

NEVADA IRRIGATION DISTRICT FINANCIAL REPORT

REASON FOR THE INVESTIGATION

The Nevada County Civil Grand Jury has the responsibility for reviewing special districts within Nevada County. The Grand Jury received three complaints concerning Nevada Irrigation District (NID).

PROCEDURE FOLLOWED

The Grand Jury conducted three meetings with the following:

- Two members of the Board of Directors
- General Manager James Chatigny
- Financial Director
- Chief Engineer
- Other technical and financial staff

The Grand Jury reviewed salary data, user fee data, NID policies and procedures and Board of Directors' minutes. The Grand Jury also reviewed the audited financial statements of NID for the years 1996 through 1998. NID's capital improvement project lists dated June 28, 1995, September 15, 1997, January 21, 1998, and March 9, 1999, were also reviewed. Completed projects for 1997 and 1998 were also reviewed.

FINDINGS

ORGANIZATIONAL

1. NID is a public water agency operated for users within its 287,000 acre boundaries in Nevada and Placer County. NID was formed by public vote in 1921. The district is the second largest irrigation district in California. The agency places emphasis on uninterrupted service to its customers. The district maintains ten reservoirs and eight water treatment plants.
2. The district was organized primarily for the purpose of supplying water for irrigation. Currently, the district also supplies water for domestic and industrial users, electric power and recreational facilities. In numbers of customers, NID has been growing by about 6 percent a year. The majority of this growth is service to users of domestic water.
3. There are approximately 160 full and part time employees.
4. A five-member board of directors governs the district. District voters elect each director for staggered four-year terms. The board members receive up to \$600 per month plus health benefits and mileage. All meetings of the board are public and are held within the district. NID operates under the authority and regulation of the California Water Code.

5. NID derives income from sale of water, electric power, recreational user fees, tax revenues and interest on district financial investments. The property tax revenue rate is set by state law, and is a part of property taxes levied on property within the district boundaries. The voters passed State Proposition 13 in June 1978. Pursuant to Revenue and Taxation Code section 95, et seq., the district is allocated a percentage of County property tax revenues. Property tax allocation to the district totaled \$4.9 Million in 1998.
6. The State Health Department has inspection and approval responsibility for work performed on NID's domestic water treatment facilities and delivery systems. Engineering inspections and approval for work on irrigation water systems is the responsibility of NID. Buildings and construction work on non-water systems for NID's use is subject to county building codes and inspections.
7. The historical financial information from NID showed that NID has averaged an annual rate increase of 3.8 percent for treated water users and 3 percent for irrigated water users.
8. The district makes water sales outside the district. However, these are subject to year to year contracts and are subject to either reduction or termination if water is not available for district users. NID forecasts water needs in the district by the use of the county's master plan, county building permit history, NID history, building proposals by developers and any other sources available to management.
9. Construction work on water systems funded by NID do not require competitive bidding. However, NID Board of Directors have mandated that competitive bidding will be used on all such projects. Construction work that is funded by the State and Federal governments require competitive bids and use of prevailing wage rates.
10. NID has reserved funds for unknown contingencies, such as Federal energy de-regulation, re-licensing power plants and a contract re-negotiation with PG&E due in 2013.

FINANCIAL

1. On December 31, 1998, NID had a total fund equity, commonly referred to as "net worth", of \$155,371,469 according to audited financial statements. The board of directors has reserved portions of their "net worth" for both unplanned and forecast requirements.
2. The December 31, 1998, audited financial statement shows cash and investments of \$62,553,512. This includes the \$13,000,000 proceeds of Certificates of Participation (debt instruments) sold to replace the Cascade Flume. Chart 1 provides NID revenue, expenses and cash flows for the years 1996 through 1998.
3. Information is taken from audited statements for the three years 1996 through 1998. The average annual revenues were \$27,306,470 and the average annual net income was \$8,995,018. This is an average annual return of 32.94 percent on revenues. The average annual net increase in cash and cash equivalents was \$5,342,521.

4. A study of NID rates over the past 10 years reveals the following:

	RATE IN 1989	RATE IN 1998	PERCENT INCREASE	ANNUAL % INCREASE
Connection Fee	\$3,040.00	\$5,750.00	89.1	8.9
BI-Monthly Charges				
Domestic ¾" Inside district	22.60	31.25	38.3	3.8
Irrigation/Miners Inch	232.00	301.00	29.7	3.0

Rates were raised every year from a low of one percent to a high of 14 percent. The overall increase in rates over 10 years is shown above. During our interviews of NID personnel, the Grand Jury was unable to determine any formal rate setting process. NID management stated that rate increases were generally determined by increases in the Consumer Price Index (CPI). However, an analysis of rate increases over the past 10 years revealed the rate increases showed little relationship with CPI.

5. NID has a current (March 3, 1999) schedule of system improvements through the year 2008 totaling \$51,535,500 of which \$1,334,000 is reimbursable from other sources for a net projected outlay of \$50,201,500. As in past years, many scheduled projects are of a maintenance nature and are funded from each year's current earnings. The scheduled amount for maintenance projects totals \$8,666,600 over the next 10 years. This leaves a balance of \$41,534,900 in system improvements needed to be paid for out of accumulated cash and investments or through additional borrowing.

6. A detailed review of prior schedules of system improvements revealed the following:

A. From the September 15, 1997, schedule totaling \$32,819,000 to the January 21, 1998, schedule totaling \$37,734,000:

- Three projects for \$150,000 were accelerated one to two years.
- 15 projects totaling \$13,136,500 were postponed one year.
- Four projects totaling \$2,155,000 were postponed two years.
- One project totaling \$820,000 was postponed three years.
- A total of 20 projects totaling \$16,138,500 or 49.2 percent were postponed one or more years.

B. From the January 21, 1998, schedule totaling \$37,734,000 to the March 9, 1999, schedule totaling \$51,535,500:

- 25 projects totaling \$21,115,500 were postponed one year.
- Nine projects totaling \$7,627,500 were postponed two years.
- Three projects totaling \$1,050,000 were postponed three years.
- Four projects totaling \$257,000 were postponed four to five years.
- A total of 41 projects totaling \$30,050,000 or 79.6 percent were postponed one or more years.

- C. The largest postponed project, budgeted at \$16,000,000, is the Cascade Flume replacement first scheduled in 1998. The project has been delayed due to controversy.
7. A review of all completed projects in 1997 and 1998 revealed the following:
- In 1997, 10 projects were completed at a total cost of \$1,918,834 which was 2.8 percent over projected capital expenditures.
 - Three projects listed as completed in 1997 totaling \$185,000 are still on the March 9, 1999, project list.
 - In 1998, 29 projects were completed at a total cost of \$2,012,225 which was 8.8% under projected capital expenditures.
8. Due to confusing and conflicting news reports over the past year, the Grand Jury has prepared a projection of cash and investments for the public's information (see chart two). This projection is based on the following *assumptions*:
- NID will continue to average an annual net increase in cash of \$5,342,521.
 - NID will complete system improvements when scheduled. Future postponements of scheduled work will improve cash balances over the near term.
 - NID will experience changes in interest income due to the expenditure of cash and investments.
 - Maintenance type projects will continue to be funded from each year's current income.
 - No provision has been made for additional projects that will undoubtedly be added to the schedule over the next 10 years.
- Based on the above assumptions, chart two reveals that NID would have cash and investments in excess of \$72 million in 2008, \$9.6 million more than NID had on December 31, 1998.

CONCLUSIONS

1. NID is in strong financial condition. It appears that corporate memory of difficult financial times in the 1970s dictates fiscal conservatism. NID seems to have more than adequate cash and investments to meet its needs.
2. NID does not have a disciplined, orderly method of setting annual water rates.
3. The capital improvement schedules include maintenance projects normally paid from current revenues, thus overstating the need for long term funds.
4. The total of cash and investments has grown by the postponement of system improvement projects. Continual postponement of necessary projects raises questions of the adequacy of the management planning process. However, some postponements in the capital improvement schedules are the result of community controversy.
5. The three projects reported completed in 1997 but remaining on the March 9, 1999, project list indicate a lack of effective project accountability.

RECOMMENDATIONS

1. The Grand Jury recommends NID develop a standard formula based on estimated future delivery costs that will be used for determining future user rate adjustments. Further, the Grand Jury recommends that factors used in producing user rates be published each year.
2. The Grand Jury recommends that the NID Board of Directors hire the expertise to accurately project their capital requirements and establish an effective long range planning process.
3. The Grand Jury recommends NID develop a process to improve their communications with the community.

REQUIRED RESPONSES

NID Board of Directors
Due September 30, 1999

CHART 1

NID SELECTED FINANCIAL INFORMATION

From audited combined statements of revenues, expenses and changes in retained earnings

		<u>1996</u>	<u>1997</u>	<u>1998</u>	AVERAGE <u>ANNUAL</u>
REVENUES					
	Water sales	\$8,492,022	\$8,817,672	\$8,811,162	
	Electric Power	7,586,043	7,456,742	6,702,746	
	Fees & Changes	1,509,153	1,227,125	983,188	
	Taxes & Assessment	4,641,039	4,815,610	4,969,958	
	Interest Income	3,272,142	3,683,038	4,036,601	
	Grants		639,629	1,304,929	
	Other Income	619,500	609,472	1,741,638	
	Total Revenue	26,119,899	27,249,288	28,550,222	27,306,470
Expenses					
	Operating/Maintenance	15,675,680	15,141,627	16,231,125	
	Interest Expense	1,864,867	2,336,921	2,306,270	
	Flood/Storm Damage		1,377,866		
	Total Expense	17,540,547	18,856,414	18,537,395	18,311,452
Net Income		\$8,579,352	\$8,392,874	\$10,012,827	\$8,995,018

From audited Combined Statements of Cash Flows

		<u>1996</u>	<u>1997</u>	<u>1998</u>	Annual Average
Net Increase in	Cash Equivalents	\$3,076,003	\$7,192,872	\$5,758,689	\$5,342,521

CHART 2

NID PROJECTED CASH FLOW

	AVERAGE ANNUAL INCREASE IN CASH	SCHEDULE IMPROVEMENTS NON- MAINTENENCE	CHANGE IN INTEREST INCOME	YEAR-END CASH AND INVESTMENTS
12/31/98				\$62,553,512
1999	\$5,342,521	\$(4,930,250)	\$113,519	63,079,302
2000	5,342,521	(19,964,400)	(347,474)	48,109,949
2001	5342,521	(818,750)	(703,312)	51,930,408
2002	5,342,521	(2,097,000)	(493,540)	54,682,389
2003	5,342,521	(8,880,500)	(535,725)	50,608,685
2004	5,342,521	(154,000)	(516,633)	55,280,573
2005	5,342,521	(4,370,000)	(347,575)	55,905,519
2006	5,342,521		(162,292)	61,085,748
2007	5,342,521		179,284	66,607,553
2008	5,342,521	(320,000)	532,832	72,162,906
		<hr/>		
		\$(41,534,900)		

The above projection clearly indicates that the district will maintain healthy cash and investments balance over the next ten years.

NID Nevada Irrigation District

1036 W Main St ♦ PO Box 1019 ♦ Grass Valley, CA 95945-1019 ♦ (530) 273-6185
From Auburn & Lincoln: 1-800-222-4102 FAX: (530) 477-2646

The District pledges to provide its customers with a safe dependable water supply for urban and agricultural uses at the lowest feasible cost utilizing available resources today and in the future.

IN REPLYING REFER
TO FILE NO

November 2, 1999

Honorable Carl Bryan II
Presiding Judge of the Nevada County Courts
201 Church Street
Nevada City, CA 95959

Dear Judge Bryan:

Please accept this letter as additional submission of District responses to the 1998-99 Civil Grand Jury investigation per the Grand Jury letter of October 4, 1999.

The previous submission of responses to Recommendations is attached and the following information responds to Findings:

ORGANIZATIONAL

1. Agree
2. Agree
3. Agree
4. Agree
5. Agree
6. Partially Agree with addition of City building codes as required for projects located in City limits.
7. Agree
8. Agree
9. Agree

10. Agree Partially (There is no fund available in reserve to negotiate with PG&E. The reserve funds are to assist in procuring a license renewal with Federal Energy Regulatory Commission.)

FINANCIAL

1. Agree
2. Interest income for 1996 should be \$2,164,354 and 1997 should be \$3,408,520. The difference should be included in other income. The rest of the line items are correct.
3. Annual revenues, net income and average annual increase in cash equivalents are okay. The rate of return should be computed based on investments, in this case, to the assets of the District.
4. The connection fees and bi-monthly fees for a ¾" meter (the majority of our customers have a 5/8" meter) are correct. The irrigation/miners inch rate shown for 1 miners inch is correct but this is not representative of the District's rate schedule. The rate lowest per miners inch rate in 1989 was \$88 and for 1998 was \$113.30. Attached is a summary of the changes for water rate, CPI and connection fees. This shows that on some years, there is correlation between the water rate increases and CPI changes.
5. Agree/Partially Agree

The District has attempted to respond under the Recommendation Section to the comments concerning system improvements, projects scheduled and unscheduled maintenance in a positive manner agreeing that there are projects not fully completed in each anticipated year. There are numerous reasons such as; higher priority needs; weather (restricting full completion); delays yet allowing the project to be used until full completion; from time to time the need to have as built drawings finished in order to close out the work order. Whatever the delay there is the goal to finalize all paper work as quickly as possible and accurately.

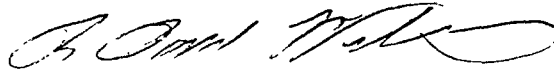
There is no question that projects have been postponed for periods of time and it is again based upon availability of personnel to professionally design and monitor the project. Some projects are developer originated and the District responds to the time frames that are provided by the developer.

6. See item 5
7. See item 5

8. What is the basis for the change in interest income and what interest rate was used are questions NID cannot answer. The writer of this FINDING uses the word assumptions and therefore chart 2 cannot be verified.

The District does apologize for the inadvertent noncompliance in its first submittal of response to the Grand Jury report.

Sincerely,



R. Paul Williams
President

JPC/sm

Attachment: Summary of Rate Fees Changes
Original submittal 9-16-99

Summary of Rate & Fees Changes

Year	Treated Water			Raw Water			CPI August	Connect. Fees	5/8 Conn. Fees \$	
	Bi-Mo.	Usage	Ave	1st MI	Addl MI	Ave				
1989	2.50%	5.30%	3.85%	6.00%	4.00%	4.92%	4.70%	2.59%	\$ 1,980	1988=\$1,930
1990	1.00%	3.00%	1.97%	1.00%	1.00%	1.00%	5.60%	2.02%	\$ 2,020	
1991	1.00%	7.00%	4.03%	4.00%	4.00%	4.00%	3.80%	4.95%	\$ 2,120	
1992	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	3.80%	2.36%	\$ 2,170	
1993	3.10%	3.10%	3.10%	3.10%	3.10%	3.10%	3.10%	2.76%	\$ 2,230	
1994	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.80%	4.04%	\$ 2,320	
1995	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	2.89%	16.81%	\$ 2,710	Yr 1of3 of 37% increase
1996	3.00%	3/4/5%	3.20%	5.00%	3.00%	4.18%	2.60%	13.28%	\$ 3,070	Yr 1of2 of storage comp. Incr
1997	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.90%	14.01%	\$ 3,500	
1998	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.20%	3.71%	\$ 3,630	
Ave 10 yrs			3.02%			3.12%	3.44%		8.3%	

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NID Nevada Irrigation District

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The District pledges to provide its customers with a safe dependable water supply for urban and agricultural uses at the lowest feasible cost utilizing available resources today and in the future.

IN REPLYING REFER
TO FILE NO

September 16, 1999

County of Nevada
Civil Grand Jury
950 Maidu Avenue
Nevada City, CA 95959

Attention: Foreperson

The following is the District's response to the 1998-99 Grand Jury report recommendations.

Comment 1

The Grand Jury recommends NID develop a standard formula based on estimated future delivery costs that will be used for determining future user rate adjustments. Further, the Grand Jury recommends that factors used in producing user rates be published each year.

Response

The District's Water Rate committee had directed staff at its May 26, 1999, meeting to prepare a request for proposal to solicit assistance in performing a cost of service study of user fees. Once this study is completed, the District will review the findings and consider adoption of the results. The anticipated completion date of the study is February 2000. At the conclusion of the study a determination will be made as to how customers will be informed in regards to annual changes in rates and fees for services provided by the District.

Comment 2

The Grand Jury recommends that the NID Board of Directors hire the expertise to accurately project their capital requirements and establish an effective long range planning process.

Response

In past years, the District has not published an annual "Capital Improvement List". As of a few years ago, the District relied on its budgeting process to set project priorities on a year by year basis. The budget project list was a compilation of separate project lists by the Maintenance, Operations and Engineering departments.

For the past two years, District staff has been developing a database containing both maintenance projects and capital improvement projects. This database is referred to as the Project List. The database is a work-in-progress, and is continuously being refined to improve content and usability. Staff members from maintenance, operations, engineering, and administration meet regularly to update the list.

All projects placed on the Project List are assigned a primary and secondary funding source using one of 10 categories. Please refer to the enclosed table "Project Funding Categories". A list of projects for the Years 1999 – 2005 is also enclosed. The list includes the project cost estimate and the anticipated primary and secondary funding source. (Five of the ten categories are unused at this time.) The anticipated primary and secondary expenditures for each effected funding category are totaled by year in the following table.

	1999	2000	2001	2002	2003	2004	2005
COP	1,185,000	0	13,500,000	0	0	0	0
OPR	2,095,850	3,091,300	2,080,000	1,594,500	432,750	253,250	117,500
RMB	1,233,000	0	0	65,000	12,750	10,750	12,500
RSI	432,900	230,200	4,877,000	640,000	7,040,500	34,000	0
TSI	1,136,750	1,844,500	1,536,000	2,019,500	1,870,000	120,000	4,370,000

The enclosed project list and above table demonstrates that the process used to project the need for long-term funding, i.e., reserve funds, is not artificially diminished by funds needed for maintenance projects. Maintenance type projects, where practical and necessary, are generally funded from District Operating Revenues (OPR).

The content and priorities found with the Project List will change routinely, from year to year, and within each budget year. The District must remain flexible in its approach to project scheduling in order to accommodate unexpected needs of our customers and to respond to unscheduled maintenance, state or federal mandates, natural disasters, and other unforeseen factors that might effect department work loads.

Other tools will be developed in the near future including a document retrieval system, leading to automation of all District maps, and a facilities management program that makes use of the automated maps. These tools will assist staff in forecasting maintenance projects and capital improvements. A consultant may be necessary to coordinate this effort.

At this time, given the advancements made thus far on the Project List, it does not seem necessary to out-source the task of projecting capital requirements or to establish a long range planning process. District staff is making satisfactory progress on both fronts.

Comment 3

The Grand Jury recommends NID develop a process to improve their communications with the community.

Response

The District has developed a very indepth program to provide information to customers and other interested groups.

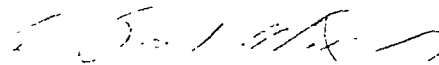
Here is an overview of the District's public information efforts:

1. **Ongoing News Program.** Since 1980, the District has conducted a proactive news program. This includes news releases on a variety of topics from Board meetings to snow surveys and water availability and support work with media representatives. Our media list includes more than 30 outlets in Nevada, Placer, Yuba and Sacramento counties.
2. **Customer Newsletter.** Since 1980, we have produced *NID WaterWays*, a quarterly newsletter to all of our customers. The newsletter is also mailed to opinion leaders in our service areas. The newsletter has included information on a wide range of NID topics, including the District's financial position. The District also produces a monthly newsletter for employees and retirees.
3. **Media Availability.** General Manager Jim Chatigny, key staff members and members of the Board make it a top priority to be available to the news media, be aware of news deadlines, and respond promptly to all news inquiries.
4. **Printed Materials.** The District offers a variety of printed materials, including a general brochure that summarizes the District's organization, services offered, facilities, customer base, etc. We have produced special edition newspaper sections for our 30th anniversary in 1981 and our 75th anniversary in 1996.
5. **Web Page Planning.** We are currently planning a web page that will make it easier for many more people to gain information about the District.

- 6 **Public Appearances.** The District manager and staff members often appear on radio and television programs and speak about District activities at service club meetings and in the schools
7. **Other Educational Activities** The District offers school and public tours of its office, water treatment plants and hydroelectric power plants, provides print materials to the schools and works on watershed planning with high school students. The District is a sponsor of the Nevada County Imaginarium. NID also produces and bottles tasty drinking water fresh from the Sierra Nevada.
8. **Event Participation.** The District regularly hosts a booth at the Nevada County Fair and at the 49er Rotary Trade Fair at Nevada Union High School. NID originated and conducts periodically the Nevada County Drinking Water Taste Test, which emphasizes the importance of good drinking water.
9. **Intergovernmental Participation.** The District works with and cooperates with governmental and related groups locally and statewide. Some of these are Boards of Supervisors, City Councils, Fish & Wildlife Commissions, Farm Bureaus, Yuba Watershed Council, Mountain Counties Water Resources Association, Water Education Foundation, Association of California Water Agencies and more.

The District believes it is conducting a good and effective public informational effort and will continue to make improvements as necessary to keep our valued customers informed of the activities and projects that create improvements to the quality of service expected of our outstanding organization.

Sincerely,



R. Paul Williams
Board President

JPC/kk

Project Funding Categories

For use with Project List Funding Analysis

Funding Category	ID	Intended Use	Funding Source	Cap
Certificates of Participation	COP	Specific to each COP issue. Requires comment identifying each particular issue and total proceeds.	Certificates of Participation	Varies
Emergency Maintenance Reserve	EMR	Unbudgeted emergency repairs.	1% of annual budget	\$5,000,000
Grants	GNT	Specific to each grant program.	Requires comment identifying granting agency and maximum grant	Varies
Loans	LON	Specific to each loan program.	Requires comment identifying loaning agency and maximum loan	Varies
Operating Revenues	OPR	Project costs falling outside of all other reserves, grants, loans, COP's, or others.	District's general revenue stream and Revenue Reserve.	N/A
Others	OTH	Requires comment identifying intended use	Requires comment identifying source and limits.	Varies
Reimbursable	RMB	All project or study costs to be reimbursed by Developer or Customer.	Developer/ Customer	N/A
Raw Water System Improvement Reserve	RSI	Upgrade raw water facilities for increased capacity, efficient operation, and design studies.	Annual budget surplus up to \$750,000 per year, plus all annexation acreage fees, plus interest earned	None
Treated Water System Improvement Reserve	TSI	Upgrade treatment plant processes for compliance and additional capacity, new storage, new transmission mains and up-sizing distribution mains to transmission mains, and design studies.	Capacity charge portion of treated water connection fees, plus interest earned.	None
Watershed Improvement Reserve	WIR	Maintenance and improvement of District's watershed.	Timber sales net revenues.	None

1999 - 2005 Project Cost Estimates and Funding Categories

Year	Facility Name	Description	Cost Estimate	Primary Category	Secondary Category	Secondary Percent	Primary	Secondary
1999	Alta Hill Rsv	Fence entire property.	30,000	OPR		0%	30,000	0
1999	Camp Far West	Siphon No I: Realign to north and abandon existing siphon.	350,000	OPR	RSI	30%	245,000	105,000
1999	Cascade Shores	Upper Pressure Zone Pump Station: Investigate pressure surges, recommend a solution, and issue a work order.	3,500	OPR		0%	3,500	0
1999	Cherry Creek	End spill: Rehabilitate or eliminate to avoid claims.	10,000	OPR		0%	10,000	0
1999	Combie Ophir II	Bradley Beer Property: Repair leaks with shotcrete. 900'.	40,000	OPR		0%	40,000	0
1999	Combie Ophir II	Shotcrete: APN 075-121-073 & -097 and 075-121-029.	50,000	OPR		0%	50,000	0
1999	Combie Ophir IV	Bald Road: Rehabilitate and line with shotcrete 600'.	18,000	OPR		0%	18,000	0
1999	Combie Ophir IV	Study: Mt. Vernon Rd downstream Rehabilitate or realign in pipeline from near Atwood Rd.	7,000	OPR		0%	7,000	0
1999	D.S.	D.S. Extension Pumps: Install traveling screen, modify bldg and manifolds for noise and vibration.	35,000	RSI		0%	35,000	0
1999	D.S.	D.S. to E. George WTP Intertie: Pump Station and p/l as auxiliary supply of raw water.	1,185,000	COP		0%	1,185,000	0
1999	D.S.	Flume No 24: Replace with 320' of 72" (Merrimac).	105,000	OPR		0%	105,000	0
1999	District Wide	Standby Generators: Study cost effectiveness of providing standby power for treated water.	8,000	OPR		0%	8,000	0
1999	Dudley	Spillways No. 6 & 7: Replace with Check/Spill. Use weir gates and crosscheck gates	40,000	OPR		0%	40,000	0
1999	E. George	Banner Reservoir: Drain line. Included in "Merrille" Subdivision. 2,200 ft. of 24" pipe.	140,000	TSI		0%	140,000	0

Year	Location	Description	Cost Estimate	Primary Category	Secondary Category	Secondary Percentage	Primary	Secondary
1999	E. George	Durbrow Rd.: Replace 18" transmission line. 900' of 18", Diameter to be determined. Postponed. See study: #157.	73,000	OPR		0%	73,000	0
1999	E. George	Fern and Boreham Lane: Replace 1000' of 4". Size to be determined.	50,000	OPR		0%	50,000	0
1999	E. George	Litton/HS Pipeline: Assist Maintenance (Robin) with contract to slip-line pipe along D.S. Canal. See # 221	8,000	OPR		0%	8,000	0
1999	E. George	Woodridge Ranch: Assist Developer's Engineer with pre-design report and preliminary plans: Hydro pump.	6,000	RMB		0%	6,000	0
1999	E. George WTP	Plant Water Service Line: Replace and upsize.	12,000	OPR		0%	12,000	0
1999	Forest Springs	Wheeler Acres Rd: Encase 2500'+ from siphon outlet with 24" (EST).	75,000	OPR	RSI	25%	56,250	18,750
1999	Kemper East	Kemper Road Encasement: Between outlet of existing encasement and Kemper Road in response to Kemper Oaks Subd.	15,000	RSI		0%	15,000	0
1999	Kyler	Study for project and priority to rehabilitate and enlarge.	10,000	RSI		0%	10,000	0
1999	Lake of Pines	Dark Horse and Pine Mountain Ranch: Water service study.	8,000	RMB		0%	8,000	0
1999	Lake of Pines	Study: Remediate sand in distribution system. Blowoffs, rehab filters, sand trap, clearwell, move pumps..??	250,000	TSI		0%	250,000	0
1999	Lake of Pines WTP	All Bldg roofs: Remove and replace.	7,500	OPR		0%	7,500	0
1999	Loma Rica	Green Tank: Paint outside only.	15,000	OPR		0%	15,000	0
1999	Loma Rica	La Barr Meadows to Hwy 49: Replace 1,100' of 10".	48,000	OPR		0%	48,000	0
1999	Loma Rica	Norlene Way Pump Station: Install vents, fans, and sound attenuation equipment to provide ventelation.	10,000	TSI		0%	10,000	0
1999	Loma Rica	Osborn Hill & David Way Tanks: Add 3.0 MG & 1.5 MG tank respectively.	250,000	TSI		0%	250,000	0
1999	Loma Rica Rsv	Leakage Weir and underdrain system: Replace, rehabilitate.	35,000	OPR		0%	35,000	0

<i>Year</i>	<i>Facility Name</i>	<i>Description</i>	<i>Cost Estimate</i>	<i>Primary Category</i>	<i>Secondary Category</i>	<i>Secondary Percent</i>	<i>Primary</i>	<i>Secondary</i>
1999	Loma Rica Rsv	Rattlesnake Canal Outlet Gate & WTP Intake Structure. Rehabilitate and add air vent.	15,000	OPR		0%	15,000	0
1999	Loma Rica WTP	Flocc basin: Add flash mix and baffles.	150,000	TSI		0%	150,000	0
1999	Loma Rica WTP	Lime Silo: Add new dual feed lime silo to existing containment area.	148,000	TSI		0%	148,000	0
1999	Loma Rica WTP	New Access Road and Fence: construct a new access road off Wawona Madrona and install security fencing upto reservoir.	28,000	OPR		0%	28,000	0
1999	Maben	Study for project and priority to rehabilitate and enlarge: includes two siphons.	15,000	RSI		0%	15,000	0
1999	Main Office	Carpenter Shop and RPM Storage Bldgs: Paint.	11,500	OPR		0%	11,500	0
1999	Main Office	Covered Storage: 75' X 20' X 16' at rear of warehouse.	18,000	OPR		0%	18,000	0
1999	Main Office	Fueling Station: Add canopy.	17,000	OPR		0%	17,000	0
1999	Main Office	Landscaping: Renovate landscape and install new irrigation system and walkways.	25,000	OPR		0%	25,000	0
1999	Main Office	Storage Bays: Add two bays at (E) equip storage sheds for Case trenchers.	17,000	OPR		0%	17,000	0
1999	North Auburn	Master Plan: Treated Water.	45,000	TSI		0%	45,000	0
1999	North Auburn	Saddleback Subdivision: Water service study.	4,000	RMB		0%	4,000	0
1999	North Auburn WTP	Clarifier No. 1 & 2: Paint structural steel and all inside surfaces as needed.	60,000	OPR		0%	60,000	0
1999	North Auburn WTP	Clearwell tank: Install new concrete floor to prevent groundwater intrusion.	230,000	OPR		0%	230,000	0
1999	North Auburn WTP	Clearwell: Replace concrete roof and relocate pumps to separate sump.	1,350,000	RMB	TSI	10%	1,215,000	135,000
1999	North Auburn WTP	Filters: Rehabilitate surface wash.	10,000	OPR		0%	10,000	0

Year	Facility Name	Description	Cost Estimate	Primary Category	Secondary Category	Secondary Percent	Primary	Secondary
1999	North Auburn WTP	Plant-water Supply line: Replace.	25,000	OPR		0%	25,000	0
1999	North Auburn WTP	Treatment Plant Bldg roof: Remove and replace.	18,000	OPR		0%	18,000	0
1999	Quincy	Quincy pipe: Modify inlet box.	4,000	OPR		0%	4,000	0
1999	Rattlesnake	Alta Sierra Siphon: Replace and realign Crase and Live Oak Siphons.	775,000	OPR	RSI	25%	581,250	193,750
1999	Rollins Rsv	Sedimentation Inventory.	7,000	OPR		0%	7,000	0
1999	Snow Mountain	Techite Replacement: Willow Vly. Rd., Bourbon Hill, & WTP access road.	35,000	OPR	TSI	25%	26,250	8,750
1999	Tarr	Okie Siphon: Replace. 1,400 LF.	80,000	OPR	RSI	25%	60,000	20,000
1999	Vernon	Vernon Pipe: Replace with 1400' of 18" and distribution box.	102,000	OPR	RSI	20%	81,600	20,400
2000	Auburn Ravine I	Spill No. 2: Replace with updated structure.	25,000	OPR	RSI	20%	20,000	5,000
2000	Cascade	Cascade Shores, Clipper Creek, and Phase III: Inspect and clean.	2,000	OPR		0%	2,000	0
2000	Cascade Shores	Summit Ridge & Lower Zone: Replace redwood tanks with welded steel. (Two tanks at Summit Ridge.)	310,000	OPR	TSI	25%	232,500	77,500
2000	Combie Ophir I	Bear River Siphon: Paint.	200,000	OPR		0%	200,000	0
2000	Combie Rsv	Probable Maximum Precipitaion: Compare HMR 58 and 59 with HMR 36.	2,000	OPR		0%	2,000	0
2000	D.S.	Flume No. 10: Replace with 180' of 72".	70,000	OPR		0%	70,000	0
2000	D.S.	Flume No. 9: Replace with 400' of 72".	145,000	OPR		0%	145,000	0
2000	District Wide	Document Retrieval System.	580,000	OPR		0%	580,000	0

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2000	District Wide	Urban Water Management Plan: update.	15,000	OPR		0%	15,000	0
2000	District Wide	Watershed Sanitary Survey: Complete 5-year update.	8,000	OPR		0%	8,000	0
2000	E. George	D. S. Canal Pipeline: Slip-line with max size pipeline.	240,000	OPR		0%	240,000	0
2000	E. George	Nevada City: Study potential for interties.	7,000	OPR		0%	7,000	0
2000	E. George	Upper Banner Tanks: Extend overflow/drain line to suitable drainage. 700' of 8".	25,000	TSI		0%	25,000	0
2000	E. George WTP	Flash mix: Add mechanical mixer prior to flocculation basin.	30,000	TSI		0%	30,000	0
2000	Gold Blossom	Study to rehabilitate entire length.	9,000	RSI		0%	9,000	0
2000	Gold Hill I	Spillways No. 9 & 10: Replace with Check/spill. Use weir gates and crosscheck gates.	40,000	RSI		0%	40,000	0
2000	Grove	Fairview Siphon: Replace to accommodate mater plan flows (est at 300' of 24").	35,000	OPR	RSI	20%	28,000	7,000
2000	Grove	Study for project to enlarge to new master plan flows.	7,000	RSI	OPR	40%	4,200	2,800
2000	Lake of Pines	PRV Station at Woodhaven and Lake Shore North: Replace vault lid.	7,000	OPR		0%	7,000	0
2000	Lake of Pines	Wayfarer Court: Replace both redwood tanks with 850,000 gal. (System requires another 2.5 MG).	480,000	OPR	TSI	40%	288,000	192,000
2000	Lake Wildwood	Jayhawk tank: Revise drainage and encase or shotcrete.	20,000	OPR		0%	20,000	0
2000	Lake Wildwood	Sunforest Pump System: install permanent pressure relief valve around station to allow isolation of system storage.	20,000	TSI		0%	20,000	0
2000	Lake Wildwood	Pavement: Overlay entire WTP compound.	50,000	OPR		0%	50,000	0
2000	Loma Rica	Cherry Creek Acres: Replace all pipelines, PR Stations, and abandon existing redwood tank.	340,000	OPR		0%	340,000	0

Year	Facility Name	Description	Estimate	Category	Category	Perco.	fy	fy	nda.
2000	Loma Rica	David Way Tank No. 1: Modify and paint inside and outside.	150,000	OPR		0%	150,000		0
2000	Loma Rica	Smith Road: Replace 8" steel and realign to road if possible. 2100' of 8".	84,000	OPR		0%	84,000		0
2000	Maben	Rehabilitate per Keith's study. (See # 142)	350,000	OPR	RSI	30%	245,000		105,000
2000	North Auburn	Shale Ridge: Add 3.0 MG tank.	1,500,000	TSI		0%	1,500,000		0
2000	Red Hill Rsv & Pipe	Study abandonment: Offer pond and property to property owners.	7,000	RSI		0%	7,000		0
2000	Scotts Flat Rsv	Log Boom: Replace.	15,000	OPR		0%	15,000		0
2000	Smartville	O'Brian Street: Replace 2" with 1,000' (Est) of 6" (Est)	38,000	OPR		0%	38,000		0
2000	Sugar Loaf Rsv & Pipe	Reservoir Property: Rebuild security fencing	40,000	OPR		0%	40,000		0
2000	Tarr	Telles Property Spill: Construct new check/spill.	25,000	RSI		0%	25,000		0
2000	Vernon	Herkomer Pipe: Replace with "closed" system; new inlet screen.	150,000	OPR		0%	150,000		0
2000	Wolf Hannaman	Sanford Siphon: Replace 1,450 LF with 30" Dia.	140,000	OPR	RSI	20%	112,000		28,000
2001	Cascade	Bench Flume: Replace entire flume with pipeline; replace 48" Techite in C.S. siphon.	18,000,000	COP	RSI	25%	13,500,000		4,500,000
2001	Cascade	Lower Cascade: Reassess study to relocate Lower Cascade Canal	120,000	RSI		0%	120,000		0
2001	Cole Viet	Palm CT downstream: Encase 1500' with 24" (EST).	165,000	OPR	RSI	25%	123,750		41,250
2001	Corey	Siphon No 1.: Replace 850' with 24"(est).	80,000	OPR	RSI	20%	64,000		16,000
2001	D.S.	Big Blue Rd upstream: Replace flume with 450' of 72".	150,000	OPR		0%	150,000		0

<i>Year</i>	<i>Facility Name</i>	<i>Description</i>	<i>Cost Estimate</i>	<i>Primary Category</i>	<i>Secondary Category</i>	<i>Secondary Percent</i>	<i>Primary</i>	<i>Secondary</i>
2001	D.S.	Flume No. 12: 280' of 72". Caution: NC's 12" routed under flume.	100,000	OPR		0%	100,000	0
2001	E. George	Forest Knolls: Replace distribution system. 6600' of 8", 2200' of 6", and a pressure reduced intertie. Hire consultant and put out to	380,000	OPR		0%	380,000	0
2001	E. George	Grass Valley: Study potential interties. (Coordinate w/ Master Plan).	7,000	OPR		0%	7,000	0
2001	E. George	Lower GV to Granholm: Replace 14" under freeway.	35,000	OPR		0%	35,000	0
2001	Fruitvale	Last 2800': Rehabilitate canal, pipes, and structures.	110,000	OPR		0%	110,000	0
2001	Gold Blossom	Rehabilitate per Keith's study. 4,000' of 18" (EST). (See # 42).	320,000	OPR	RSI	30%	224,000	96,000
2001	Kyler	Rehabilitate per Keith's study. (See # 143).	250,000	OPR	RSI	35%	162,500	87,500
2001	Lake of Pines	Timber Ridge Tank #3: Paint interior and exterior.	40,000	OPR		0%	40,000	0
2001	Lake Wildwood	Jayhawk Pump: Raise Sta. And add pump	60,000	OPR	TSI	35%	39,000	21,000
2001	Lake Wildwood	Lasso Loop: Replace 4" with 3900' of 8".	156,000	OPR		0%	156,000	0
2001	Lake Wildwood	Penn Valley Tank: Replace redwood tank with welded steel.	180,000	OPR	TSI	20%	144,000	36,000
2001	Lake Wildwood	Tank No. 6: Paint inside and outside. (#78 must be completed first).	75,000	OPR		0%	75,000	0
2001	Loma Rica	Hwy 49 @ Christian Life Way: Replace 1500' with 8".	68,000	OPR		0%	68,000	0
2001	Loma Rica	Master Plan: Treated Water.	15,000	TSI		0%	15,000	0
2001	Loma Rica	Meadow View Dr. PRV Station: Relocate and add pressure relief valve.	35,000	OPR	TSI	40%	21,000	14,000
2001	Loma Rica Rsv	Dredge sediment, add WTP outlet gates, rehab canal outlet gates.	120,000	OPR		0%	120,000	0

Year	Location	Description	Estimate	Category	Category	Percent	Planned	Actual
2001	Magnolia III Pumps	Mag III Discharge Pipe: Replace between pumps and reservoir. Upsize if necessary to meet future demands. 400' of 24"(Est -	65,000	OPR	RSI	25%	48,750	16,250
2001	Smartville WTP	Backwash tank: Modify for settling time and add sludge drying facilities.	4,000	OPR		0%	4,000	0
2001	Snow Mountain	E. George Pumped Intertie: Pump station on Gracie Road and transmission pipeline. Abandon Snow Mt. WTP.	1,450,000	TSI		0%	1,450,000	0
2001	Tarr	Study: Perrin past Old Auburn Rd: Rehabilitate or reroute in siphon: More emphasis on rehab per Jim(12/10).	8,000	OPR		0%	8,000	0
2002	Alta Hill Rsv	Study reconstruction or abandonment.	7,000	OPR		0%	7,000	0
2002	Combie Rsv	Combie North Aqueduct outlet: Install slide gate on upstream side of dam and equip with automatic shut off controls. (Gate at NA	85,000	RSI		0%	85,000	0
2002	D.S.	Flume No. 13, 14, & 15: 60', 130', 240' of 72".	160,000	OPR		0%	160,000	0
2002	Deer Creek	Discharge to Lower Scotts: Install perminate gauging station. Investigate alternatives.	45,000	RSI		0%	45,000	0
2002	E. George	Bost Ave & Hallwood: Replace private pipelines.	70,000	OPR	RMB	25%	52,500	17,500
2002	E. George	Marjon Drive: Replace remaining 4" with 1,400 feet of 8".	65,000	OPR		0%	65,000	0
2002	E. George	Master Plan: Treated Water.	55,000	TSI		0%	55,000	0
2002	E. George	Via Colina Drive: Replace northerly 500' with 10" or 12".	30,000	OPR	TSI	25%	22,500	7,500
2002	E. George	Watt Park: Replace pvt pipeline on Cliff's Place and Gene Road.	40,000	OPR	RMB	25%	30,000	10,000
2002	Lake of Pines	Treatment Plant Effluent. 3,700 ft of 12"	220,000	TSI		0%	220,000	0
2002	Lake Wildwood	Lime Storage and Feed: Add bulk lime storage.	250,000	TSI		0%	250,000	0
2002	Loma Rica	Alta Sierra Rsv. Inlet pipe: 300 ft of 12".	45,000	TSI		0%	45,000	0

<i>Year</i>	<i>Facility Name</i>	<i>Description</i>	<i>Cost Estimate</i>	<i>Primary Category</i>	<i>Secondary Category</i>	<i>Secondary Percent</i>	<i>Primary</i>	<i>Secondary</i>
2002	Loma Rica	Dog Bar to Francis Drive: Install 1400' of 10" loop per Master Plan.	75,000	TSI		0%	75,000	0
2002	Loma Rica	Hollydale Rd: Replace pvt pipeline.	35,000	OPR	RMB	25%	26,250	8,750
2002	Loma Rica	Loma Rica Tank # 1: Paint interior and exterior.	40,000	OPR		0%	40,000	0
2002	Loma Rica	Rattlesnake Rd: Masterplan, Phase II, 14,300' of 18".	1,200,000	TSI		0%	1,200,000	0
2002	Loma Rica	TimBur Lane & Star Dr: Replace pvt pipeline with 2,800 ft of 8".	115,000	OPR	RMB	25%	86,250	28,750
2002	Lower Scotts Flat Rsv	Dam Wing-walls: Rehabilitate concrete.	150,000	OPR		0%	150,000	0
2002	Newtown	Headworks: Protect from PMF (probable maximum flood).	250,000	OPR	RSI	40%	150,000	100,000
2002	Newtown	Personeni Pipe Drop: Replace and encase canal upstream. 1200 LF of 30" Dia.(est).	150,000	OPR	RSI	30%	105,000	45,000
2002	North Auburn	Hyw 49: Locksley to Quartz. 1,250 ft of 14".	105,000	TSI		0%	105,000	0
2002	Orr Creek Rsv	Dam outlet facilities: Rehabilitate (study abandonment).	65,000	OPR		0%	65,000	0
2002	Red Hill	Cement Hill Road Spill: Check/spill. Study need for spill and encasement of spill channel.	10,000	OPR		0%	10,000	0
2002	Rex Rsv	Study abandonment.	10,000	OPR		0%	10,000	0
2002	Rohr Shanley Pipe	Mid-section: Replace/realign 2200' with 12".	95,000	OPR		0%	95,000	0
2002	Rough & Ready	Abandon between limits of Sazarac.	85,000	RSI		0%	85,000	0
2002	Snow Mountain	Sugarloaf pipeline: Convert to treated water and realign. 1200' of 8".	62,000	TSI		0%	62,000	0
2002	Tarr	Perrin past Old Auburn Road: Rehabilitate or relocate in siphon. See 1997 Study project.	800,000	OPR	RSI	35%	520,000	280,000

Year	Facility Name	Description	Cost Estimate	Primary Category	Secondary Category	Secondary Percent	Primary	Secondary
2003	Cascade	Lower Cascade: Replace with pipeline. Includes Upper G.V. Canal.	7,000,000	RSI		0%	7,000,000	0
2003	D S	Flume No. 16: 290' of 72".	110,000	OPR		0%	110,000	0
2003	Lake of Pines	Madrone Ct Install new pump station for local pressure problems	140,000	TSI		0%	140,000	0
2003	Lake Wildwood	Master Plan: Treated Water.	30,000	TSI		0%	30,000	0
2003	Loma Rica	Airport North Pipeline: Masterplan, 7,600' of 24".	820,000	TSI		0%	820,000	0
2003	Loma Rica	Cedar Ridge Loop: Transmission pipe (24") from East Bennett to Hwy 174.	880,000	TSI		0%	880,000	0
2003	Loma Rica	Rocky Lane: Replace pvt pipeline (900').	36,000	OPR	RMB	25%	27,000	9,000
2003	Loma Rica	Sum Gold Acres: Replace 1,700 ft. w/ 8".	50,000	OPR		0%	50,000	0
2003	North Auburn	Bower Lane. Replace pvt pipeline between Linda Dr and Bell Road.	6,000	OPR	RMB	25%	4,500	1,500
2003	North Auburn	Dry Creek Rd: Replace pvt pipeline opposite Lumber Jack.	9,000	OPR	RMB	25%	6,750	2,250
2003	Rough & Ready	Carey Dr to Ridge View Rd: Realign and encase in 500' of 24". (See Jim C. for concept).	55,000	OPR	RSI	30%	38,500	16,500
2003	Scotts Flat Rsv	Dam outlet gate: Replace hydraulic lines.	100,000	OPR		0%	100,000	0
2003	Wolf Hannaman	Austin Flat Siphon. Replace including structures..	120,000	OPR	RSI	20%	96,000	24,000
2004	D.S.	Flume No. 17: 120' of 72".	45,000	OPR		0%	45,000	0
2004	Doty North	Cannon Siphon: Replace.	50,000	OPR	RSI	20%	40,000	10,000
2004	Loma Rica	Francis Drive: 2,300 ft of 10".	120,000	TSI		0%	120,000	0

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2004	Lower Scotts Flat Rsv	Dam Center Gate: Rehabilitate and add hydraulic controls.	120,000	OPR	RSI	20%	96,000	24,000
2004	Newtown	Smith Property Rehabilitate.	40,000	OPR		0%	40,000	0
2004	Snow Mountain	Celio Rd: Replace pvt pipeline.	43,000	OPR	RMB	25%	32,250	10,750
2005	D.S.	Flume No. 18 & 19: 110' & 90' of 72".	80,000	OPR		0%	80,000	0
2005	E. George	Catalpa Lane: Replace private pipeline (est 550' of 8")	25,000	OPR	RMB	25%	18,750	6,250
2005	E. George	Linda Lane and C Street: Replace pvt pipeline(s). Off Squirrel Creek Rd.	25,000	OPR	RMB	25%	18,750	6,250
2005	E. George WTP	Treatment Plant: Expand capacity to 24 MGD (Sed. Basin, filters, plant effluent pipe).	2,200,000	TSI		0%	2,200,000	0
2005	Lake of Pines	Expand to 4.0 MG and New Clearwell tank (large as possible).	1,100,000	TSI		0%	1,100,000	0
2005	Loma Rica	Sky Pines: 2.2 MG tank and 3,600 ft of 14"	110,000	TSI		0%	110,000	0
2005	Loma Rica WTP	Treatment Plant: Expand to 12 MGD (Sed. Basin and filters).	960,000	TSI		0%	960,000	0