TABLE OF CONTENTS

EX	ECUTIV	/E SUMI	MARY	iii
ΑB	BREVI	ATIONS		V
UN	ITS OF	MEASU	JRE	vi
ı	FLOW	/ REDU	CTION AND WETLANDS MITIGATION	1
	I-A	SOUTH	HBAY WATER RECYCLING	2
	I-B	INDUS	TRIAL RECYCLE AND REUSE	4
		<i>I-B1</i>	FLOW AUDIT STUDY	
		<i>I-B2</i>	INDUSTRIAL DISCHARGERS	5
		<i>I-B3</i>	INDUSTRIAL WASTEWATER REUSE GUIDELINES	
		<i>I-B4</i>	COOLING TOWER GUIDELINES	5
	I-C	INDOO	R WATER CONSERVATION	6
	I-D	GROU	NDWATER INFILTRATION	6
	I-E	MARSI	H MITIGATION	6
		I-E1	BAUMBERG TRACT	
		<i>I-E2</i>	MARSH MITIGATION PROJECT - MOSELEY TRACT	
		I-E3	BAIR ISLAND	7
II	POLL	UTANT	REDUCTION	9
	II-A	SJ/SC	WATER POLLUTION CONTROL PLANT	9
	II-B	THE PI	RETREATMENT PROGRAM	9
		II-B1	INDUSTRIAL WASTEWATER DISCHARGE MUNICIPAL CODE	9
		II-B2	DEVELOPMENT APPLICATION REVIEW	
		II-B3	INDUSTRIAL DISCHARGER RESEARCH STUDIES	
		II-B4	INDUSTRIAL POLLUTANT LOADING STATUS	10
Ш	RESE	ARCH A	AND SPECIAL STUDIES	11
	III-A	SPECI	AL EFFLUENT STUDY FOR CERTAIN ORGANIC POLLUTANTS	11
	III-B	MERCI	URY TMDL PARTICIPATION PLAN	11
	III-C	TRACE	ELEVEL MONITORING IN SOUTH SAN FRANCISCO BAY	12
	III-D	CALCL	JLATION OF TMDL FOR COPPER AND NICKEL IN SOUTH SAN FRANCISCO BAY	14
	III-E	SOUTH	H BAY MARSH HABITAT STUDY	14
	III-F	STREA	M FLOW AUGEMENTATION PILOT PROJECT	15
	III-G	WETLA	ANDS CREATION PILOT PROJECT	15
	III-H	AVIAN	BOTULISM	15
	III-I	LOCAL	EFFECTS MONITORING	16

	III-J	BIOASSESSMENT OF SOUTH BAY	16
IV	REGIO	ONAL COOPERATIVE EFFORTS	17
	IV-A	SANTA CLARA VALLEY URBAN RUNOFF POLLUTION PREVENTION PROGRAM	17
	IV-B	WATERSHED MANAGEMENT INITIATIVE	17
	IV-C	WATERSHED GRANTS	20
	IV-D	REGIONAL MONITORING PROGRAM	20
٧	OUTR	REACH	21
	V-A	FLOW REDUCTION OUTREACH	21
		V-A1 SOUTH BAY WATER RECYCLING OUTREACH	21
		V-A2 INDOOR WATER CONSERVATION OUTREACH	22
	V-B	POLLUTANT REDUCTION OUTREACH	22
		V-B1 REGIONAL OUTREACH	22
		V-B2 GENERAL OUTREACH	23
		V-B2.1 WEBSITE	23
		V-B2.2 PLANT TOURS	24
		V-B3 TARGETED OUTREACH	24
		V-B4 COMMERCIAL AND INDUSTRIAL OUTREACH	24

Appendix A

Clean Bay Strategy Timeline

Appendix B

Copper and Nickel Action Plan Status

EXECUTIVE SUMMARY

The City of San Jose (City) administers and implements the requirements of the National Pollutant Discharge Elimination System (NPDES) permit for the San Jose/Santa Clara Water Pollution Control Plant (Plant) on behalf of San Jose, Santa Clara and the Tributary Agencies. The City's continuing strategy is to focus on integrating local and regional programs to achieve cost-effective protection of the South San Francisco Bay (South Bay) as well as ongoing assessment of the programs to ensure continuous improvement.

This report documents permit activities during the period July 1, 2001 to December 31, 2001 and is specifically focused on those programs that have significant updates or modifications to report. The July annual report will include a comprehensive description of all programs and activities. The Clean Bay Strategy timeline is included in Appendix A.

Flow Reduction

Average Dry Weather Effluent Flows were maintained at 107.3 million gallons per day (mgd), well below the 120 (mgd) trigger for the 2001 dry season. The combined effort of all flow reduction programs contributed to this successful flow reduction. In particular the use of recycled water increased significantly compared to last year.

Marsh conversion analysis shows that salt marsh acreage in the study area has increased over the last 10 years. The City is continuing to monitor habitat marsh types and analyze contributing natural factors that impact vegetation type in the vicinity of the discharge.

Pollutant Reduction

The Plant has met all of its discharge limits for the reporting period.

Research and Special Studies

The City researches and performs special studies in order to better understand the South Bay ecosystem and the effect of the Plant's flow on its beneficial uses.

During the reporting period, the City provided support to the San Francisco Bay Regional Water Quality Control Board for the development of a Basin Plan amendment that will include site-specific objectives for copper and nickel. This amendment is the outcome of the copper and nickel Total Maximum Daily Load process that concluded with a finding that copper and nickel levels are unlikely to impair the South Bay.

Other study highlights this period include:

- Began a bioassessment program that could lead to site-specific environmental indicators for the South Bay.
- Controlled avian botulism outbreak during the summer.

Regional Cooperative Efforts

The City continued its active involvement in several regional cooperative efforts. Highlights included:

- Continued development of the Santa Clara Basin Watershed Management Initiative (WMI) Action Plan, including participation in a retreat in early January 2002 dedicated to the development of a stakeholder supported watershed action plan for the basin.
- State Task Force on Watershed Management selected the Santa Clara Watershed Management Initiative as one of the top 10 watershed projects in the State.

Outreach

The City is a partner in the successful Watershed Watch campaign launched in September 2001 by the Santa Clara Valley Urban Runoff Pollution Prevention Program and the WMI. In addition, the City participated in the development of a WMI brochure that includes the stakeholders' vision for the watershed in fifty years and opportunities for increased public participation in watershed protection and enhancement activities.

Next Steps

The City has begun developing a permit strategy for the Plant's next NPDES permit, the application for which is due in December 2002. The permit strategy is based on the watershed approach to permitting, which looks at programs broadly to direct resources to priority environmental issues; includes stakeholder involvement; and pursues focused, scientific special studies as a method to ensure a good technical basis for permit requirements. A first step in the preparation for the permit application was the assessment of the 1997 *Revised South Bay Action Plan* programs using cost-benefit methods, as described in the July 2001 *Clean Bay Strategy Report*. The City strives to continue its environmental leadership and will be revising its flow reduction programs to better address protection of habitat. This includes research on the positive effects of the Plant's flows on the South Bay ecosystem, as well as pursuing environmental enhancement opportunities. A stakeholder process on the permit approach is expected to begin during the summer of 2002.

ABBREVIATIONS

ADWEF Average Dry Weather Effluent Flow

Bay San Francisco Bay

BMM Watershed Management Initiative Bay Monitoring and

Modeling Subgroup

BACWA Bay Area Clean Water Agency
BAPPG Bay Area Pollution Prevention Group

CBS Clean Bay Strategy

CII Commercial, Industrial, Institutional

City of San José

EIR Environmental Impact Report ESD Environmental Services Department

FY Fiscal Year IU Industrial User

MFD Multi-Family Dwelling

NPDES National Pollutant Discharge Elimination System

Observatory San Francisco Bay Bird Observatory

Plant San José/Santa Clara Water Pollution Control Plant

POTW Publicly Owned Treatment Works

Regional Board San Francisco Bay Regional Water Quality Control Board

RSM Residual Sludge Management SBWR South Bay Water Recycling SFSU San Francisco State University

South Bay San Francisco Bay, South of Dumbarton Bridge

SSO Site Specific Objectives

Urban Runoff Program Santa Clara Valley Urban Runoff Pollution Prevention

Program

TMDL Total Maximum Daily Loads

Tributary Agencies Cities and Agencies Tributary to the Plant: San José; Santa

Clara; Milpitas; Cupertino Sanitary District; West Valley Sanitary District – Campbell, Los Gatos, Monte Sereno, and Saratoga; County Sanitation Districts 2 and 3, and Sunol and

Burbank Sanitary Districts

ULFT Ultra-Low Flush Toilet

U.S. EPA United States Environmental Protection Agency

Water District Santa Clara Valley Water District

WMI Santa Clara Basin Watershed Management Initiative

UNITS OF MEASURE

per o	day
	per

mgd

ppb

ppd

million gallons per day
parts per billion
pounds per day (lbs/day)
parts per million
parts per trillion ppm ppt

I FLOW REDUCTION AND WETLANDS MITIGATION

In response to marsh conversion and the need to protect endangered species' habitat, the City proposed the *San José Action Plan* in 1991. The San Francisco Bay Regional Water Quality Control Board (Regional Board) approved, and the City adopted, the *San José Action Plan* with a goal to reduce dry weather flows from the Plant to below 120 million gallons per day (mgd). The three main components of that plan were marsh mitigation, water conservation, and water recycling.

The City proposed a *Revised South Bay Action Plan (Action Plan)* in June 1997 that was approved and incorporated in the Plant's 1998 National Pollutant Discharge Elimination System (NPDES) permit.² The 1997 *Action Plan* called for expanding South Bay Water Recycling (SBWR), promoting industrial water recycling and reuse, expanding indoor water conservation, furthering inflow/infiltration reduction, and developing environmental enhancement projects.

Table 1 shows the flow for the year 2001. Note that the 120 mgd effluent requirement was met, with an Average Dry Weather Effluent Flow (ADWEF) of 107.3 mgd in July, August, and September.

Table 1: Year 2001 Plant Flows

MONTH	FLOW, mgd			
MONTH	INFLUENT	DIVERTED*	EFFLUENT	
January	125.9	1.5	124.4	
February	131.4	1.5	129.9	
March	131.8	2.6	129.2	
April	124.7	3.8	120.9	
May	124.0	9.9	114.1	
June	122.1	11.5	110.6	
July	118.9	12.1	106.9	
August	119.3	11.9	107.4	
September	117.4	9.8	107.6	
October	117.1	7.9	109.2	
November	119.1	4.9	114.2	
December	123.9	3.7	120.3	
Average	123.0	6.8	116.2	

^{*} Includes Recycled Water to SBWR distribution system, seasonal storage at the Plant, and Plant irrigation

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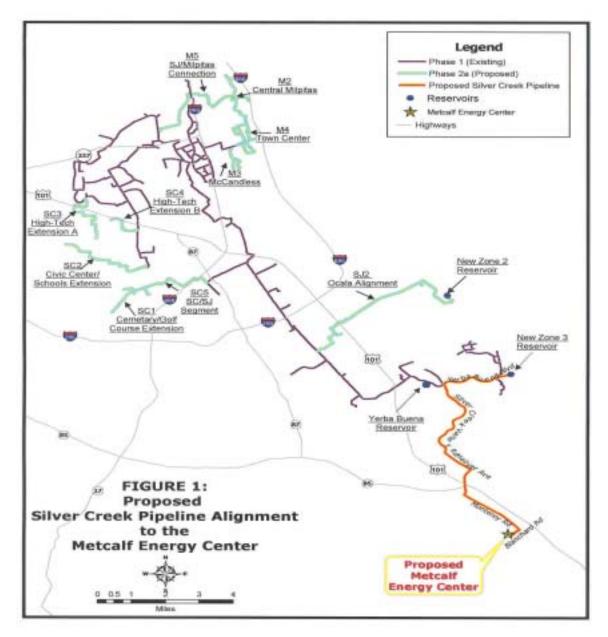
¹ In accordance with Board Order 91-152

² Board Order 98-052

I-A SOUTH BAY WATER RECYCLING

South Bay Water Recycling (SBWR) develops infrastructure and promotes the use of recycled water for landscape irrigation and industrial uses in San Jose, Santa Clara, and Milpitas. The goal of the program is to protect endangered species habitat at the southern end of San Francisco Bay, and to provide a reliable, drought-proof supply of recycled water for the benefit of the community.

Figure 1: PROPOSED SILVER CREEK PIPELINE ALIGNMENT TO THE METCALF ENERGY CENTER



During this reporting period, 28 new customers were brought online, bringing the total number of customers to 350 (See Figure 2).

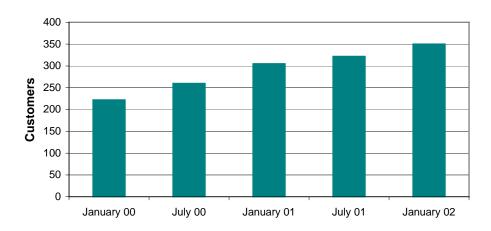


Figure 2: Total Number of SBWR Customers

With the growing need for new power sources in the state, the California Energy Commission recently approved construction of the Metcalf Energy Center located in Coyote Valley in South San Jose. The 600-Megawatt power generation facility has an expected peak demand of 5 million gallons per day (mgd) of recycled water.

In June of 2001, the San Jose City Council approved \$82.5 million for the design and construction of new projects, including the Silver Creek Pipeline to serve the proposed Metcalf Energy Center.

Negotiations for a partnership with Santa Clara Valley Water District (Water District) to expand the service area to the south are near completion. The Water District will share in the cost of future expansion and delivery of recycled water.

The monthly recycled water usage increased significantly for the 2001 dry weather season. Average use peaked at 10.1 mgd during the month of July (See Figure 3). The rate of month to month increase compared to the 2000 season ranged from 18% to 51%.

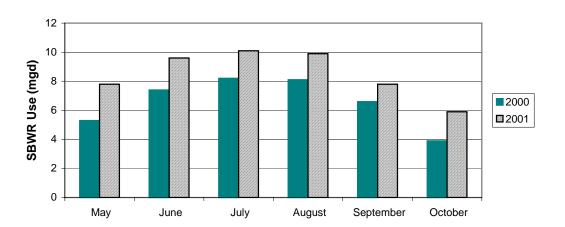


Figure 3: SBWR Monthly Usage

During the next six months, the program will continue implementation of the \$82.5 million design and construction of the new Phase 2 projects.

An industrial reuse initiative will provide technical support to local facilities in promoting the use of recycled water for industrial processes.

The SBWR program will start a six-month study on two Advanced Water Treatment technologies for salt removal in recycled water. This study is supported jointly by the City of San Jose, the Plant's tributary agencies, the Water District, and the United States Bureau of Reclamation, with additional funding from the WateReuse Foundation and the California Energy Commission.

I-B INDUSTRIAL RECYCLE AND REUSE

The objective of Industrial Recycle and Reuse efforts is to ensure that Industrial Users (IUs) in the Plant's service area are reducing the use of potable water, recycling their own wastewater, and/or using recycled water from SBWR in their facilities to the maximum extent practical.

I-B1 FLOW AUDIT STUDY

The second round of companies to complete Flow Audit Studies have been notified of their permit requirement to conduct an audit and have held kick-off meetings. There are eleven (11) companies with Flow Audit Studies in progress. The due date for these Flow Audit Studies is February 24, 2002.

Flow reduction projects completed as a result of the Flow Audit Study program will be reported annually in the July edition of the *CBS Report*.

I-B2 INDUSTRIAL DISCHARGERS

The City continued to work with industrial dischargers to reduce flows to the Plant by offering financial incentives (see section I-C2 for information on the Water Efficient Technologies program) and technical support. Figure 4 illustrates the net trend in industrial flows based on the average discharge for the previous 12 months since 1996.

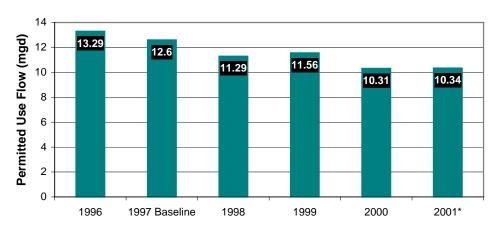


Figure 4: Industrial Flows

I-B3 INDUSTRIAL WASTEWATER REUSE GUIDELINES

No changes. A comprehensive report will be included in the July 2002 *CBS Report*.

I-B4 COOLING TOWER GUIDELINES

The City is developing guidelines for using recycled water from SBWR and/or reusing industrial process water in cooling towers. Draft guidelines have been developed. Final printing is targeted for Spring 2002.

^{*} Flow for year 2001 includes newly permitted non-industrial facilities such as hospitals and jails

I-C INDOOR WATER CONSERVATION

Indoor water conservation reduces the amount of water used indoors in residential, commercial, industrial and institutional settings and thus, the volume of wastewater ultimately flowing to the Plant and the South Bay. The City has an indoor water conservation goal of 5-8 mgd of flow reduction over the five years of the *Revised South Bay Action Plan*, with an annual flow reduction goal of not less than 1 mgd.

Water conservation programs are implemented in close partnership with the Water District. Both the City and the Water District administer programs and provide funding and/or outreach support for programs run by the other agency. Programs offer varying levels of incentive, depending on the program element and the sector served. Services include provision of low flow water fixtures (e.g., ultra-low flush toilets (ULFTs)), fixture installation, rebate offers, and site visits.

Since July 2001, the City has achieved an estimated 519,000 gallons per day (gpd) in flow savings, just over 50% of the 1 mgd minimum goal for the fiscal year (FY). More than 5.3 mgd of flow reduction has been achieved through indoor water conservation so far over the course of the *Revised South Bay Action Plan*. Table 2 includes a summary of program activity for the reporting period.

Table 2: Indoor Water Conservation Program Summary

Description	# Units	Flow Savings (gpd)
ULFT Programs	12,663	478,000
Clothes Washer Programs	2,299	41,000
Other Rebates	0	0
Total		519,000

During the remainder of the fiscal year, program implementation will continue. Program expansions and increased marketing will be used to bolster participation in elements that are currently behind schedule. A detailed report of water conservation programs and accomplishments will appear in the July 2002 *CBS Report*.

I-D GROUNDWATER INFILTRATION

No program changes. A comprehensive report will be included in the July 2002 *Clean Bay Strategy (CBS) Report*.

I-E MARSH MITIGATION

The City's contribution towards the purchase of the Baumberg Tract, the Moseley Tract, and Bair Island has made it possible for the City to fulfill its marsh mitigation requirement.

I-E1 BAUMBERG TRACT

A final update for this element was included in the July 1999 CBS Report.

I-E2 MARSH MITIGATION PROJECT - MOSELEY TRACT

Due to difficulties addressing joint use issues with Caltrans, the City is currently assessing salt marsh mitigation alternatives for the Moseley Tract.

I-E3 BAIR ISLAND

A final update for this element was included in the July 1999 CBS Report.

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II POLLUTANT REDUCTION

To reduce pollutants to the South Bay, the City uses a multi-faceted, continuous improvement approach involving infrastructure optimization, pretreatment programs, partnerships with industry, and special studies. The goal is to ensure that programs are efficient, cost-effective, and based on sound science.

II-A SJ/SC WATER POLLUTION CONTROL PLANT

The Plant effluent did not exceed any pollutant concentration or mass loading limit over the last six-month period (May – November 2001). This includes zinc concentrations, which experienced maximum concentrations ranging from 49 - 58 parts per billion (ppb) and monthly average concentrations of 41 - 53 ppb. A more detailed discussion of the Plant's pollutant reduction performance will be provided in the July 2002 *CBS Report*.

II-B THE PRETREATMENT PROGRAM

The City's Pretreatment Program regulates industrial dischargers and other critical users and encourages pollutant and flow reduction. The program is reviewing and rewriting its procedures to assist in increasing efficiency and consistency.

II-B1 INDUSTRIAL WASTEWATER DISCHARGE MUNICIPAL CODE

The City is still evaluating its current fee structure for Industrial Wastewater Discharge Permits. If these fees need to be changed, the City will update the municipal code to reflect these fee changes. The analysis is expected to be complete by the end of April 2002.

II-B2 DEVELOPMENT APPLICATION REVIEW

The Development Application Review Group continues to review projects from the City's Planning, Building, and Code Enforcement Department. The purpose of the reviews is to address issues affecting environmental programs and services. A summary of the group's activity is shown in Table 3.

9

Table 3: Development Application Review

Activity Summary				
Number of development applications reviewed for the following subjects:				
Recycled Water				
Water Efficiency	46			
Source Control	24			
Number of Environmental Impact Reports (EIRs) reviewed				

II-B3 INDUSTRIAL DISCHARGER RESEARCH STUDIES

Final report included in July 2000 CBS Report.

II-B4 INDUSTRIAL POLLUTANT LOADING STATUS

Permitted Industrial loading continues to be well below the 1997 baseline levels. Flows and copper loading from several Group 1³ Industrial Dischargers is almost half the levels from a year ago, due in large part to the slowed economy. A detailed analysis of industrial loading will be provided in the July 2002 *CBS Report*.

Table 4: Permitted Industrial Dischargers Copper and Nickel Loading and Flow to the Sanitary Sewer

Parameter		Permitted I	ndustrial Loadii	ng and Flow	
	1997	1998	1999	2000	20014
Copper, lbs/day	8.79	7.80	8.61	7.58	5.57
Nickel, lbs/day	6.36	4.96	4.85	4.35	3.66
Flow, MGD	12.60	11.29	11.56	10.31	10.38

³ Industrial User using copper or nickel in their process and discharging more than 0.04 pounds per day (ppd) of copper or 0.09 ppd of nickel.

⁴ All 2001 numbers are from January 1, 2001 to December 31, 2001. Also includes newly permitted non-industrial facilities.

POLLUTANT REDUCTION

III RESEARCH AND SPECIAL STUDIES

The City regularly works with other cities and agencies to perform special studies to better understand the impact of the effluent from the Plant on the South Bay. Recent studies include a Special Effluent Study for Certain Organic Pollutants, a Mercury Total Maximum Daily Load (TMDL) Participation Plan, Trace Level Monitoring in the South Bay, Calculation of TMDL for Copper and Nickel in South San Francisco Bay, and a Saltwater Marsh Conversion Study.

In addition to South Bay special studies, the City also studies the environmental benefits and effects of special projects such as the Stream Flow Augmentation Pilot.

III-A SPECIAL EFFLUENT STUDY FOR CERTAIN ORGANIC POLLUTANTS

A final update was included in the July 2001 CBS Report.

III-B MERCURY TMDL PARTICIPATION PLAN

The San Francisco Bay Estuary is listed as an impaired water body for mercury, and a Bay wide TMDL for individual mercury sources is currently being developed by the Regional Board. The Regional Board has also determined that total mercury loading into San Francisco Bay should be held at current levels until this TMDL is developed and implemented. Since January 2000, municipal and industrial dischargers have been using ultra-clean sampling and analytical methods for total mercury measurement to provide the highest quality information for TMDL development.

For this reporting period, Plant effluent monitoring for total mercury averaged 3 parts per trillion (ppt) and the mercury loading level has remained relatively unchanged.

The City will continue its participation on the Regional Board's Mercury Council, representing both the City and the Bay Area Clean Water Agency's Laboratory Committee. The City also has representation on the Council through the Urban Runoff Program. The Bay-wide mercury TMDL was not released by the Regional Board as scheduled in December and no new date has been estimated for its release. Workshops on the mercury TMDL were held on December 19-20, 2001. In addition to this Bay-wide effort, City staff will continue participation in the WMI's Watershed Assessment Subgroup, which serves as the stakeholder forum for the Guadalupe Watershed Mercury TMDL effort.

III-C TRACE LEVEL MONITORING IN SOUTH SAN FRANCISCO BAY

The City monitors various water quality parameters monthly at 12 sampling sites in the extreme South Bay. These sites represent deep channel, mid-channel, shallow mudflats, and areas of significant stream influence. Figure 5 shows the locations of these South Bay sampling stations. This monitoring program provides fundamental information describing the spatial and temporal trends in water quality to provide a better understanding of beneficial use impairments in the South Bay. This monitoring information also represents the basis for trigger levels in the *Copper and Nickel Action Plans* and their associated pollution control activities.

The Copper and Nickel Action Plans necessitate continued monthly monitoring of ambient water stations using dissolved metal concentrations as an indicator for overall pollution increases or decreases in the South Bay. Spatial trends in total copper and nickel remained similar to previous years' results, decreasing along a south to north gradient in the South Bay. Table 5 presents the individual station dissolved averages and the grand station dissolved means for the 2001 dry season monitoring. Ambient grand mean dissolved copper and nickel levels for the 2001 dry season remained well below the Action Plan trigger levels of 4.0 and 6.0 ppb, respectively.

Total mercury levels were again found highest in conjunction with suspended sediment, particularly near Calaveras Point. Highest suspended sediment normalized mercury concentrations were found at the Alviso Slough site (SB12).

The City will transmit a written report of the 2001 dry weather season monitoring results to both the Regional Board and the WMI's Bay Monitoring and Modeling (BMM) Subgroup in early 2002. This water quality monitoring program will continue throughout 2002.

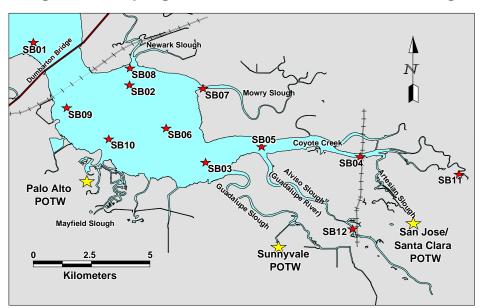


Figure 5: Sampling Locations for Trace Level Monitoring

Table 5: Station Means March- October 2001.

Station	Total Cu (ppb)	Dissolved Cu (ppb)	Total Ni (ppb)	Dissolved Ni (ppb)
SB 01	4.16	3.34	5.07	3.36
SB 02	5.16	3.42	7.94	3.94
SB 03	19.68	2.85	39.46	4.65
SB 04	13.60	2.33	28.08	6.18
SB 05	20.70	2.64	43.03	5.85
SB 06	6.88	3.47	11.99	4.57
SB 07	10.27	2.92	19.81	4.76
SB 08	6.44	3.56	10.31	4.58
SB 09	5.71	3.50	8.15	3.91
SB 10	7.62	3.49	12.42	4.50
SB 11	5.51	1.21	10.68	2.95
SB 12	13.45	1.07	26.84	3.03
Grand Mean	9.93	2.82	18.65	4.36

III-D CALCULATION OF TMDL FOR COPPER AND NICKEL IN SOUTH SAN FRANCISCO BAY

Since the October 2000 NDPES permit amendment, a detailed work plan has been implemented by the WMI's Bay Monitoring and Modeling (BMM) Subgroup to develop site-specific objectives (SSO) for both copper and nickel and to prepare the requisite Basin Plan Amendment language. Efforts have been focused on the preparation of the regulatory documentation, including the Basin Plan staff report and the specific Basin Plan Amendment language.

The activities over the period June 2001 to December 2001 focused on providing technical support to the Regional Board for the preparation of a Basin Plan Amendment for Copper and Nickel Site Specific Water Quality Objectives. BMM meetings were held on July 20, August 21, September 26, and October 15, 2001. The primary activities undertaken by the subgroup members during this period of time were:

- Review and discussion of the "Staff Report on Proposed Site-Specific Water Quality Objectives and Water Quality Attainment Strategies for Copper and Nickel for San Francisco Bay South of the Dumbarton Bridge".
- Review and discussion on the "Status of the Baseline Actions Status Update of Copper and Nickel Action Items in Action Plans & Permits"
- Review and discussion of peer-review comments on the technical documents (Conceptual Model Report, Impairment Assessment Report, Copper and Nickel Action Plans) that support the development of site-specific objectives. Peer reviews were conducted by Drs. Alex Horne and Ken Jenkins from the University of California, Berkeley.

The goal of this stakeholder process is to have the staff report and Basin Plan language finalized by the end of January 2002. Once the Basin Plan Amendment package has been finalized, the approval process will be initiated, followed by formal public notice, two Regional Board hearings, and public review and comment. The tentative timeframe for the first Regional Board hearing is February 2002. Upon approval by the Regional Board, the amendment will then be reviewed by the State Water Resources Control Board, the California Office of Administrative Law, and ultimately the United States Environmental Protection Agency (U.S. EPA).

III-E SOUTH BAY MARSH HABITAT STUDY

This study is a continuation of the long-term monitoring program designed to detect changes in habitat types within the estuarine marshes of the South Bay. The marsh studies, which began in 1989, are progressing as scheduled, and will be reported out more fully in our July 2002 annual report. The complete *Marsh Plant Associations of South San Francisco Bay: 2001 Comparative Study* is available on the Environmental Services Department's (ESD's) web site www.ci.san-jose.ca.us/esd under "Publications and Research."

III-F STREAM FLOW AUGEMENTATION PILOT PROJECT

The baseline monitoring program in Coyote Creek completed its third dry season sampling effort in 2001. In addition to the general water chemistry parameters measured in past seasons, this season included limited sampling for priority pollutants outlined in the State Implementation Policy (*Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California*). Priority pollutants were measured at two creek stations and in the recycled water.

This season also saw the addition of two upstream stations and the deletion of one downstream station. San Jose State University continued its monitoring of algae and flow in Coyote Creek and the two tributary streams. This baseline data will assist in evaluating the impact of recycled water on stream water quality and its potential benefit to aquatic life.

III-G WETLANDS CREATION PILOT PROJECT

A wetland creation pilot project using recycled water is one of the potential environmental enhancement projects currently under consideration. This project is in the preliminary study phase, and will be updated in the July 2002 CBS Report.

III-HAVIAN BOTULISM

During the period from June – November each year, the San Francisco Bay Bird Observatory (Observatory) monitors Artesian Slough, Coyote Creek, and Alviso Slough for the presence of avian botulism and other avian diseases. The Observatory conducts this monitoring program under contract to ESD. This study is part of a long-term monitoring program begun in 1982 and is a regulatory requirement of the Plant's NPDES permit. In conjunction with the avian botulism study, the Observatory also conducts a wildlife survey of the Artesian Slough, lower Coyote Creek, Alviso Slough, and bordering marshes each year.

Twenty-four surveys were conducted during the 2001 monitoring period. Environmental conditions were found to be conducive for the outbreak of botulism during the summer of 2001. Numerous outbreaks of avian botulism were reported throughout the Santa Clara Valley during this period.

ESD Laboratory staff provided prompt assistance with an avian botulism outbreak in the settling ponds of the Residual Sludge Management (RSM) area at the Plant. The prolonged heat wave in June and the below-normal precipitation in the spring contributed to this outbreak. From June through October, Laboratory staff patrolled the RSM area collecting sick and dead birds. Within a month of the initial

outbreak, the number of sick and dead birds tapered off appreciably. More than 190 sick birds were delivered to outside agencies for treatment. Nearly 1200 birds of various species (primarily ducks) succumbed to the disease. Annual reports on avian botulism and the wildlife survey will be available in early 2002.

The City will continue its avian botulism control program and wildlife survey program in 2002 as directed by NPDES permit requirements.

III-I LOCAL EFFECTS MONITORING

A final update was included in the July 1999 CBS Report.

III-J BIOASSESSMENT OF SOUTH BAY

The purpose of conducting bioassessment studies in the lower South Bay is to cooperatively develop, with academic and regulatory communities, bioassessment techniques that could lead to site-specific environmental indicators for the South Bay. On November 8, 2000, the Executive Officer of the Regional Board approved the City's bioassessment study, and required implementation pursuant to the schedule contained therein. The City worked with marine scientists from San Francisco State University's (SFSU's) Romberg Tiburon Center for Environmental Studies to implement the City's approved bioassessment program.

Since July 2001, the City has finalized the workplans with all parties necessary to implement the City's bioassessment program. A Technical Advisory Group was organized to provide program direction and technical review and to better facilitate interagency coordination in designing and conducting fieldwork and analysis. Stakeholder groups represented on the advisory committee include the United States Geological Survey, Interagency Ecological Program, U.S. EPA, San Francisco Estuary Institute, Regional Monitoring Program, Regional Board, SFSU, and the City. This group will begin meeting in early 2002.

Quarterly sampling events occurred in August and November 2001 to assess plankton community composition and conventional water chemistry in the South Bay. Acquisition of historical data has begun. This data will be used in a thorough quantitative analysis of plankton composition and abundance, and possible covariance with water quality conditions.

The City's bioassessment program will continue throughout 2002.

IV REGIONAL COOPERATIVE EFFORTS

The City is involved in a number of regional cooperative efforts including the Urban Runoff Program, the WMI, the Watershed Grant Program and the Regional Monitoring Plan. The primary goal of these efforts is to maximize efficiency and effectiveness by prioritizing issues and solutions and involving key stakeholders on a regional basis.

IV-A SANTA CLARA VALLEY URBAN RUNOFF POLLUTION PREVENTION PROGRAM

The work of the City's Urban Runoff Program is closely coordinated with the countywide efforts conducted by the Urban Runoff Program as well as with the work of the WMI.

In October 2001, the Regional Board adopted an order amending the 2000-2005 Storm water NPDES Permit (Order No. 01-024) provisions for new development and redevelopment. The order was adopted subsequent to a series of stakeholder forums to discuss the proposed revisions.

The City's Urban Runoff Program works with the WMI to meet the watershed management requirements in the permit, including integration of watershed management activities, production of assessment reports, and development of a multi-year monitoring program.

The City's Urban Runoff Program coordinates outreach efforts with the WMI through the Watershed Education and Outreach Ad Hoc Task Group, a joint work group of the WMI and the Urban Runoff Program. The WMI and the Urban Runoff Program, along with its media partners, initiated the Watershed Watch campaign in September 2001 (see Outreach section for more information).

For more details on the City's Urban Runoff Program's activities, the *City of San Jose Urban Runoff Management Plan Annual Report 2000-2001* is available upon request by calling (408) 945-3000.

The City will work with the Urban Runoff Program and the co-permittees to update workplans for permit program elements, due on March 1, 2002. In addition to the usual submittal, the Urban Runoff Management Plan will be revised, where necessary, and a workplan for the revised new development and redevelopment requirements and a pesticide workplan will be submitted.

IV-BWATERSHED MANAGEMENT INITIATIVE

Since 1996, the City has been an active participant in the WMI, a stakeholder-driven process that strives to improve conditions of the South San Francisco Bay (South Bay) by addressing all sources of impairment that threaten the water bodies draining into the South Bay. This collaborative effort includes representatives from state and federal regulatory agencies; regional and local public agencies; business

and industrial trade organizations; civic, environmental, resource conservation and agricultural groups; and the general public. The WMI is led by a policy-making body, the Core Group, and is supported by numerous subgroups and task-specific work groups. The City has committed significant staff and fiscal resources, as have the Water District, the cities of Sunnyvale and Palo Alto, and other stakeholders, to meet agreed-upon goals. City and tributary agencies staff are members of the Core Group and many subgroups. One of the goals of the WMI is to develop a community-based Watershed Management Plan for the Santa Clara Basin, which will allow for better protection and sustainability of the South Bay's natural resources.

Since July 2001, the following has been accomplished:

Joint Task Force on Watershed Management

In August and September 2001, City staff were part of a team interviewed by the State's Joint Task Force on Watershed Management. The Joint Task Force, which was formed by the California Resources Agency and the State Water Resources Control Board, named the WMI to the list of the State's Top Ten Watershed Management projects. This list recognizes the WMI for pioneering efforts to manage and restore California's watersheds. City staff worked with the Joint Task Force to provide an evaluation of the WMI on its collaborative process and coordination among agencies and interested parties in the implementation of watershed protection programs. City staff are now preparing for a visit by the California Resources Agency Secretary, scheduled for February 2002.

Watershed Assessment Report

The City participated in data analysis efforts as part of the watershed assessment for three pilot watersheds: Guadalupé River, San Francisquito Creek, and Upper Penitencia Creek. The results of the data analysis are being presented to stakeholders in January 2002. These results will be the basis for the *Watershed Assessment Report*, Volume 2 of *the Watershed Management Plan*. The assessment will be used to determine the watershed's ability to support the appropriate beneficial uses including salmon/steelhead fisheries, rare and endangered animal and plant species, water contact recreation, water supply uses, and flood protection.

Watershed Action Plan

City staff have continued to work on identifying and reviewing management actions that will go into the *Watershed Action Plan*, the third and final volume of the *Watershed Management Plan*. These action items will be used to identify tasks that need to be performed to achieve the implementation objectives of the WMI, and ultimately, the WMI goals. City staff have also participated in the formation of the work group that will be advising the preparation of the Watershed Action Plan.

Facilitation Contract

The City continues to manage its contract with MIG, Inc. to provide independent facilitation to the core group and subgroups as needed, as well as leadership on process issues, such as the evaluation of the process and value of the WMI. In

September 2001, MIG reported the results of a process survey conducted to evaluate the WMI process. Survey respondents suggested that the WMI process has improved and, consequently, has become a useful and systematic approach for developing a long-term management plan. Overall, the WMI was described as the best opportunity for restoring the watershed, as it continues to be refined and enhanced based on the experiences of its participants.

The following summarizes the next steps for the WMI:

- Continue providing resources and support for the Watershed Assessment Report and the Watershed Action Plan,
- Complete the *Watershed Action Plan* development,
- Disseminate the vision outreach brochure to communities and organizations,
- Continue participation in Regulatory Executive Forum, and
- Continue to fund contract for independent facilitation of Core Group and Subgroups.

Copper and Nickel Action Plan Status

Since the October 2000 NDPES permit amendment, a detailed work plan has been implemented by the WMI Bay Monitoring and Modeling Subgroup (BMM) to develop site-specific objectives (SSO) for both copper and nickel, to prepare the requisite Basin Plan Amendment language, and to convey progress on Action Plan program components. The permit amendment required the dischargers, in conjunction with the BMM and/or Regulatory subgroups, to schedule semi-annual meetings to discuss tracking efforts and implementation efforts associated with the implementation of the baseline actions contained on the Copper and Nickel Action Plans.

The first semi-annual review of baseline copper and nickel programmatic actions, as described in the Copper and Nickel Action Plans, was conducted during BMM meetings held on September 26, and October 15, 2001. The information presented in Appendix B documents the results of this first review:

- August 29, 2001 memo entitled "Status Update of Copper and Nickel Action Items in Action Plan & Permits." The memo contains assignments to all members of the BMM/Regulatory subgroups.
- Updated POTW baseline table entitled "FY00-01 Semi-Annual Review Update of Appendix A of Lower South Bay POTW Permits Summary of POTW Baseline Copper Control Actions", dated September 26, 2001. No additional changes were made to this table at the October 15, 2001 meeting. The nickel actions were covered as part of the update of the copper actions.
- September 15, 2001 draft Urban Runoff Program update table entitled "FY00-01 Annual Report Update of Appendix B Summary of Urban Runoff and Watershed Management Baseline Copper/Nickel Control Actions." The September 15 draft was discussed at the BMM/Regulatory

subgroup meeting on September 26, 2001. Discussions at that meeting are contained in the attached draft dated September 26, 2001. The September 26 draft was again discussed at the BMM/regulatory subgroup meeting on October 15. The results of that meeting are contained in the attached draft dated October 15, 2001.

The dischargers, in conjunction with the BMM subgroup, will conduct WMI committee meetings during the first half of 2002 to discuss the program status of the baseline Action Plan activities since September 2001.

IV-CWATERSHED GRANTS

No program changes. A comprehensive report will be included in the July 2002 *CBS Report*.

IV-D REGIONAL MONITORING PROGRAM

No program changes. A comprehensive report will be included in the July 2002 *CBS Report*.

V OUTREACH

The City's outreach programs provide several mechanisms to promote an awareness of pollutant and flow reduction programs to the public and dischargers to the Plant. The programs also describe pollution prevention and flow reduction techniques and practices that may be useful for industries, commercial facilities, and residents.

V-A FLOW REDUCTION OUTREACH

Outreach activities promoting flow reduction support SBWR and a wide array of water conservation programs.

V-A1 SOUTH BAY WATER RECYCLING OUTREACH

The purpose of SBWR outreach is to educate the public and customers about the benefits of recycled water and to expand the customer base for recycled water.

Marketing activities for this reporting period included:

<u>Customer (Current and Potential)</u>

- Conducted customer outreach meetings;
- Conducted two *Recycled Water Site Supervisor* training workshops;
- Revised and published SBWR Rules and Regulations;
- Had 25 professional publicity photographs taken of SBWR customers for use in outreach displays and future collateral;
- Conducted two focus groups of existing SBWR customers to gauge their perception of the services that SBWR provides; and
- Provided customer and stakeholder presentations and plant tours as requested.

General Public

- Participated in the Guadalupe River Park & Gardens *Pumpkins in the Park*; and City Council District 3 and District 8 Community Festivals; and
- Conducted two Wacky Watersheds training classes at the Resource Area for Teachers, presenting the *South Bay Water Connections Environmental Education Activities* to teachers of grades 6 through 8.

Anticipated Marketing Activities for the next reporting period between January and June 2002 include:

Customer Outreach (Current and Potential)

- Conduct annual Customer Satisfaction Survey;
- Presentations to constituents of business trade associations, community and environmental groups;
- Hold two Recycled Water Site Supervisor training workshops;

- Provide construction outreach support and materials to contractors; and
- Continue to offer customer and stakeholder presentations as requested.

General Public

- Conduct stakeholder meetings regarding the SBWR Phase II expansion plan;
- Sponsor and participate in the Guadalupe River Park & Gardens *Spring In Guadalupe Gardens* event;
- Participate in department wide survey of City of San Jose residents water use; and
- Produce give-away items for event distribution.

V-A2 INDOOR WATER CONSERVATION OUTREACH

A comprehensive report will be included in the July 2002 CBS Report.

V-B POLLUTANT REDUCTION OUTREACH

V-B1 REGIONAL OUTREACH

This section features:

- Watershed program updates, modifications and changes
- WMI support Status report of how the Watershed program is cooperating with the Watershed Management Initiative.

Governor's Task Force Recognizes Santa Clara Basin Watershed Management Initiative

The State Task Force on Watershed Management selected the WMI as one of the top 10 watershed projects to study under AB 2117 (the Wayne Watershed Bill). The Task Force interviewed the past and current WMI Chairs and other Core Group members. They will be returning with the State Secretary of Resources in February for a press conference about the Task Force and to showcase the WMI.

WMI brochure and Public Participation Opportunities List

The WMI produced a brochure for the general public, introducing the WMI Core group's "vision" of what an ideal watershed could look like in fifty years. A significant feature of the brochure is a "Public Participation Opportunities" section, which is supported by a second piece in the form of a list of such opportunities. The list features 60 opportunities to participate offered by more than 30 municipalities, agencies, and environmental organizations in 11 categories. Participants from the WMI and the Urban Runoff Program collaborated on both pieces. The "Public Participation Opportunities" list is designed so that both WMI and the Watershed Watch Campaign can use it.

The WMI will next attempt to capture the general public's vision of what they value in their watershed.

Watershed Education and Outreach Campaign Launched

Watershed Watch is a new public outreach campaign funded through the Urban Runoff Program in partnership with the WMI. Partnerships with media and local businesses have tripled the value of the original campaign budget. The focus of the campaign is to educate the general public about watersheds and how important watershed resources are to the environment and their own health; and to provide information and tips on how people can prevent storm water pollution, and protect local creeks and the Bay. The basic messages of the 3-year campaign are selected to address findings from a 1999 survey of urban runoff and watershed management issues and practices.

A media launch event, originally planned for Thursday, September 13th at 10 A.M., was postponed, then cancelled due to the unfortunate events of September 11th. However since then, media partnerships and work by Watershed Education and Outreach project staff and contractors have yielded radio, television, and print media coverage for the campaign in Spanish and English. A toll-free number, 1-866 WATERSHED, is operational. The website is complete and on line at www.Watershedwatch.net, and will continue to be expanded as the campaign progresses. Work will focus on implementing the year two workplan, and planning for year three implementation. A draft implementation plan is due in January 2002.

Change to Program: Regional Groups Merge

During this report period, the Bay Area Clean Water Agencies (BACWA) invited the San Francisco Bay Area Pollution Prevention Group (BAPPG) to become a Committee of BACWA: a move formalizing the multiple year working relationship between the two groups. BAPPG membership voted to accept BACWA's offer.

In practice, BAPPG will function very much as it has in the past to provide shared funding and development of pollution prevention and public education materials and information. The City of San Jose will chair BACWA's new committee for the first year.

Work will begin to update the BAPPG's information brochure, and transition of BAPPG's web-based information, currently hosted by Palo Alto, to BACWA's web site.

V-B2 GENERAL OUTREACH

The General audience includes all residents. The City delivers its messages to this audience through participation in regional and City-sponsored activities including tours, events, ads, outreach campaigns, and a website. Updates on selected elements are presented below.

V-B2.1 WEBSITE

This element will be reported on in the July 2002 CBS Report.

V-B2.2 PLANT TOURS

For the past several years, tours of the Plant have been conducted for visiting dignitaries, other treatment plant professionals, the general public, and schoolteachers and students. After the events of September 11, 2001, ESD announced the cessation of Plant tours until further notice.

Staff will modify programs that incorporated Plant tours to deliver wastewater, storm water, and recycled water messages so messages that formerly depended on tours are delivered through other mechanisms.

V-B3 TARGETED OUTREACH

This element will be reported on in the July 2002 CBS Report.

V-B4 COMMERCIAL AND INDUSTRIAL OUTREACH

This element will be reported on in the July 2002 CBS Report.

Appendix A

Clean Bay Strategy Timeline

Clean Bay Strategy Report – January 2002

Appendix B

COPPER AND NICKEL ACTION PLAN STATUS

- Status Update of Copper and Nickel Action Items in Action Plan & Permits, August 2001 memo
- FY00-01 Semi-Annual Review Update of Appendix A of Lower South Bay POTW Permits Summary of POTW Baseline Copper Control Actions, updated September, 2001
- FY00-01 Annual Report Update of Appendix B Summary of Urban Runoff and Watershed Management Baseline Copper/Nickel Control Actions, October, 2001