent for these purposes eliminates the need to pump an equal amount of groundwater from the borderline overdrafted Merced Basin, resulting in "in lieu" recharge and substantial energy savings.</p> <p>The difficulty and high cost of meeting Basin Plan requirements, combined with the extreme demographics in our service area, will hurt many of our citizens that must choose daily between food, shelter and healthcare. Doubling our monthly service charges for expenditures that provide no real environmental benefit will hurt the very citizens we are sworn to serve.</p>	

### WASTEWATER NEEDS – COMMUNITY CASE STUDY

<b>NAME OF COMMUNITY:</b>	City of Porterville (Tulare County)
<b>POPULATION</b>	40,625 (Dept of Finance, 2001)
<b>MEDIAN INCOME</b>	\$36,800
<b>CURRENT SEWER USER RATE:</b>	\$21.74
<b>TOTAL POTENTIAL COSTS IN NEXT 5 YEARS TO COMPLY WITH REQUIREMENTS</b>	\$8 million

The City of Porterville’s wastewater treatment facility was expanded in 1994 to 8,000 gallon per day capacity; at that time, all state and federal requirements were met. All treated effluent is piped to land west of the Porterville Airport and used for agricultural irrigation or percolation. All bio-solids are pumped to lined drying beds west of the Porterville Airport.

In the year 2000, the Regional Water Quality Control Board issued tentative Waste Discharge Requirements and Cease and Desist Order **requiring an estimated \$53 million worth of additional requirements.** These requirements consisted of constructing 450 acres of double lined storage ponds to store water in the winter.

Porterville spent approximately \$100,000 for attorneys and consultants to appeal the additional requirements. The City’s position was that storage and agricultural irrigation would result in higher concentrations of nitrates and total dissolved solids entering the groundwater than if Porterville percolated the water into the ground in the winter. In April 2001, after months of negotiation, the Waste Discharge Requirements and Cease and Desist Order were amended and adopted, leaving Porterville with an estimated \$8 million worth of work to lift the Cease and Desist Order. Porterville has appealed the requirements to the State Water Resources Control Board, and requested that the appeal be held in abeyance until Porterville has an opportunity to determine how the Regional Water Quality Control Board staff will interpret the requirements.

Porterville’s position is that it would prefer to use the wastewater discharge method which protects the groundwater best at the least cost.

### WASTEWATER NEEDS – COMMUNITY CASE STUDY

<b>NAME OF COMMUNITY:</b>	City of Stockton (San Joaquin County)
<b>POPULATION</b>	243,771 (Census 2000) 310,000 population served by WWTP
<b>MEDIAN INCOME</b>	\$28,567 per household median income (1999, per Stockton Chamber of Commerce)
<b>CURRENT SEWER USER RATE:</b>	SFR – \$18.33 per month; MFR -\$17.27 per month;
<b>TOTAL POTENTIAL COSTS IN NEXT 5 YEARS TO COMPLY WITH REQUIREMENTS</b>	\$121 million

Stockton’s treatment plant effluent (treated to secondary/tertiary standards) is discharged to the San Joaquin River. By the time the San Joaquin River reaches Stockton, it consists mainly of agricultural drainage, heavily laden with agricultural chemicals and fertilizers. The River is also on the State’s 303(d) list for low dissolved oxygen. Rather than to address water quality issues by limiting discharges of pollutants further upstream, the Regional Water Board has imposed extremely strict requirements on the City’s wastewater discharge. The Tentative NPDES Permit removed all the dilution credits available from the discharge, which essentially means Stockton is being considered as a discharger to a lake.

This is not correct. The San Joaquin River flows continually to the Delta, but is influenced by tide reversals. During tide reversals, the flow velocity stops and changes direction, but the volume still increases because the river flow does not stop. Therefore, our scientists have shown that there should be dilution credits applied and the river modeling results have confirmed that. Stockton’s river model has been reviewed by EPA’s river modeling experts and has been declared by them to be accurate.

Because Regional Board staff has allowed no dilution credits, Stockton has been ordered to complete additional studies, which will be very costly:

Human Carcinogen Impact Study	(\$200,000 for Phase II)
Pollution Prevention Plan	(\$15,000 for initial draft)
Groundwater Monitoring Plan	(\$20,000 for initial draft)
Groundwater Well Installation Report	(\$20,000 for initial draft)
Groundwater Monitoring Evaluation Report (If wells are installed)	(\$300,000 including wells)
TIE/TRE Work Plan	(\$30,000 for initial work only)
Treatment Feasibility Report	(\$300,000 for draft)
Could lead to Construction	(\$50 to 120 Million)
Offset Program Report	(\$40,000 for initial draft)
Dissolved Oxygen Report	(\$100,000 for initial draft)
TDS Reduction Report	(\$100,000 for initial draft)
Nitrate Study	(\$100,000 to \$200,000 to start)

On the low end, this equates to a cost of \$1,225,000 for special studies and after the reviews are complete, the cost will be higher. Additionally the Permit requires a time schedule for full Title 22 Treatment compliance at an estimated cost of \$20 Million.

**WASTEWATER NEEDS – COMMUNITY CASE STUDY**

<b>NAME OF COMMUNITY:</b>	City of Tracy
<b>POPULATION</b> (please list source used, i.e., per 2000 Census)	69,000 (CA. Dept. of Finance – Jan. '03)
<b>MEDIAN INCOME</b> (please list source used)	
<b>CURRENT WASTEWATER/SEWER USER RATE:</b>	\$17.50 per month for single family home
<b>TOTAL POTENTIAL COSTS IN NEXT 5 YEARS TO COMPLY WITH REQUIREMENTS</b>	\$67 million construction cost
<p><b>PROBLEM STATEMENT</b> <i>Briefly (in one or two sentences) state the problem your community has with the current NPDES permitting scheme.</i></p> <p>Unreasonably stringent wastewater discharge requirements result in the need for very complex treatment facilities that are both expensive to construct, operate and maintain.</p>	
<p><b>DESCRIBE THE NATURE OF YOUR COMMUNITY’S WASTEWATER NEEDS OR DIFFICULTY IN COMPLIANCE WITH BASIN PLAN</b></p> <p>The unreasonably stringent wastewater discharge requirements result in the need for very complex treatment facilities that are both expensive to construct, operate and maintain.</p>	

**WASTEWATER NEEDS – COMMUNITY CASE STUDY**

<b>NAME OF COMMUNITY:</b>	City of Tulare (Tulare County)
<b>POPULATION</b> (please list source used, i.e., per 2000 Census)	46,250 (Ca. Department of Finance)
<b>MEDIAN INCOME</b> (please list source used)	\$33,637 (2000 Census)
<b>CURRENT WASTEWATER/SEWER USER RATE:</b>	\$15.52 single family/mo.
<b>TOTAL POTENTIAL COSTS IN NEXT 5 YEARS TO COMPLY WITH REQUIREMENTS</b>	\$38.6 million (Requires a three-year, 15% per year rate increase for financing.)
<p><b>PROBLEM STATEMENT</b> <i>Briefly (in one or two sentences) state the problem your community has with the current NPDES permitting scheme.</i></p> <p>Basin Plan has a numeric limit for electrical conductivity (salts) in the effluent. Basin Plan provides a credit for organic salts to food processors discharging to land, but not to POTWs.</p>	
<p><b>DESCRIBE THE NATURE OF YOUR COMMUNITY’S WASTEWATER NEEDS OR DIFFICULTY IN COMPLIANCE WITH BASIN PLAN</b></p> <p>The City of Tulare will be required to construct \$38.6 million of improvements to the wastewater treatment plant in the next seven years to comply with the Cease and Desist Order. Industry will be required to invest heavily to remove electrical conductivity (EC) from their wastewater before discharging to the sanitary sewer system for treatment in the POTW in order to meet Basin Plan requirements.</p> <p>The level of industry pre-treatment would be reduced if the Tulare Lake Basin Plan provided credit for the organic salts to POTWs, as the Basin Plan provides for land application of food processing wastewater. One plant at the POTW treats nothing but food processor waste and applies the effluent to land. Further, a portion of the EC is from ions beneficial to plants such as calcium and magnesium and should be credited. The Regional Water Quality Control Board has made review of the organic salts and beneficial ions issue a high priority in the last two Basin Plan updates, but does not have the staff hours available to do the work.</p>	

## WASTEWATER NEEDS – COMMUNITY CASE STUDY

<b>NAME OF COMMUNITY:</b>	City of Turlock (Stanislaus County)
<b>POPULATION</b>	61,305 (Dept of Finance, Jan 2003)
<b>MEDIAN INCOME</b>	\$ 39,050 (2000 Census)
<b>CURRENT SEWER USER RATE:</b>	Avg. Residential \$28.13
<b>TOTAL POTENTIAL COSTS IN NEXT 5 YEARS TO COMPLY WITH REQUIREMENTS</b>	\$25 to 125 million

The problem: The issuance of overly stringent waste discharge requirements by the Regional Water Quality Control Board, Central Valley Region, and U.S. EPA, without adequate justification or funding.

The City's 20 million gallon per day wastewater treatment facility serves the City of Turlock and the community service districts of Keyes and Denair. This facility currently discharges advanced secondary, disinfected wastewater to the constructed agricultural drain known as Turlock Irrigation District Lateral No. 5 Drain, approximately five miles upstream of the Drain's outlet to the San Joaquin River. The City recently completed the process of improving the facility with nitrification facilities. To fund the capital and operation costs of those new facilities, the City obtained over \$10 million in capital in 1998 by raising rates for its sewer service by 27 percent, phased in over three years, to cover the bond issuance, which included these capital funds.

In April 2002, the City Council approved an additional rate increase of approximately 90% over a four-year period in order to provide funding for approximately \$40 million in improvements mandated by the City's new waste discharge requirements and discretionary improvements. Although portions of the waste discharge requirements were remanded by the State Board to the Regional Board for reconsideration, the current permit continues to require the City to treat its wastewater to tertiary treatment standards by May 1, 2006.

For the City's industrial users, largely food processing companies, these recent rate increases represent a monthly increase from the 1999 level of \$9,900 per month to \$13,997 in 2003 and \$22,398 in 2006. An increase of over 125%. Residential rates will increase from 1999 rates of \$19.90 per month to \$28.13 in 2003 and \$45.00 in 2006. These rate increases will adversely affect the economic viability of the business, agricultural, and residential users served by the facility, without significant benefits to the environment. Despite the drastic adverse impacts of these new permit requirements the Regional Board has performed no analysis of the economic consequences versus the environmental benefits of these requirements.

The remanded portions of the permit would require the City's "end-of-pipe" effluent quality to meet drinking water standards and objectives for the most sensitive cold water aquatic habitats for spawning and migrating species *prior to its discharge to a constructed agricultural drain that also receives untreated waste and wastewater from other sources*. The Regional Board's reasoning is that, for the first time, all existing and potential beneficial uses of the San Joaquin River are applicable to, and designated for, the "tributary" agricultural drain.

For example, the City was being required to meet a standard for iron designed to avoid negative taste characteristics which iron can give drinking water. Water is not and should not be extracted from the agricultural drain for drinking water, for many reasons. Most importantly, the

agricultural drain is constructed specifically for agricultural use and carries irrigation tailwater inappropriate for domestic use. In addition, it has been documented to have high levels of fecal coliform and pesticides as a result of nearby land use. There has been no indication that the iron is actually causing a problem with any actual drinking water sources in the San Joaquin River, nor that there is any apparent benefit to this requirement. Limiting iron in treatment plant effluent is uncommon. It poses special difficulty because iron is one of the most plentiful elements in nature and may be contributed to the effluent by the metal infrastructure through which the water supply and sewage travels.

The remaining, non-remanded portions of the City's permit require construction of new tertiary treatment facilities that will result in advanced coagulation and filtration of the effluent and will meet new, more stringent requirements for constituents such as coliform, BOD, TSS, and turbidity. The reason for these requirements is the Regional Board's application of the Department of Health Services' ("DHS") requirements for reclamation projects (*i.e.* direct re-use with no intervening discharge to surface waters), recommended by DHS in a 1999 letter to the Regional Board. The City's permit states that the requirements are imposed primarily to protect future potential irrigated agricultural uses of the agricultural drain and water contact recreation. The Department of Health Services recommendations are not water quality standards that have been properly subjected to scientific or public review under the Clean Water Act and the State's Porter-Cologne Water Quality Act, and they are far more stringent than existing standards in the Basin Plan and related US EPA guidance. While the City's permit seeks to protect an agricultural interest, there is no indication that tertiary treatment would actually benefit agricultural uses, while the economic consequences of increased sewer rates will certainly have adverse effects to agricultural food processing businesses supporting the agricultural economy.

If re-imposed without adequate schedules of compliance in the City's permit, the remanded portions of the City's permit may place the City in immediate noncompliance (the City cannot immediately comply with many of the remanded requirements). Both federal and state law provide that the City is criminally and civilly liable for violations of its permit. The State Legislature has also enacted mandatory minimum daily penalties (*SB 709*) for violations of NPDES permit effluent limitations, and violations can also be enforced through third party civil lawsuits (*i.e.*, environmental groups suing to enforce requirements under citizen suit provision of the Clean Water Act).

Prior to the State Board's remand, the Regional Board addressed the consequence of the expected violations through the issuance of a Cease and Desist Order, which historically has represented an agreement by the Regional Board not to take enforcement action as long as the compliance schedule in the Cease and Desist Order is followed. The schedule in the Cease and Desist Order was unworkably short. Much more importantly however, such orders do not protect dischargers against third-party lawsuits. Many still misunderstand this issue.

For those requirements where a compliance schedule was included in the City's permit, the schedules were barely over three years long. This limited time frame would not provide enough time to study the cause of threatened exceedances, study potential methods of control and compliance, consider and select among alternatives, perform environmental review, fund necessary projects, and perform the necessary bid process and work for design and implementation.

In fact, the standards chosen by the Regional Board may make it economically irrational to do anything other than attempt to remove the City's effluent from the agricultural drain. Clearly, there is no easy fix in the form of source control. In order to weigh and implement the appropriate alternatives, it is critical that the City not be required to immediately begin design and implementation of additional costly treatment systems. Once appropriate limits are identified, in keeping with goals of the Clean Water Act related to construction of publicly-owned treatment works, the City should be entitled to obtain funding from sources other than the City's ratepayers.

## WASTEWATER NEEDS – COMMUNITY CASE STUDY

<b>NAME OF COMMUNITY:</b>	City of Visalia (Tulare County)
<b>POPULATION</b>	94,285 (2001 Dept. of Finance)
<b>MEDIAN INCOME</b>	\$36,800 (2001 HUD )
<b>CURRENT SEWER USER RATE:</b>	\$11.92 (Effective July 1, 2001)
<b>TOTAL POTENTIAL COSTS IN NEXT 5 YEARS TO COMPLY WITH REQUIREMENTS</b>	\$36.8 million

The City of Visalia completed an \$8.7 million wastewater treatment plant expansion to a capacity of 16.6 million gallons per day in spring 2000 using a \$2.75 million grant from the US Department of Commerce Economic Development Administration for industrial job growth. Visalia is currently designing a \$7.4 million treatment plant expansion to 20 mgd using \$2.675 million in Federal grants from EDA and HUD, along with a \$3.685 million Section 108 loan to provide for industrial job growth. The Federal focus has been to provide new value-added food processing jobs in the South Valley, such as cheese making, meat processing and produce canning, through adequate wastewater treatment capacity. The balance of the construction funds has been borrowed from Visalia's treatment plant replacement reserves, and sewer rates have been increased 15% over the last three years to repay those reserves. Visalia also provides wastewater treatment for the Goshen Community Services District.

Visalia discharges secondary treated effluent to Mill Creek with an NPDES permit, which is due for renewal in March 2002. The treated effluent is used for crop irrigation and groundwater recharge. Visalia is under a Regional Board Cease and Desist Order for violating the electrical conductivity limit in the Tulare Lake Basin Plan. To achieve compliance, Visalia issued a Cease and Desist Order to the local olive processing plant that was causing the violation. The olive plant found the cost of compliance to be too high, and ceased operations in Visalia with the loss of over 300 seasonal jobs and \$1 million in annual wastewater treatment revenue.

Visalia's concern with recent draft renewal permits in the Tulare Lake Basin is the Regional Board's requirement to store treated effluent in lined ponds during the winter months, so that the effluent is available for crop irrigation during the growing season. Visalia's treatment capacity of 20 million gallons per day will require 920 acres of 10-foot deep lined storage ponds, with an acquisition and construction cost of \$36.8 million. Financing this construction would require a 10% increase in the current sanitary sewer rate structure. This would have a significant negative impact on our efforts to attract new food processing industry and jobs, and may even cause existing industry to rethink their location options, especially when combined with California's energy problems.

The other concern Visalia has is with the electrical conductivity limit in the Tulare Lake Basin, because food processors typically discharge high Ec wastewater. It appears that the Federal government's goal of job creation through grant-funded wastewater treatment capacity expansion is at odds with the Regional Board's proposed discharge requirements.