

# METROPOLITAN WASTE CONTROL COMMISSION

### 1988 PROGRAM BUDGET

# OFFICIALLY APPROVED NOVEMBER 17, 1987

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The Honorable Peter E. Meintsma, Chairman Members of the Commission Metropolitan Waste Control Commission 350 Metro Square Building St. Paul, MN 55101

Dear Chairman Meintsma and Commissioners:

Enclosd for your review and consideration in accordance with Minnesota Statute 473.163, is the Proposed 1988 Program Budget for the Metropolitan Waste Control Commission covering the period January 1 through December 31, 1988.

The procedure followed in the preparation of the Program Budget was initiated by the Program Managers preparing their budget requests based upon their objectives in 1988. These requests were then reviewed with their Department Director. Budgets were reduced by a joint decision of the Department Director and Program Manager, and the total Budget as presented to the Budget Committee totaled approximately a 14.5% increase. The Budget Committee, consisting of the Deputy Chief Administrator, Director of Administrative Services, Director of Quality Control, and the Comptroller, met with each Department Director and Program Manager, conducted six informational workshops with the Commission, and then further reduced the total budget increase to 8.84%. This budget increase will cause rates to go up an average 2.95%.

The total proposed expenditures of \$108,349,615 are detailed and described in 54 program budgets as indicated on Schedules 3-1 through 3-23. Each program budget indicates a description of the program and total resources required. You will find that program budgets and objectives, which emphasize results, not dollars spent, will tell you a great deal more about our activities and whether they meet community needs and requirements than the traditional line-item budgeting. In addition, this budgeting concept outlines a considerable amount of information in an understandable manner.

The 1987 Legislature passed legislation phasing out the six (6) service areas. However, the phase-out of the six (6) service areas occurs over a five-year period beginning in 1988. Thus, the 1988 area rates reflect the first phase towards accomplishing the uniform rate for the Metropolitan Area by 1992.

The Honorable Peter E. Meintsma, Chairman Members of the Commission July 10, 1987 Page Two

Some of the significant items in the Proposed 1988 Budget are as follows:

<u>Sewer Service Charges</u> - Allocation of current use charges to local governments being served by the Metropolitan Disposal System is estimated to cost \$87.19 per 100,000 gallons (per family) based on flow volume of 104,553 million gallons. This is an increase of 2.95% from 1987. Our Metropolitan Area sewer charges continue to be below the median (and also the mean) for the larger Metropolitan Areas of the United States.

Sewer Rates for 1988 Compared to 1987 per 100,000 gallons.

Typical Community	Center	<u> 1987 Rate</u>	1988 <u>Rate</u>	<pre>%</pre>
Hastings	T. W.	\$ 72.39	77.95	7.68
Minneapolis	S.A. #1	82.59	85.61	3.65
Coon Rapids	S.A. #2	90.16	91.89	1.91
Anoka	S.A. #3	109.08	108.14	37
Deephaven	S.A. #4	101.38	98.74	-2.60
Bloomington	S.A. #5	84.83	85.87	1.23
Newport	S.A. #6	83.96	85.87	2.28

Reserve Capacity Charges (SAC) - The distribution between current use and reserve capacity of the Metropolitan Disposal System is as follows:

<u>Cost Center</u>	Current Use %	Current Jse <u>Debt Service</u>	Reserve <u>Capacity</u> %	Reserve Cap. Debt Service
T.W.	.811968	\$ 18,404,857	.188032	\$ 4,258,116
Service Areas	.516051	7,288,526	.483949	6,835,128
TOTALS		\$ 25,693,383		\$11,093,244

The total Reserve Capacity requirement is \$11,093,244. This amount is based on the new statute which passed in the 1987 legislative session allocating a proportionate amount of current value charges to SAC. We are proposing that the present SAC charge increase to \$550 except that communities who do not have interceptor service will pay \$350 SAC fee per unit. Any deficit occurring during the year due to reduced construction and housing activities will be made up from the surplus balance in the SAC Fund, which at the end of 1986 was \$38,800,000. The Honorable Peter E. Meintsma, Chairman Members of the Commission July 10, 1987 Page Three

> Industrial Strength Charges - This system determines fees to be collected from an estimated 200 companies located in 31 units of government for discharging high strength wastewaters. These strength charges result in an estimated revenue of \$4,960,000.

The 1987 Proposed Operating Budget of \$108,349,615 is an increase of \$8,800,000 or 8.84% over the 1987 Budget. This proposed increase is attributed to the following:

(A)	Debt Services	\$4,200,000
(B)	Computer Development	1,300,000
(C)	Wage and Benefits	1,050,000
(D)	Move	914,000
(E)	Ash Removal Loan	860,000
(F)	Workers Compensation	500,000
(G)	Reserve	500,000
Sub	o-Total	\$9,324,000

Less:

Decreases in various programs \$ 524,000

\$8,800,000

Net Increase

### Capital Budget

The Capital Improvements Program contains 65 projects for which \$382,772,288 has been appropriated during the past several years.

It is anticipated that one (1) of these will be closed out during the current year and the remaining authorized projects will require total expenditures of \$204,378,662. Of this amount, \$43,483,181 has been encumbered and the balance of \$160,895,481 will be encumbered during the next years. A detailed financial status of these projects is shown on Schedule 11. In addition, one (1) new project is being proposed in the amount of \$2,500,000 and described on Schedule 13. The Honorable Peter E. Meintsma, Chairman Members of the Commission July 10, 1987 Page Four

Revenues to finance these projects include certified federal grants (net) \$9,443,681; certified state grants \$17,889,638; investment earnings \$3,900,000; miscellaneous income of \$50,000, 1987 bond sale of \$45,948,000; and a fund balance as of December 31, 1986 of \$26,785,000, resulting in total resources of \$104,016,319. Proposed expenditures total \$206,878,662 and result in a deficit fund balance of \$102,862,343, which will require sales of bonds to completely finance these projects. Over one-half of these expenditures will occur after 1988. To finance the funds required in 1988, bond sales will be required in 1988 totalling approximately \$55 million.

In submitting the 1988 Program Budget to the Commission, I wish to point out that many members of the staff have contributed significantly to the preparation of the budget. Their expertise experience and judgment have been exceedingly valuable. The task, at this point, is for the Commission to review the objectives and programs contained in this Budget and thereafter, in subsequent public meetings, to hear and consider input from the Council, local government officials and other interested parties. The staff, as usual, will provide you our complete cooperation and assistance in the review process.

Very truly yours, muchunt

Louis J. Breimhurst Chief Administrator

LJB:RLB:blm

Enclosure

# GENERAL FUND - REVENUES & EXPENDITURES

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	Budget 1988	Budget 1987	Actual 1986
ESTIMATED REVENUES:			
Sewer Service Charges-Communities	\$91,096,370	\$85,859,454	\$81,717,791
Industrial Strength	4,960,000	4,560,000	4,743,588
Service Availability Charges	11,093,245	8,655,546	7,096,597
Investment Earnings	600,000	375,000	1,147,158
Industrial Discharge Permits	25,000	25,000	4,941
Other	575,000	75,000	54,463
TOTAL ESTIMATED REVENUES	\$108,349,615	\$99,550,000	\$94,764,538
	· .		
ESTIMATED EXPENDITURES:			
Program	\$71,558,987	\$66,836,523	\$ 61,282,781
Debt Service	32,622,510	28,549,986	26,597,287
Acquisition Costs	4,168,118	4,163,491	4,093,038
TOTAL ESTIMATED EXPENDITURES	\$108,349,615	\$99,550,000	\$91,973,106
Transfer to Budget Reserve			\$ 500,000
Due to Local Government			2,291,432
GRAND TOTAL			\$94,764,538
Transfer to SAC Reserve (Add'l SAC	Revenue)		\$ 6,327,699

SCHEDULE 2

### CHIEF ADMINISTRATOR'S OFFICE (001)

#### Description:

The Chief Administrator's Office provides overall leadership and direction to all MWCC staff. In addition, internal auditing of selected activities is conducted. Two major costs of MWCC operation, central office rent and payments to the Metropolitan Council for staff services, are included in this program. Also included are costs associated with moving the central office facility from one building to another with more space.

Resources Required: \$1,727,665

Work Hours Required: 10,200

BOARD OF COMMISSIONERS (002)

#### Description:

The Board of Commissioners is the governing body for the MWCC. The Board provides policy direction for staff operations and reviews, then approves or rejects administrative actions proposed by the Chief Administrator.

Resources Required: \$252,974

Work Hours Required: 5,400

### OFFICE OF LEGAL COUNSEL (003)

### Description:

The Office of Legal Counsel provides general in-house legal service to MWCC's Board of Commissioners and staff; provides in-house acquisition services; and arranges for and supervises contracted-out legal services.

Resources Required: \$158,610

Work Hours Required: 4,050

### OFFICE OF PUBLIC AND COMMUNITY RELATIONS (004)

#### Description:

This Office supports the goals of the MWCC by conducting a comprehensive information and communication program about MWCC's activities for all MWCC audiences--commissioners, employees, the media, government organizations, plus local officials and the public in 105 communities in the metropolitan area.

Resources Required: \$245,676

Work Hours Required: 6,240

### OFFICE OF HEALTH AND SAFETY (005)

### Description:

This Office ensures a safe and healthy work environment for all employees by:

- Managing a loss control system (through trend analysis of injury reports) to reduce frequency of injuries and loss time rates;
- Servicing special needs of program managers, including analysis of air contaminants, noise levels, construction design, work procedures, and policy interpretations;
- 3) Providing all employees with safety and industrial hygiene training and information relative to on-the-job and home and safety issues;
- 4) Maintaining safe work environments through site audits of treatment plants, lift stations, meter vaults, and MWCC construction projects to verify compliance with safety policies and OSHA regulations; and
- 5) Managing the Workers' Compensation and Return-To-Work Programs.

Resources Required: \$1,535,873

Work Hours Required: 12,760

### PLANNING DEPARTMENT - ADMINISTRATION (006)

### Description:

Planning Department Administration is responsible for the supervision of broad-scale planning activities, which help assure that MWCC's facilities continue to meet environmental standards and user needs, and that programs and policies are in place for efficient and costeffective operations.

Resources Required: \$112,483

Work Hours Required: 2,785

PLANNING DEPARTMENT - CAPITAL PROJECTS (007)

### Description:

The Planning Department is responsible for MWCC's long range capital planning. The Department:

- Coordinates, prepares and processes MWCC's Implementation Plan (a long range capital and service delivery plan);
- Coordinates, conducts or manages studies that update or review plans for MWCC facilities;
- Reviews and assesses the implementation of MWCC's capital improvements program; and
- 4) Coordinates with the Metropolitan Council, providing information and studies necessary to formulate revisions or amendments to the Waste Resources Management Development Guide Policy Plan, the Implementation Plan, or the Capital Budget.

Resources Required: \$42,569

Work Hours Required: 1,130

### PLANNING DEPARTMENT - MUNICIPAL SERVICES (008)

#### Description:

The Planning Department is responsible for interacting with Twin Cities metro area municipalities by:

 Reviewing and approving comprehensive sewer plans and sanitary sewer improvements, as required by State statutes;

### PLANNING DEPARTMENT - MUNICIPAL SERVICES (008) - (Cont.)

Description: (Continued)

- Determining and assigning estimated and actual wastewater flows, plus interceptor and treatment capacities by municipality;
- Administering the sewer Service Availability Charge, interpreting policy and unit assignments as part of the Cost Allocation System; and
- 4) Reviewing projects proposed for the metropolitan areas to determine whether their construction or use will have an impact on the Metropolitan Disposal System.

Resources Required: \$251,357

Work Hours Required: 10,710

### PLANNING DEPARTMENT - SPECIAL PROJECTS (009)

### Description:

The Planning Department coordinates non-routine planning studies that deal with new concepts, innovative technologies or other special projects. Some projects require inter and intra-departmental coordination.

Resources Required: \$70,258

Work Hours Required: 1,800

### PLANNING DEPARTMENT - COMPREHENSIVE PLANNING (010)

### Description:

The Planning Department is responsible for MWCC-wide strategic planning, and grants administration. Strategic planning is used to determine the long range implications of change (e.g., governmental, sociological and economic) and to identify key issues and formulate strategies for MWCC policymakers and managers to deal with the changes, so that the Commission can take advantage of opportunities and avoid threatening circumstances. Through grants administration, MWCC departments are kept abreast of current and planned environmental regulations. The Planning Department packages grant applications and provides administrative services on construction grants for the life of construction projects.

Resources Required: \$174,270

Work Hours Required: 4,400

### QUALITY CONTROL DEPARTMENT - ADMINISTRATION (011)

### Description:

The Quality Control Department is responsible for fulfilling MWCC's needs in the areas of environmental monitoring and technical support. This includes sampling and analyzing wastewater, receiving water and air, administering MWCC permits, controlling industrial users, and conducting applied research.

Resources Required: \$128,311

Work Hours Required: 3,870

### QUALITY CONTROL DEPARTMENT - INDUSTRIAL WASTE (012)

#### Description:

The Industrial Waste Division is responsible for controlling industrial users of the Metropolitan Disposal System by granting and enforcing permits; responding to spills, and treatment plant and wastewater collection system problems; and administering the MWCC Strength Charge System.

Resources Required: \$908,601

Work Hours Required: 43,240

# QUALITY CONTROL DEPARTMENT - RESEARCH & DEVELOPMENT (013)

#### Description:

The Research & Development Division is a service group, consisting of engineers, scientists, and technicians dedicated to conducting diligent, systematic, and timely investigations into subject areas of interest to MWCC. These investigations are conducted to solve existing or anticipated problems and/or optimize the utilization of physical and financial resources.

Resources Required: \$996,986

Work Hours Required: 21,462

### QUALITY CONTROL DEPARTMENT - WATER QUALITY MONITORING & ANALYSIS (014)

### Description:

The Water Quality Monitoring and Analysis Division measures compliance with standards and detects trends by monitoring the quality of area receiving waters, conducting toxicity testing of treatment plant effluents, and monitoring groundwater in MWCC wells. The Division also provides support for facility planning and regional management activities. Additional tasks performed by staff include field collections and surveys, data interpretation and reporting, and mathematical modeling.

Resources Required: \$525,289

Work Hours Required: 22,390

### QUALITY CONTROL DEPARTMENT - LAB SERVICES (015)

### Description:

The Laboratory Services Division functions to provide the MWCC with efficient and accurate analyses of samples originating from treatment plants, rivers, industries, special studies, and research and development.

Resources Required: \$1,665,613

Work Hours Required: 72,688

### QUALITY CONTROL DEPARTMENT - AIR QUALITY MONITORING (016)

#### Description:

The Air Quality Monitoring Division provides air quality monitoring and related technical expertise to other MWCC divisions, to assist the Commission in achieving its goal of complying with clean air standards in a cost effective manner. Specifically, this Division:

- 1) Serves as a coordination center for all MWCC air quality efforts;
- 2) Provides all needed gas and air testing;
- Provides technical expertise to other MWCC divisions dealing with air quality issues, including involvement in project and regulatory permit negotiations;
- 4) Insures, in concert with the Dept's Permits Division, that the MWCC's stack gas and ambient air testing efforts are in compliance with all regulatory requirements; and
- 5) Maintains, in conjunction with the Research and Development Division, an ongoing program of investigations into improved methods for measuring air quality indices.

Resources Required: \$291,271

Work Hours Required: 9,704

# QUALITY CONTROL DEPARTMENT - PERMITS ADMINISTRATION & MONITORING (017)

### Description:

The Permits Administration and Monitoring Division administers and monitors all permits for air emissions, effluent discharges, and residual solids generated by the MWCC in an environmentally, technically, financially, and legally sound manner. The Division interacts with all segments of the MWCC and represents the Commission's interests before regulatory agencies on permitting issues. Tasks performed include:

- Applying for, negotiating, and tracking compliance of air permits, NPDES permits, ash landfill and utilization permits, and sludge landspreading site and facility permits;
- 2) Processing miscellaneous hazardous waste forms and requirements;
- 3) Coordinating permit requirements with other divisions of the Quality Control Department, Operations, Engineering/Construction, and Planning Departments; and
- Monitoring federal and state publications as they relate to permitting matters.

Resources Required: \$299,038

Work Hours Required: 4,810

# ADMINISTRATIVE SERVICES DEPARTMENT - ADMINISTRATION (018)

### Description:

Provides administrative support to the MWCC. The Director of the Department is responsible for seeing that the Divisions within the Department fulfill their missions and accomplish their goals on schedule and within budget. There are six Divisions within the Department: Affirmative Action; Business Services; Accounting (Controller); Human Resources; Information Technologies; and Procurement.

Resources Required: \$161,044

Work Hours Required: 4,500

#### ADMINISTRATIVE SERVICES DEPARTMENT - BUSINESS SERVICES (019)

#### Description:

The Business Services Division is responsible for providing space, replacement furniture, communications equipment, and postage and xerox services to all Central Office personnel. The Division also administers MWCC's Employee Assistance and Records Retention programs and provides support to MWCC's Quality and Productivity Improvement Interest Group.

Resources Required: \$382,095

Work Hours Required: 9,400

### ADMINISTRATIVE SERVICES DEPARTMENT - HUMAN RESOURCES (020)

#### Description:

The Human Resources Division provides a range of services to MWCC, including administering the recruitment and selection of new employees, employee orientation, performance appraisal, job descriptions (including job analysis and job evaluation), wages and salaries, and employee benefits.

Resources Required: \$289,152

Work Hours Required: 9,900

### ADMINISTRATIVE SERVICES DEPARTMENT - LABOR RELATIONS (021)

#### Description:

The Administrative Services Department is responsible for all MWCC labor relations activities, including the negotiation of labor contracts and agreements.

Resources Required: \$89,383

Work Hours Required: 900

### ADMINISTRATIVE SERVICES DEPARTMENT - PROCUREMENT (022)

### Description:

The Procurement Division is responsible for:

- Providing a centralized purchasing system with a proper set of checks and balances on orders that comply with all federal, state, and local laws and establish rules;
- Maintaining a bid calendar for all items acquired through the bidding process and administer bid procedures.
- 3) Managing a central motor pool;
- 4) Providing semi-annual reports to management to aid decision-making;
- 5) Preparing a budget forecast for materials and supplies to be used by all MWCC Departments in preparing their annual program budget; and
- 6) Coordinating with MWCC departments and government agencies on the disposal of surplus or obsolete Commission equipment.

Resources Required: \$207,509

Work Hours Required: 11,260

### PLANNING DEPARTMENT - INSURANCE (023)

### Description:

The Planning Department is responsible for assessing risks inherent in the operation of the Metropolitan Disposal System and securing coverage for those risks that will adversely affect the operations of the System. The dept. is also responsible for:

- 1) Ascertaining risks that are self/co-insurable, to reduce premiums;
- Soliciting quotes from vendors for coverage at least 30 days prior to anniversary date(s) or premium due date(s); and
- Processing all property and damage claims within three days of learning about them.

Resources Required: \$779,591

Work Hours Required: 1,370

### ADMINISTRATIVE SERVICES DEPARTMENT - CONTROLLER'S ADMINISTRATION (024)

#### Description:

The Administrative Services Dept. is responsible for insuring the successful completion of a full range of required financial services for the MWCC on a timely basis, including collections, disbursements, payroll, budgeting, general accounting, final reporting, cost effectiveness studies and other related financial matters.

Resources Required: \$155,773

Work Hours Required: 5,120

### ADMINISTRATIVE SERVICES DEPARTMENT - ACCOUNTING & COLLECTIONS (025)

### Description:

The Administrative Services Dept. is responsible for insuring that accounting regulations and policies are followed in all MWCC's financial transactions and also for providing accurate, useful and up-todate financial data to all dept.s with MWCC. Further, the Dept. is responsible for proper receipt and accounting of Commission revenue as well as maintenance of a Commission-wide fixed asset system.

Resources Required: \$198,216

Work Hours Required: 3,820

### ADMINISTRATIVE SERVICES DEPARTMENT - DISBURSEMENTS (026)

#### Description:

The Administrative Services Dept. is responsible for properly paying all vendors and contractors used by the MWCC.

Resources Required: \$134,111

Work Hours Required: 9,070

### ADMINISTRATIVE SERVICES DEPARTMENT - PAYROLL (027)

### Description:

The Administrative Services Dept. is responsible for preparing all MWCC payroll checks, distributing labor costs to the respective MWCC dept.s and remitting all necessary payroll deductions to the appropriate government agencies.

Resources Required: \$185,227

Work Hours Required: 9,840

### PLANNING DEPARTMENT - DEBT SERVICES - CASH/FISCAL MANAGEMENT (028)

### Description:

The Planning Department is responsible for planning cash flow requirements for both the operating and construction funds; bonding requirements for the construction fund and related debt service requirements in the operating fund; prompt investment of Commission monies; and recommendations on financial matters pertaining to long-range planning.

Resources Required: \$36,874,475

Work Hours Required: 2,730

### ADMINISTRATIVE SERVICES DEPARTMENT - AFFIRMATIVE ACTION (029)

#### Description:

The Affirmative Action Division is responsible for recruitment, employee selection, upward mobility and training that leads to the improvement at MWCC in employment opportunities for minorities, women and the handicapped. This Division is also responsible for implementing the Women's Business Enterprise/Minority Business Enterprise (WBE/MBE) program.

Resources Required: \$120,605

Work Hours Required: 3,600

### ADMINISTRATIVE SERVICES DEPARTMENT - CAREER DEVELOPMENT/TRAINING (030)

### Description:

The Administrative Services Department assists employees with education to prepare them for career opportunities within MWCC.

Resources Required: \$53,202

Work Hours Required: 0

### ADMINISTRATIVE SERVICES DEPARTMENT - INFORMATION TECHNOLOGIES (031)

#### Description:

The Information Technologies Division:

- Provides electronic data processing to all departments within MWCC;
- Maintains MWCC's existing systems of minicomputers, personal computers and word processors;
- 3) Reviews current and future technologies and the impact they might have on the Commission; and
- 4) Assures implementation of the Comprehensive Long-Range Information Systems Plan adopted by MWCC's Board of Commissioners in 1986. (This will require the addition of new staff in 1988.)

Resources Required: \$2,299,190

Work Hours Required: 33,832

### OPERATIONS DEPARTMENT - ASH DISPOSAL (032)

### Description:

The Operations Department is responsible for disposing of 230,000 tons of sewage sludge ash, which has been stored at MWCC's Metro Plant.

Resources Required: \$860,000

Work Hours Required: 0

### OPERATIONS DEPARTMENT - REGULATOR SYSTEM (033)

### Description:

The Operations Department is responsible for operating and maintaining 17 instrumented combined sewer overflow (CSO) regulator sites and 80 non-instrumented regulator sites in conformance with NPDES permit requirements. Proper operation of the regulator system maximizes the conveyance of wastewater to MWCC's Metro Plant for treatment and minimizes the overflow of sewage from combined (sanitary and storm) sewers to the river.

Resources Required: \$355,896

Work Hours Required: 11,300

# OPERATIONS DEPARTMENT - INTERCEPTOR ADMINISTRATION (034)

#### Description:

The Operations Department is responsible for administering the interceptor sewer system in the metro area. This includes:

- 1) Managing finances;
- 2) Maintaining a radio system; and
- 3) Planning for improvements.

Resources Required: \$318,078

Work Hours Required: 11,728

### OPERATIONS DEPARTMENT - INTERCEPTOR SYSTEM MAINTENANCE (035)

### Description:

The Operations Department is responsible for maintaining the MWCC wastewater collection system, which includes approximately 500 miles of sewer pipes, serving more than 100 communities. This requires managing interceptor rental agreements and interceptor maintenance contracts. The MWCC Inspection Crew performs ongoing inspection and rehabilitation of interceptor sewer pipes. Videotaping, sewer hole sealing, pipe joint sealing and root control are all performed as part of interceptor system maintenance.

Resources Required: \$678,586

Work Hours Required: 10,140

### OPERATIONS DEPARTMENT - LIFT STATIONS (036)

### Description:

The Operations Department is responsible for operating and maintaining 61 lift stations and the associated alarm telemetry system, which monitors each station. Routine first echelon maintenance is performed on each lift station daily. (Two-thirds of the stations are checked on weekends to assure continued operation.) Preventative maintenance and corrective maintenance are scheduled to provide necessary second echelon maintenance to all 61 lift stations. Standby power coverage is provided by either on-site generators or portable generators, which are moved from site to site.

Resources Required: \$2,320,339

Work Hours Required: 54,486

OPERATIONS DEPARTMENT - METERING STATIONS (037)

#### Description:

The Operations Department is responsible for the following activities related to metering stations:

- Keeping 173 flow meters in good working order through preventative maintenance and quarterly calibrations;
- Preparing and forwarding to the Engineering Department monthly metered flow reports;
- 3) Preparing community flow reports twice annually;
- Assisting the Engineering Department in the contacting of communities responsible for excesses of inflow and infiltration into the MWCC system;
- 5) Maintaining all meter system computer equipment and peripherals; and
- 6) Installing weirs at locations where data is needed and no meter devices are available.

Resources Required: \$1,078,776 Work Hours Required: 30,300

### OPERATIONS DEPARTMENT - EMPIRE PLANT (038)

#### Description:

The Empire Plant has a capacity to treat 6 million gallons per day of wastewater. It serves Empire Township, Apple Valley, Lakeville and Farmington. The plant provides primary, secondary and tertiary treatment to wastewater before discharging it into the Vermillion River. Sludge is landspread on adjacent farmland. The Operations Department is responsible for the following activities at this and all of its plants:

- 1) Operating the plant in compliance with permit requirements;
- Maintaining plant facilities;
- 3) Emphasizing safe working conditions through safety training, safety committee meetings and effectively addressing specific safety problems; and
- 4) Maintaining the plant to provide a pleasant, safe, and productive work environment, and a good image to the public.

Resources Required: \$1,861,209

Work Hours Required: 54,838

### OPERATIONS DEPARTMENT - METRO PLANT OPERATIONS (039)

#### Description:

The Metro Plant has the capacity to treat 250 million gallons of wastewater each day or 80 percent of the wastewater in the metro area. The plant serves some 60 communities and 1.5 million people. The plant provides primary, secondary and advanced treatment to wastewater before discharging it into the Mississippi River. Over \$3 million in fuel bills is saved annually by burning sludge to create energy. (See Operations Department - Empire Plant for activities common to all plants.)

Resources Required: \$25,806,720

Work Hours Required: 977,461

#### OPERATIONS DEPARTMENT - METRO MAINTENANCE (040)

#### Description:

The Operations Department is responsible for maintaining the Metro Plant by:

- Providing emergency, preventive, and corrective maintenance of an in-house and contract nature for MWCC's Metro Plant Operations and Quality Control;
- Providing warehouse services for MWCC's Metro Plant and Maintenance shops;
- 3) Providing purchasing services for MWCC's Maintenance shops;
- 4) Providing receiving services for MWCC's Metro Plant, Quality Control, and Construction Field Office.
- 5) Providing vehicle maintenance services for MWCC's Metro Plant Operations, Construction Field Office, Quality Control and Administrative Services; and
- 6) Providing salvage services for MWCC.

Resources Required: \$12,317,199

Work Hours Required: 340,388

### OPERATIONS DEPARTMENT - SENECA PLANT (041)

#### Description:

The Seneca Plant has a capacity to treat 24 million gallons per day of wastewater. It serves Bloomington, Eagan and Burnsville. The plant provides primary and secondary treatment to wastewater before discharging it into the Minnesota River. Seneca Plant sludge is incinerated on site. Also, 85 percent of the sludge from the Blue Lake Plant is incinerated at the Seneca Plant. (See Operations Department - Empire Plant for activities common to all plants.) In addition to the usual plant activities, the Seneca Plant manages a special odor reduction program necessary for continued good community relations between MWCC and the City of Eagan.

Resources Required: \$4,220,697

Work Hours Required: 97,368

### OPERATIONS DEPARTMENT - BLUE LAKE PLANT (042)

### Description:

The Blue Lake Plant has a capacity to treat 24 million gallons per day of wastewater. It serves Chanhassen, Deephaven, Eden Prairie, Excelsior, Greenwood, Laketown Township, Long Lake, Maple Plain, Minnetonka, Minnetonka Beach, Minnetrista, Mound, Orono, Prior Lake, St. Bonifacius, Shakopee, Shorewood, Spring Park, Tonka Bay, Victoria, Waconia and Wayzata. The plant provides primary and secondary treatment to wastewater and chlorinates the effluent before discharging it into the Minnesota River. Sludge is thickened and transported to either the Seneca Plant or Metro Plant for further treatment and incineration. (See Operations Department - Empire Plant for activities common to all plants)

Resources Required: \$2,328,312

Work Hours Required: 64,520

### OPERATIONS DEPARTMENT - CHASKA PLANT (043)

### Description:

The Chaska Plant has a capacity to treat approximately 1.0 million gallons per day of wastewater. It serves the City of Chaska. The plant provides primary and secondary treatment to wastewater before discharging it into the Minnesota River. Sludge is transported to either the Seneca Plant or Metro Plant for disposal. (See Operations Department - Empire Plant for activities common to all plants.)

Resources Required: \$333,079

Work Hours Required: 5,600

### OPERATIONS DEPARTMENT - ANOKA PLANT (044)

#### Description:

The Anoka Plant has a capacity to treat 2.46 million gallons per day of wastewater. It serves the communities of Anoka, Champlin and Ramsey. The plant provides primary and secondary treatment to wastewater before discharging it into the Mississippi River. Sludge is transported to the Metro Plant for disposal. (See Operations Department - Empire Plant for activities common to all plants.)

Resources Required: \$321,215

Work Hours Required: 9,150

#### OPERATIONS DEPARTMENT - BAYPORT PLANT (045)

#### Description:

The Bayport Plant has a capacity to treat 0.65 million gallons per day of wastewater. It serves the community of Bayport. The plant provides primary and secondary treatment to wastewater plus removal of phosphorous before discharging the effluent into the St. Croix River. Sludge is transported to the Metro Plant for disposal. (See Operations Department - Empire Plant for activities common to all plants.)

Resources Required: \$262,897

Work Hours Required: 5,049

#### OPERATIONS DEPARTMENT - COTTAGE GROVE PLANT (046)

#### Description:

The Cottage Grove Plant has a capacity to treat 1.8 million gallons per day of wastewater. It serves the community of Cottage Grove. The plant provides primary and secondary treatment to wastewater before discharging it into the Mississippi River. Sludge is applied to farmland or transported to the Metro Plant for disposal. (See Operations Department - Empire Plant for activities common to all plants.)

Resources Required: \$407,697

Work Hours Required: 11,149

### OPERATIONS DEPARTMENT - HASTINGS PLANT (047)

#### Description:

The Hastings Plant has a capacity to treat 2.34 million gallons per day of wastewater. It serves the community of Hastings. The plant provides primary and secondary treatment to wastewater before discharging it into the Mississippi River. Sludge is applied to farmland or transported to the Metro Plant for disposal. (See Operations Department - Empire Plant for activities common to all plants.)

Resources Required: \$507,907

Work Hours Required: 11,749

#### OPERATIONS DEPARTMENT - STILLWATER PLANT (048)

#### Description:

The Stillwater Plant has a capacity to treat 3.0 million gallons per day of wastewater. It serves the communities of Stillwater and Oak Park Heights. The plant provides primary and secondary treatment to wastewater plus the removal of phosphorous from the effluent before discharging it into the St. Croix River. Sludge is transported to the Metro Plant for disposal. (See Operations Department - Empire Plant for activities common to all plants.)

Resources Required: \$493,927

Work Hours Required: 12,349

### OPERATIONS DEPARTMENT - SAVAGE PLANT (049)

#### Description:

The Savage Plant has a capacity to treat 0.86 million gallons per day of wastewater. It serves the community of Savage. The plant provides primary and secondary treatment to wastewater before discharging it into the Minnesota River. Sludge is transported to either the Seneca Plant or the Metro Plant for disposal. (See Operations Department -Empire Plant for activities common to all plants.)

Resources Required: \$128,780

Work Hours Required: 4,640

### OPERATIONS DEPARTMENT - ROSEMOUNT PLANT (050)

### Description:

The Rosemount Plant has a capacity to treat 0.6 million gallons per day of wastewater. It serves the community of Rosemount. The Rosemount Plant is different from all the other MWCC plants in that it is a physical-chemical plant. This means that chemicals are used to remove pollutants in the treatment process. (Biological treatment processes are used at the other MWCC treatment plants.) The plant provides primary and secondary treatment to wastewater and removal of phosphorous from the effluent before discharging it to the Mississippi River. Sludge is transported to the Metro Plant for additional treatment and disposal. (See Operations Department - Empire Plant for activities common to all plants.)

Resources Required: \$671,842

Work Hours Required: 17,392

#### OPERATIONS DEPARTMENT - OPERATIONS ADMINISTRATION (051)

#### Description:

Operations Department Administration provides administrative support to the entire department. The Director of the department is responsible for seeing that those who manage the wastewater treatment plants and interceptor sewer system accomplish their goals on schedule and within budget.

Resources Required: \$242,494

Work Hours Required: 7,200

# OPERATIONS DEPARTMENT - PROCESS ASSURANCE (052)

### Description:

Process Assurance is a technical services section of the Operations Department which works with managers and technical staff in the Operations, Planning, Engineering/Construction and Quality Control Departments. Technical services include:

- 1) Assisting the Operations Department with permit compliance;
- Providing wastewater treatment plants with process control engineering services, to insure permit compliance and practical, costeffective and environmentally sound operation;
- 3) Implementing a residual solids management program; and
- 4) Planning, designing and coordinating construction of capital improvement projects between the Operations Department and Engineering/ Construction Departments.

Resources Required: \$214,412

Work Hours Required: 8,600

# ENG./CONSTRUCTION DEPARTMENT - ENGINEERING/CONSTRUCTION SERVICES (053)

### Description:

The Engineering/Construction Department is responsible for:

- Providing engineering and construction management services for the design and construction of projects designed in-house and funded by the MWCC'S operating budget;
- Providing engineering and construction management services for projects designed and constructed under special agreements;
- Providing engineering and construction management services for sewer connections;
- 4) Providing engineering services for planning of projects funded by MWCC's capital budget; and
- 5) Providing resources to record lands and easements in the name of MWCC.

Resources Required: \$343,205

Work Hours Required: 14,040

### OPERATIONS DEPARTMENT - REGIONAL FACILITIES (054)

### Description:

The Operations Department is responsible for supporting MWCC's Regional Facilities. Technical support and coordination is provided during design, construction and start-up of new projects and during inspection/rehabilitation of interceptor sewers.

Resources Required: \$459,931

Work Hours Required: 9,000

### SUMMARY STATEMENT OF PROGRAM EXPENDITURES

		Proposed 1988	Budget 1987	Actual 1986
5010	Salaries & Wages	\$ 32,733,988	\$ 31,816,866	\$ 30,127,942
5020	Employee Benefits	7,201,477	6,988,097	6,570,371
5040	Travel - Out of State	27,995	29,748	21,640
5041	Travel - Local	21,130	19,238	14,082
5042	Auto Allowance	9,000	9,950	9,054
5045	Recruitment	22,000	15,000	8,984
5046	Public Hearings	6,808	8,787	0
5050	Commission-Per Diem	38,000	38,800	28,750
5051	Commission-Other	3,354	2,678	3,787
5060	Office Rent	429,295	336,200	304,864
5070	Educational Assistance	355,305	335,659	260,696
5075	Budget Reserve	500,000	0	0
5080	Safety	44,900	32,000	60,357
5085	Medical Aids	16,139	13,463	10,175
5090	Cont. Serv Data Proc.	468,614	101,287	111,359
5091	Cont. Serv Admin.	81,636	62,900	63,758
5092	Cont. Serv Auditing	42,005	31,452	31,339
5093	Cont. Serv Engin.	648,000	40,000	151,926
5094	Cont. Serv Lab.	171,383	162,316	43,620
5095	Cont. Serv Laundry	123,249	113,929	112,517
5096	Cont. Serv Legal	60,000	61,660	2,783
5097	Cont. Serv Maint.	1,704,240	1,834,020	1,127,547
5098	Cont. Serv Oper.	1,438,440	720,295	263,243
5099	Cont. Serv Xerox	106,499	107,182	98,172
5100	Cont. Serv Sldg. Rem.	112,007	361,039	371,165
5101	Cont. Serv Janit.	170,095	117,144	52,675
5102	Cont. Serv Other	2,142,912	1,616,246	1,173,755
5200	Materials & Supplies	1,199,461	1,097,612	1,032,435
5210	Maint. Materl. & Supp.	3,268,519	2,959,564	2,664,685
5300	Office Supplies	114,116	114,686	94,606
5310	Publications	72,315	42,408	53,672
5320	Postage	36,230	43,146	34,597
5330	Office Equip. Repair	5,477	9,894	7,573
5340	Advertising	10,636	16,200	9,642
5350	Dues & Subscriptions	26,984	22,653	12,487
5370	Flood Control	10,000	10,000	0
5390	Council Participation	369,600	115,000	96,408
5500	Motor Vehicle Expense	657,937	603,193	532,346
5600	Permit Fees	149,590	108,500	0

		Proposed 1988	Budget 1987	Actual 1986
5620	Intep. Rental Contract	\$ 128,427	\$ 128,427	\$ 109,015
5630	Intep. Maint. Contract	106,500	135,700	94,317
5700	Insurance - Auto	210,670	241,518	207,456
5701	Insurance - Blanket Bond	1,760	1,600	929
5702	Insurance - Bldg. & Prop.	323,703	384,275	303,484
5703	Insurance - Gen. Liab.	118,762	132,965	106,469
5704	Insurance - Work. Comp.	1,160,000	664,271	1,084,703
5705	Insurance - Exc. Liab.	82,500	90,000	60,000
5706	Insurance - Other	4,108	2,800	3,870
5800	Utilities - Elec.	8,356,853	8,794,116	8,123,217
5801	Utilities - Fuel	84,532	162,359	72,106
5802	Utilities - Gas	1,510,955	1,434,802	1,210,161
5803	Utilities - Water	161,215	138,441	101,540
5850	Telephone Service	153,210	299,284	266,859
5851	Leased Lines	177,058	179,758	139,194
5900	Chemicals - Ferr. Chlor.	7,477	11,848	125,114
5901	Chemicals - Potassium	165,000	139,000	48,280
5902	Chemicals - Lime	33,760	44,652	43,757
5903	Chemicals - Other	793,854	703,741	594,780
5904	Polymers	1,058,300	1,019,283	1,053,990
5905	Chemicals - Acid	49,365	21,450	27,556
5940	Chlorine	360,312	358,436	312,118
5999	Miscellaneous	38,166	26,007	36,372
6010	Debt ServLoc. Gov't.	1,100,033	1,167,682	1,234,801
6020	Debt ServMet. Coun.	31,522,477	27,382,304	25,362,487
6100	Acquisition Costs	4,168,118	4,163,491	4,093,038
6200	Capital Outlay	1,873,164	1,602,978	1,595,343
		\$108,349,615	\$ 99,550,000	\$ <u>91,973,968</u>

SCHEDULE 3-24

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### PROGRAM DETAIL COSTS

# CHIEF ADMINISTRATOR'S OFFICE (001)

# OFFICE OF PUBLIC & COMMUNITY RELATIONS (004)

5010 Salaries & Wages 5020 Employee Benefits	\$ 271,039 59,629	5010 Salaries & Wages 5020 Employee Benefits	\$104,255 22,936
	874	5041 Travel - Local	552
		5046 Public Hearings	161
5042 Auto Allowance	5,400	-	
5046 Public Hearings	1,647	5070 Educational Assistance	3,803
5060 Office Rent	406,433	5102 Cont. Serv Other	24,000
5070 Educational Assistance	2,041	5200 Materials & Supplies	30,000
5091 Cont. Serv Admin.	32,136	5310 Publications	50,000
5102 Cont. Serv Other	10,866	5320 Postage	5,080
5200 Materials & Supplies	2,906	5350 Dues & Subscriptions	1,251
5350 Dues & Subscriptions	8,094	5999 Miscellaneous	1,638
		6200 Capital Outlay	2,000
5390 Council Participation	369,600	6200 Capital Ouclay	
5999 Miscellaneous	11,000		
6200 Capital Outlay	546,000		
		- · · •	AA 45 575
Total	\$1,727,665	. Total	\$245,676
BOARD OF COMMISSIONERS (002)		OFFICE OF HEALTH & SAFETY (005)	
	C 04 343	FOLD Colorido ( Marca	\$ 219,679
5010 Salaries & Wages	\$ 94,141	5010 Salaries & Wages	
5020 Employee Benefits	20,711	5020 Employee Benefits	48,329
5040 Travel - Out of State	3,000	5070 Educational Assistance	1,163
5041 Travel - Local	3,072	5085 Medical Aids	13,280
5042 Auto Allowance	3,600	5090 Cont. Serv Data Proc.	1,019
5046 Public Hearings	5,000	5102 Cont. Serv Other	48,700
5050 Commission - Per Diem	38,000	5200 Materials & Supplies	19,200
	-	5350 Dues & Subscriptions	4,003
5051 Commission - Other	3,354		-
5070 Educational Assistance	11,150	5500 Motor Vehicle Expense	7,200
5102 Cont. Serv Other	64,000	5704 Insurance - Wkrs. Comp.	1,160,000
5999 Miscellaneous	2,657	6200 Capital Outlay	13,300
6200 Capital Outlay	4,289	-	
			<b>.</b>
Total	\$252,974	Total	\$1,535,873
			400 <u>,22,2000</u> ,2000
OFFICE OF LEGAL COUNSEL (003)		PLANNING ADMINISTRATION (006)	
5010 Salaries & Wages	\$ 76,671	5010 Salaries & Wages	\$ 86,451
-		5010 Salaries & wages 5020 Employee Benefits	19,019
5020 Employee Benefits	16,868		
5040 Travel - Out of State	2,660	5040 Travel - Out of State	936
5041 Travel - Local	208	5070 Educational Assistance	3,685
5070 Educational Assistance	300	5200 Materials & Supplies	520
5096 Cont. Serv Legal	60,000	5350 Dues & Subscriptions	520
5102 Cont. Serv Other	238	5500 Motor Vehicle Expense	1,352
5200 Materials & Supplies	104		<u>_</u>
5310 Publications	1,284		
	-		•
5350 Dues & Subscriptions	173		
5999 Miscellaneous	104		
Total	\$158,610	Total	\$112,483
			<u></u>
		SCHEDULE 3-	-20

CAPIT	AL PROJECTS PLANNING (007)		QUALI	TY CONTROL ADMINISTRATION	(0)	11)
5010 5020 5040 5041 5070 5999 6200	Salaries & Wages Employee Benefits Travel - Out of State Travel - Local Educational Assistance Miscellaneous Capital Outlay Total	\$25,967 5,713 624 239 3,450 208 <u>6,368</u> \$42,569	5010 5020 5040 5200 5310 5350 5999 6200	Salaries & Wages Employee Benefits Travel - Out of State Educational Assistance Materials & Supplies Publications Dues & Subscriptions Miscellaneous Capital Outlay		\$ 98,072 21,576 500 1,163 2,000 500 500 1,000 3,000
	IPAL SERVICES PLANNING (008			Total		\$128,311
MUNIC	IPAL SERVICES PLANNING (008		INDUS	TRIAL WASTE (012)		
5010 5020 5040 5041 5070 5200 5350 5999 6200	Salaries & Wages Employee Benefits Travel - Out of State Travel - Local Educational Assistance Materials & Supplies Dues & Subscriptions Miscellaneous Capital Outlay Total	\$200,850 44,187 1,100 345 2,535 400 200 200 1,540 \$251,357	5010 5020 5041 5070 5090 5097 5200 5500 5999 6200	Salaries & Wages Employee Benefits Travel - Local Educational Assistance Cont. Serv Data Proc. Cont. Serv Maint. Materials & Supplies Motor Vehicle Expense Miscellaneous Capital Outlay		\$685,922 150,903 100 3,998 5,500 2,288 23,943 4,667 300 30,980
SPECI	AL PROJECTS PLANNING (009)			Total		\$908,601
5010 5020 5040 5070 6200	Salaries & Wages Employee Benefits Travel - Out of State Educational Assistance Capital Outlay Total	\$53,060 11,673 2,200 1,500 <u>1,825</u> \$70,258	5010 5020 5040	Employee Benefits	\$	340,853 74,988 5,400 14,042
			5070 5090	Educational Assistance Cont. Serv Data Proc.		13,000 350
COMPE	EHENSIVE PLANNING (010)		5094 5097 5099 5101 5102	Cont. Serv Lab. Cont. Serv Maint. Cont. Serv Xerox Cont. Serv Janit.		121,000 9,000 500 4,000 266,850
5010 5020 5040 5041 5070 5090 5350 5999 6200	Salaries & Wages Employee Benefits Travel - Out of State Travel - Local Educational Assistance Cont. Serv Data Proc. Dues & Subscriptions Miscellaneous Capital Outlay	\$111,738 24,582 1,225 340 2,000 16,820 3,455 210 13,900	5200 5210 5300 5310	Materials & Supplies Maint. Materl. & Supplie Office Supplies Publications Motor Vehicle Expense	S	27,903 1,800 3,000 8,900 3,600 101,800
	Total	\$174,270		Total	\$	996 <b>,</b> 986
				SCHEDULE 3-26		

WATER QUALITY MONITORING & ANALYSIS (014)		PERMITS ADMIN. & MONITORING (017)			
5010 5020 5070 5090 5097 5102 5200 5210 5500 5851 6200	Educational Assistance Cont. Serv Data Proc. Cont. Serv Maint. Cont. Serv Other Materials & Supplies Maint. Materials & Suppli Motor Vehicle Expense Leased Lines		5010 5020 5090 5094 5102 5200 5300 5310 5500 5600 6200	Materials & Supplies Office Supplies Publications Motor Vehicle Expense	<pre>\$ 95,467 21,003 1,275 500 750 26,000 478 460 635 1,080 149,590 1,800 \$299,038</pre>
LAB S	ERVICES (015)				
5010 5020 5041 5070 5090 5094 5095 5097 5099 5101 5102 5200 5310 5350 5350 6200	Employee Benefits Travel - Local Educational Assistance Safety Cont. Serv Data Proc. Cont. Serv Lab. Cont. Serv Laundry Cont. Serv Maint. Cont. Serv Maint. Cont. Serv Xerox Cont. Serv Janitorial Cont. Serv Other Materials & Supplies Office Supplies Publications Dues & Subscriptions Motor Vehicle Expense	\$1,061,002 233,420 372 5,445 9,900 1,254 49,633 10,111 36,380 12,917 35,049 10,000 125,838 5,402 1,815 3,565 3,050 60,460 \$1,665,613	5010 5020 5040 5041 5070 5102 5200 5310 5350 5999	employee Benefits Travel - Out of State Travel - Local Educational Assistance Cont. Serv Other Materials & Supplies Publications Dues & Subscriptions Miscellaneous Total Total	TRATION (018) \$110,528 24,316 6,000 200 7,500 10,000 500 1,000 500 500 \$161,044 \$145,570 32,025
AIR (	QUALITY MONITORING (016)		5020 5070 5099 5102	Educational Assistance Cont. Serv Xerox	1,500 64,000 22,000
5010 5020 5060 5070 5097 5102 5200 5500 6200	Employee Beneits Office Rent Educational Assistance Cont. Serv Maint. Cont. Serv Other Materials & Supplies Motor Vehicle Expense	\$144,049 31,691 8,820 1,215 1,576 62,560 25,725 309 15,326 \$291,271	5102 5300 5320 5330 5850 6200	Office Supplies Postage Office Equipment Repair Telephone Service	22,000 59,000 30,000 2,000 25,000 1,000 \$382,095
				SCHEDULE 3-27	

HUMAN	RESOURCES (020)		INSUR	ANCE - PLANNING (023)	
5010 5020 5045 5070 5102 5200 5310 5340 5999 6200	Salaries & Wages Employee Benefits Recruitment Educational Assistance Cont. Serv Other Materials & Supplies Publications Advertising Miscellaneous Capital Outlay Total	\$141,467 31,123 12,000 4,000 82,500 2,754 2,416 9,436 1,056 2,400 \$289,152	5010 5020 5350 5700 5701 5702 5703 5705 5706 5999 6200	Salaries & Wages Employee Benefits Educational Assistance Dues & Subscriptions Insurance - Auto Insurance - Blanket Bond Insurance - Bldg. & Prop. Insurance - General Liab. Insurance - Other Miscellaneous Capital Outlay Total	\$ 27,859 6,129 850 150 210,670 1,760 323,703 118,762 82,500 4,108 100 3,000 \$779,591
LABOR	RELATIONS (021)		CONTR	OLLER'S ADMINISTRATION (024	
5010 5020 5070 5091 5350 5999	Salaries & Wages Employee Benefits Educational Assistance Cont. Serv Admin. Dues & Subscriptions Miscellaneous Total	\$31,110 6,844 1,413 49,500 100 416 \$89,383	5010 5020 5070 5090 5350 5999 6200	Salaries & Wages Employee Benefits Educational Assistance Cont. Serv Data Proc. Dues & Subscriptions Miscellaneous Capital Outlay	\$106,149 23,353 4,276 3,937 1,051 1,606 15,401
PROCU	REMENT (022)			Total	\$155 <b>,7</b> 73
5010 5020 5070 5102 5200 5340 5350 5500 6200	Salaries & Wages Employee Benefits Educational Assistance Cont. Serv Other Materials & Supplies Advertising Dues & Subscriptions Motor Vehicle Expense Capital Outlay	\$151,275 33,281 2,254 9,600 350 1,200 450 7,020 2,079	ACCOU 5010 5020 5041 5090 5092 6200		5) \$ 74,359 16,359 292 65,000 42,005 201
	Total	\$20 <b>7,</b> 509		Total	\$198,216
			DISBU	IRSEMENTS (026)	
			5010 5020	Salaries & Wages Employee Benefits	\$109,927 
				Total	\$134,111
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SCHEDULE 3-28

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PAYROLL (027)		CAREER DEVELOPMENT/TRAINING (030	)
<ul> <li>5010 Salaries &amp; Wages</li> <li>5020 Employee Benefits</li> <li>5070 Educational Assistance</li> <li>5090 Cont. Serv Data Proc.</li> <li>5350 Dues &amp; Subscriptions</li> <li>6200 Capital Outlay</li> </ul>	\$125,945 27,708 750 29,744 175 905	5041 Travel - Local 5070 Educational Assistance 5102 Cont. Serv Other 5200 Materials & Supplies 5310 Publications 5999 Miscellaneous	\$ 123 9,750 40,532 2,600 120 77
Total	\$185,227	Total	\$53 <b>,2</b> 02
DEBT SERVICES - CASH/FISCAL MG 5010 Salaries & Wages 5020 Employee Benefits 5041 Travel - Local 5070 Educational Assistance 5200 Materials & Supplies 5350 Dues & Subscriptions	61,657 13,565 300 2,200 850 175	5020 Employee Benefits 5041 Travel - Local 5070 Educational Assistance 5090 Cont. Serv Data Proc. 5093 Cont. Serv Engineering	\$ 499,052 109,791 4,575 50,000 326,055 648,000
5999 Miscellaneous 6010 Debt Serv Loc. Gov't. 6020 Debt Serv Met Council 6100 Acquisition Costs 6200 Capital Outlay Total		5097 Cont. Serv Maint. 5102 Cont. Serv Other 5200 Materials & Supplies 5300 Office Supplies 5310 Publications 5500 Motor Vehicle Expense 5850 Telephone Service 5999 Miscellaneous 6200 Capital Outlay	180,875 192,139 131,634 2,000 1,000 3,000 16,398 400 134,271
AFFIRMATIVE ACTION (029)		Total ASH DISPOSAL (032)	\$2,299,190
5010 Salaries & Wages 5020 Employee Benefits 5040 Travel - Out of State 5041 Travel - Local 5070 Educational Assistance 5102 Cont. Serv Other 5200 Materials & Supplies 5350 Dues & Subscriptions 5500 Motor Vehicle Expense 5999 Miscellaneous 6200 Capital Outlay Total	\$ 78,897 17,357 2,850 222 2,303 1,208 5,000 1,000 250 1,254 264 \$120,605	<ul> <li>5102 Cont. Serv Other Total</li> <li>REGULATOR SYSTEM (033)</li> <li>5010 Salaries &amp; Wages</li> <li>5020 Employee Benefits</li> <li>5041 Travel - Local</li> <li>5070 Educational Assistance</li> <li>5085 Medical Aids</li> <li>5095 Cont. Serv Laundry</li> <li>5097 Cont. Serv Maint.</li> <li>5200 Materials &amp; Supplies</li> <li>5210 Maint. Materials &amp; Suppl.</li> <li>5300 Office Supplies</li> <li>5500 Motor Vehicle Expense</li> <li>5801 Utilities - Electric</li> <li>5811 Leased Lines</li> <li>5999 Miscellaneous</li> <li>6200 Capital Outlay</li> </ul>	\$860,000 \$860,000 \$191,333 42,093 45 250 75 2,100 9,100 8,000 23,800 23,800 23,800 23,800 23,800 500 22,000 7,800 15,700 100 33,000 \$355,896
		SCHEDULE 3-29	

TNUTTO	CEPTOR ADMINISTRATION (034	5	LIFT	STATIONS (036) - (Cont.)	I
		,			
5010	Salaries & Wages	\$213 <b>,</b> 691	5803		
5020	Employee Benefits	47,012	5850		
5040	Travel - Out of State	600		Leased Lines	
5041	Travel - Local	30	5999	Miscellaneous	•
	Educational Assistance	6,000	6200	Capital Outlay	
-	Cont. Serv Maint.	10,000			
5098	Cont. Serv Operations	1,000	1	Total	
	Cont. Serv Xerox	1,000			
	Office Supplies	1,100			
	Publications	645			
	Office Equip. Repair	1,500			
	Motor Vehicle Expense	18,500	METER	ING STATIONS (037)	
6200	Capital Outlay	17,000			
0200	outrain on one of the second s	<u> </u>	5010	Salaries & Wages	
	Total	\$318,078		Employee Benefits	
	IUul			Travel - Local	
				Educational Assistance	
				Medical Aids	
TNTIFD	CEPTOR SYSTEM MAINTENANCE	(035)		Cont. Serv Laundry	
THITT		(	5097		
5010	Salaries & Wages	\$171 <b>,</b> 580		Cont. Serv Other	
5020	Employee Benefits	37,748	5200		
5041		250	5210		L.
	Educational Assistance	1,565	5300		-
	Medical Aids	150	5500	,	
	Cont. Serv Laundry	2,366	5800		
5097		49,000	5851		
	Cont. Serv Other	9,000	6200		
	Materials & Supplies	37,000	0200		
	Maint. Materials & Supplies	24,000	1	Total	\$
5300		1,500		10001	Ŧ
5500	Motor Vehicle Expense	24,000			
5620	Intep. Rental Contract	128,427			
5630	Intep. Maint. Contract	106,500	EMPTE	RE PLANT (038)	
5999	Miscellaneous	100,500			
6200	Capital Outlay	85,400	5010	Salaries & Wages	\$
0200	capital outlas		5020	-	•
	Total	\$678,586	5041		
	IOCAI		5070		
			5085		
LIND	STATIONS (036)		5090		•
	<u>STATIONS</u> (0507		5095		-
5010	Salaries & Wages	\$ 933,352	5097	. –	
	Employee Benefits	205,337	5098		s
	Travel - Local	400	5099	-	-
	Educational Assistance	3,450	5100		
		400	5102		•
5085		10,900	5200		
5095	Cont. Serv Laundry Cont. Serv Maint.	80,300	5210		1.
5097	Cont. Serv Maint. Cont. Serv Other	1,000	5300		- •
5102	Materials & Supplies	83,000	5330		
5200	Maint. Materials & Supplies		5500		
5210		3,500	5800	-	
5300	Office Supplies	58,000	5801		
5500	Motor Vehicle Expenses	640,000	5801		
5800	Utilities - Elec.	34,000	5850	-	
5802	Utilities - Gas	34,000	1 1010	Terchione pervice	
			4		

8,000 20,000 42,100 200 84,400

\$2,320,339

\$ 538,301 118,426 300 2,625

> 200 3,434 53,000 1,065 39,600 65,425

500 22,800 35,900 100,700 96,500

\$1,078,776

\$1,041,272 229,080 920 2,912

> 94 12,000

5,351 68,924 8,400

500 7,900

4,413 25,067

70,661 2,112 600 16,407 227,795 53,118 4,796 5,265

$\underline{EMPIRE PLANT}  (038) - (Cont.)$	METRO MAINTENANCE (040) - (Cont.)
5903 Chemicals - Other 1,368	5999 Miscellaneous 1,000
5904 Polymers 49,500	6200 Capital Outlay 287,720
5940 Chlorine 3,938	
5999 Miscellaneous 1,700	Total \$12,317,199
6200 Capital Outlay 17,116	
Total \$1,861,209	
	SENECA PLANT (041)
METRO PLANT OPERATIONS (039)	5010 Salaries & Wages \$1,831,670
	5020 Employee Benefits 402,967
5010 Salaries & Wages \$11,710,47	
5020 Employee Benefits 2,576,30	
5041 Travel - Local 96	1
5070 Educational Assistance 70,28	
5080 Safety 32,00	1
5095 Cont. Serv Laundry 47,24	
5098 Cont. Serv Operations 1,198,00	
5099         Cont. Serv Xerox         16,00           5101         Cont. Serv Janitorial         18,04	
5101 Cont. Serv Janitorial 18,04 5102 Cont. Serv Other 326,64	
5200 Materials & Supplies 457,20	
5300 Office Supplies 15,00	
5330 Office Equipment Repair 52	
5370 Flood Control 10,00	
5500 Motor Vehicle Expense 82,91	= · · ·
5800 Utilities - Electrical 6,372,00	
5802 Utilities - Gas 937,46	
5803 Utilities - Water 105,30	
5850 Telephone Service 44,60	
5902 Chemicals - Lime 7,00	
5903 Chemicals - Other 587,66	
5904 Polymers 865,80	
5905 Chemicals - Acid 49,36	
5940 Clorine 222,23	
5999 Miscellaneous 5,00	
6200 Capital Outlay 48,70	Total \$4,220,697
Total \$25,806,72	
	-
	BLUE LAKE PLANT (042)
METRO MAINTENANCE (040)	5010 Salaries & Wages \$1,287,663
UDINO DETRIBUTION (040)	5020 Employee Benefits 283,286
5010 Salaries & Wages \$ 6,870,85	
5020 Employee Benefits 1,511,58	
5041 Travel - Local 1,00	
5070 Educational Assistance 73,21	
5095 Cont. Serv Laundry 20,69	5097 Cont. Serv Maint. 10,000
5097 Cont. Serv Maint. 876,00	) 5099 Cont. Serv Xerox 2,676
5099 Cont. Serv Xerox 3,90	
5101 Cont. Serv Janitorial 55,00	
5102 Cont. Serv Other 1,54	
5210 Maint. Materials & Suppl. 2,536,99	
5300 Office Supplies 12,80	
5500 Motor Vehicle Expense 64,88	5330 Office Equipment Repair 104
	SCHEDULE 3-31

BLUE LAKE PLANT (042) - (Cont.)	ANO	KA PLANT (044) - (Cont.)	
5800 Utilities - Electrical 3 5801 Utilities - Fuel 5802 Utilities - Gas	372 5850 14,881 5855 07,476 5903 300 5940 39,463 5999 25,050	l Leased Lines 3 Chemicals - Other 0 Chlorine	679 973 912 8,584 139
5850 Telephone Service 5903 Chemicals - Other 5940 Chlorine 5999 Miscellaneous	6,948 300 27,810 150 28,700 BAY	Total PORT PLANT (045)	\$321,215
Total \$2,	328,312 501 502		\$116,870 25,711
CHASKA PLANT (043)	504 507 508	1 Travel - Local 0 Educational Assistance 5 Medical Aids	115 1,028 100
<pre>5010 Salaries &amp; Wages \$ 5020 Employee Benefits 5041 Travel - Out of State 5070 Educational Assistance 5095 Cont. Serv Laundry 5097 Cont. Serv Maint. 5102 Cont. Serv Other 5200 Materials &amp; Supplies 5210 Maint. Materials &amp; Suppl. 5500 Motor Vehicle Expense 5800 Utilities - Electric 5801 Utilities - Fuel</pre>	\$114,761       509         25,247       509         71       509         50       510         912       510         3,412       520         1,222       521         2,858       550         18,589       580         1,490       580         81,770       580         213       580	<pre>7 Cont. Serv Maint. 9 Cont. Serv Xerox 0 Cont. Serv Sldg. Rem. 2 Cont. Serv Other 0 Materials &amp; Supplies 0 Maint. Materials &amp; Suppl. 0 Motor Vehicle Expense 0 Utilities - Electrical 1 Utilities - Fuel 2 Utilities - Gas</pre>	542 5,984 246 2,000 3,000 1,902 9,609 11,441 38,383 1,500 5,332 5,281
5803 Utilities - Water 5850 Telephone Service 5851 Leased Lines 5903 Chemicals - Other 5940 Chlorine 5999 Miscellaneous 6200 Capital Outlay	4,255 585 823 585 897 590	<ol> <li>Telephone Service</li> <li>Leased Lines</li> <li>Chemicals - Other</li> <li>Chlorine</li> <li>Miscellaneous</li> </ol>	566 916 21,127 774 177 <u>10,293</u> \$262,897
Total	\$333,079		
ANOKA PLANT (044)	501	-	\$ 204,767 45,049
5010 Salaries & Wages 5020 Employee Benefits 5070 Educational Assistance 5095 Cont. Serv Laundry 5097 Cont. Serv Maint. 5099 Cont. Serv Xerox 5101 Cont. Serv Janit. 5102 Cont. Serv Other 5200 Materials & Supplies 5500 Motor Vehicle Expense 5800 Utilities - Electric 5801 Utilities - Fuel 5803 Utilities - Water	\$167,793       502         36,914       504         312       507         726       508         3,918       509         107       509         668       509         3,370       510         8,685       510         11,554       520         69,780       521         3,254       550         2,847       580	<ol> <li>Travel - Local</li> <li>Educational Assistance</li> <li>Medical Aids</li> <li>Cont. Serv Laundry</li> <li>Cont. Serv Maint.</li> <li>Cont. Serv Xerox</li> <li>Cont. Serv Sldg. Rem.</li> <li>Cont. Serv Other</li> <li>Materials &amp; Supplies</li> <li>Maint. Materials &amp; Suppl.</li> <li>Motor Vehicle Expense</li> <li>Utilities - Electrical</li> </ol>	230 1,090 200 1,033 10,639 282 25,000 5,000 3,364

				*	
COTTA	$\frac{1}{3} = \frac{1}{3} = \frac{1}$	ont.)	STILL	WATER PLANT (048) - (Cont.	)
5802	Utilities - Gas	20,623	509 <b>7</b>	Cont. Serv Maint.	11,514
5850	Telephone Service	777	5099	Cont. Serv Xerox	238
5851	Leased Lines	472	5100	Cont. Serv Sldg. Rem.	2,000
5903	Chemicals - Other	871	5102	Cont. Serv Other	5,000
5940	Chlorine	3,401	5200	Materials & Supplies	2,702
5999	Miscellaneous	413	5210	Maint. Materials & Suppl.	25,242
6200	Capital Outlay	9,532	5500	Motor Vehicle Expense	25,510
			5800	Utilities - Electrical	39,482
	Total	\$ 407,697	5801	Utilities - Fuel	2,000
			5802	Utilities - Gas	14,340
			5850	Telephone Service	905
			5851	Leased Lines	865
HASTI	NGS PLANT (047)		5903	Chemicals - Other	67,559
			5940	Chlorine	2,021
5010	Salaries & Wages	\$210,809	5999	Miscellaneous	375
5020	Employee Benefits	46,378	6200	Capital Outlay	12,552
5041	Travel - Local	460			a
5070	Educational Assistance	2,280		Total	\$ <u>493,927</u>
5085	Medical Aids	300			
5095	Cont. Serv Laundry	1,638	CNRC		
5097	Cont. Serv Maint.	10,000	SAVAG	E PLANT (049)	
5099	Cont. Serv Xerox	1,740	5010	Colorios ( Wasas	¢ 02 10¢
5100	Cont. Serv Sldg. Rem.	25,000	5010 5020	Salaries & Wages	\$ 82,186 18,081
5102	Cont. Serv Other	6,000 5,000	5020	Employee Benefits Travel - Local	27
5200	Materials & Supplies	40,000	5070	Educational Assistance	50
5210	Maint. Materials & Suppl.	1,000	5095	Cont. Serv Laundry	642
5300	Office Supplies	100	5095	Cont. Serv Maint.	1,500
5320 5330	Postage Office Equip. Repair	250	5102	Cont. Serv Other	427
5350	Dues & Subscriptions	150	5200	Materials & Supplies	947
5500	Motor Vehicle Expense	20,196	5210	Maint. Materials & Suppl.	
5800	Utilities - Electrical	65,000	5800	Utilities - Electrical	14,111
5801	Utilities - Fuel	2,000	5801	Utilities - Fuel	125
5802	Utilities - Gas	34,200	5802	Utilities - Gas	4,000
5803		794		Utilities - Water	2,288
5850		2,070		Telephone Service	893
5851		1,342	5851	Leased Lines	843
5903	Chemicals - Other	4,086	5903	Chemicals - Other	118
5940	Chlorine	3,057	5940	Chlorine	1,103
5999	Miscellaneous	657	5999	Miscellaneous	46
<b>6</b> 200	Capital Outlay	23,400			
				Total	\$128,780
-	Total	\$507,907			
<b></b>			ROSE	DUNT PLANT (050)	
STILL	WATER PLANT (048)		- E010	Colorian - Margar	6040 E14
5010	0-1	6007 00F	5010	Salaries & Wages	\$340,514
	Salaries & Wages	\$227,835	5020	Employee Benefits Travel - Local	74,913 97
	Employee Benefits	50,124 345		Educational Assistance	1,335
	Travel - Local Educational Assistance	1,792		Medical Aids	214
	Educational Assistance	200		Cont. Serv Laundry	2,178
5085	Medical Aids Cont. Serv Laundry	1,326	5095		13,680
2032	when berve - haukury	±1320	2021	Contro Contro Padallos	

ROSEM	OUNT PLANT (050) - (Cont.)		ENGIN	EERING/CONSTRUCTION SERVI	CES (053)
5098	Cont. Serv Oper.	1,440	5010	Salaries & Wages	\$279,086
5100	Cont. Serv Sldg. Rem.	50,000	5020		61,399
5102	Cont. Serv Other	940	5041		1,720
5200	Materials & Supplies	11,842	5200	Materials & Supplies	<u>    1,000  </u>
5210	Maint. Materials & Suppl.	24,026			
5500	Motor Vehicle Expense	1,181		Total	\$343,205
5800	Utilities - Electrical	43,776			
5801	Utilities - Fuel	1,622			
5802	Utilities - Gas	17,436	REGIC	NAL FACILITIES (054)	
5850	Telephone Service	2,886			A104 848
5900	Chemicals - Ferr. Chlor.	7,477	5010		\$184,747
5902	Chemicals - Lime	26,760		Employee Benefits	40,644
5903	Chemicals - Other	40,431	5041		1,150
	Chlorine	2,231		Educational Assistance	15,000
	Miscellaneous	56	5080		3,000
6200	Capital Outlay	6,807	5097	Cont. Serv Maint.	19,400
	_	A ( T ) A ( A	5099	Cont. Serv Xerox	1,000
	Total	\$ <u>671,842</u>	5101		38,000
			5102	Cont. Serv Other	6,400
			5200		3,500
OPERA	TIONS ADMINISTRATION (051)	}	5300		500
		41 70 057	5310		4,000 500
	Salaries & Wages	\$179,257		Postage	250
	Employee Benefits	39,437	5330	Office Equip. Repair Dues & Subscriptions	230 600
5040	Travel - Out of State	900 100	5350		6,500
5041	Travel - Local	10,300		Utilities - Electric	22,500
	Educational Assistance	3,000	£	Utilities - Gas	18,900
	Motor Vehicle Expense Miscellaneous	500	1	Utilities - Water	900
5999 6200	Capital Outlay	9,000	5850		20,400
6200	Capital Outlay		5999	-	1,000
	Total	\$242,494	6200	Capital Outlay	71,040
				Total	\$459,931
PROCE	SS ASSURANCE (052)		BUDGE	T RESERVE (055)	
5010	Salaries & Wages	\$165,048			
	Employee Benefits	36,311	5075	Budget Reserve	\$500, <u>000</u>
5020	Travel - Local	207	00.0		, <u> ,</u>
	Educational Assistance	6,300		Total	\$500,000
	Cont. Serv Other	778			
	Materials & Supplies	2,261			
	Office Supplies	879			
	Miscellaneous	603			
6200		2,025			
	Total	\$214,412			

#### SUMMARY OF DEBT SERVICE

·		Proposed 1988	Budget 1987	Actual 1986
Treat	ment Works	\$22,089,909	\$20,499,623	\$20,137,005
Inter	ceptor System			
Ser	vice Areas:			
1.	Minneapolis-St. Paul	4,311,003	2,961,392	2,375,965
2.	North Suburban	2,228,344	1,781,657	1,245,667
3.	Anoka	685,169	631,475	561,820
4.	Southwest	1,909,410	1,436,470	1,186,340
5.	Bloomington-Eagan-Burnsville	781,089	661,472	555,697
6.	Southeast	617,586	577,897	534,795
	TOTALS	\$32,622,510	\$28,549,986	\$ <u>26,597,289</u>

#### METROPOLITAN COUNCIL SEWER BOND FUND DEBT SERVICE

•

Required Fund Balance 10/1/87			\$52,898,760
	service payments '87 - 10/1/88		<u>31,870,989</u>
Balance (Debt Ser	vice payments 11/1	/88 - 1/1/89)	21,027,771
Required Balance	10/1/88	•	54,572,632
Balance due Metro	politan Council by	10/1/88	\$33,544,861
	est to be earned O through September		2,988,024
Amount due M	Metropolitan Counci	1	\$30,556,837
	payment due SAC fun se #1 to the Metrop		
Princi Intere	ipal est (11.42%)	866,667 98,773	965,640
Progra	am Budget Requireme	nt	\$31,522,477

Apportioned to:

Cost Pool	Capital Improvements	% Of Debt Service	Amount
Treatment Works SA #1 SA #2 SA #3 SA #4 SA #5 SA #6	<pre>\$ 545,278,000 101,548,000 51,820,000 17,099,000 46,178,000 14,101,000 15,009,000</pre>	68.93 12.84 6.55 2.16 5.84 1.78 1.90	\$ 21,728,443 4,047,486 2,064,722 680,886 1,840,913 561,100 598,927
TOTALS	\$791,033,000	100.00	\$31,522,477

SCHEDULE 4-1

### Service Area 1 - Minneapolis/St. Paul

	Treatment Works	Interceptors	Total
Birchwood Forest Lake Township Little Canada Mendota Heights Oakdale Plymouth St. Paul Shoreview* White Bear Lake Woodbury	\$ 2,519.00	\$ 596.00 72,644.77 8,054.00 51,173.00 9,876.00 57,718.66 28,148.04 7,036.00 28,270.00	\$ 
	\$ <u>2,519.00</u>	\$ 263,516.47	\$ 266,035.47

#### Service Area 2 - North Suburban

Shoreview* Circle Pines Coon Rapids New Brighton Spring Lake Park	\$  <pre>\$ 16,823.00 2,355.99 33,218.00 108,649.00 2,576.00</pre>	\$
	\$ \$ <u>163,621.99</u>	\$ <u>163,621.99</u>

#### Service Area 3 - Anoka

Anoka Champlin	\$ 43,605.00	\$ 4,283.47	\$
	\$ 43,605.00	4,283.47	47,888.47

\* Located in 2 Service Areas

#### Service Area 4 - Southwest

.

	Treatment Works	Interceptors	Total
Deephaven	\$	\$ 16,940.53 3,059.88	\$
Greenwood Long Lake	9,344.00	5,055.00	
Medina	4,400.00		
Minnetrista	.,	29,041.63	
Mound	20,506.43	19,455.39	
Savage	10,546.00		<u> </u>
. · · ·	\$ 44,796.43	\$ 68,497.43	\$ <u>113,293.86</u>

#### Service Area 5 - Bloomington/Eagan/Burnsville

Burnsville Eagan	\$ 3,762.82	\$182,805.00 37,184.00	\$
• •	\$ _3,762.82	\$ <u>219,989.00</u>	\$ <u>223,751.82</u>
Service Area 6 - Southeast	:		
Apple Valley Cottage Grove Hastings Inver Grove Heights Lakeville Newport Oak Park Heights South St. Paul	<pre>\$ 10,958.29 33,091.89 42,245.00 14,696.00 8,886.00 5,063.00 13,457.00 138,385.00</pre>	\$ 18,658.71	\$
	\$ <u>266,782.18</u>	\$ <u>18,658.71</u>	\$ <u>285,440.89</u>
GRAND TOTAL	\$361,465.43	\$738,567.07	\$1,100,032.50

SCHEDULE 4-3

## 1988 SUMMARY OF ACQUISITION COSTS

Treatment Works		\$	577 <b>,</b> 065				
Interceptor System							
Service Areas:		-					
l. Minnea	polis - St. Paul		3,003,733				
2. North	Suburban		212,070				
3. Anoka			489				
4. Southw	vest		74,057				
5. Bloomi	ngton-Eagan-Burnsville		296,774				
6. Southe	ast		3,930				

TOTAL

\$4,168,118

#### SCHEDULE 5

#### 1988 LOCAL GOVERNMENT CURRENT VALUE CREDIT

Anoka	\$15,901	Forest Lake Twp.	\$ 53
Apple Valley	6,083	Fridley	26,965
Arden Hills	11,924	Golden Valley	131,187
Bayport	7,673	Greenwood	1,401
Birchwood	257	Hastings	14,284
Blaine	7,352	Hilltop	• 42
Bloomington	200,659	Hopkins	27,454
Brooklyn Center	14,581	Inver Grove Heights	1,435
Brooklyn Park	60,157	Lakeville	8,255
Burnsville	103,123	Landfall	354
Champlin	1,025	Lauderdale	1,222
Chanhassen	1,858	Lexington	586
Chaska	7,075	Little Canada	2,345
Circle Pines	1,006	Long Lake	1,028
Columbia Heights	22,272	Mahtomedi	2,870
Coon Rapids	25,209	Maple Plain	6,818
Cottage Grove	5,537	Maplewood	23,902
Crystal	42,343	Medicine Lake	1,408
Deephaven	11,620	Medina	38
Eagan	27,418	Mendota Heights	33,553
Eden Prairie	3,494	Minneapolis	1,426,356
Edina	61,020	Minnetonka	16,639
Excelsior	3,521	Minnetrista	543
Falcon Heights	2,204	Mound	10,344
Farmington	10,999	Mounds View	3,561
Forest Lake	8,807		

### Local Government Current Value Credit (continued)

New Brighton	\$ 77,192	Tonka Bay	\$ 1,684
New Hope	46,523	Vadnais Heights	195
Newport	595	Victoria	2,535
North St. Paul	30,968	Waconia	15,245
Oakdale	1,150	Wayzata	22,674
Oak Park Heights	39	West St. Paul	7,376
Orono	33,988	White Bear Lake	41,047
Osseo	14,928	White Bear Township	2,173
Plymouth	217	Willernie	1,053
Prior Lake	2,459	Woodbury	2,647
Richfield	133,042		
Robbinsdale	5,150	TOTAL	\$4,168,118
Rosemount	4,372		
Roseville	93,959		
St. Anthony	8,778		
St. Louis Park	78,231		
St. Paul	1,033,404		
St. Paul Park	7,394		
Savage	1,872		
Shakopee	9,064		
Shoreview	23,680		
Shorewood	391		
South St. Paul	41,712		
Spring Lake Park	3,183		
Spring Park	2,926	÷	
Stillwater	10,511		

#### ALLOCATION OF CURRENT USE COSTS

.

Local Government	Est. Flow (MG)	Lake Overflow Adjustments		Treatment Works		Service Area	Total
· · · · · · · · · · · · · · · · · · ·			~	00.760.50	ć	16 500 60 6	100 240 10
Andover	119		\$	92,760.50	\$	16,588.60 \$	109,349.10
Anoka	770			600,215.00		232,463.00	832,678.00
Apple Valley	935			728,832.50		74,052.00	802,884.50
Arden Hills	460			358,570.00		35,236.00	393,806.00
Bayport	210			163,695.00		.00	163,695.00
Birchwood	32			24,944.00		2,451.20	27,395.20
Blaine	1,050			818,475.00		146,370.00	964,845.00
Bloomington	3,720			2,899,740.00		294,624.00	3,194,364.00
Brooklyn Center	1,200			935,400.00		91,920.00	1,027,320.00
Brooklyn Park	1,840			1,434,280.00		256,496.00	1,690,776.00
Burnsville	1,820			1,418,690.00		144,144.00	1,562,834.00
Centerville	40			31,180.00		5,576.00	36,756.00
Centerviite	40			51,100.00			
Champlin	330			257,235.00		71,189.50	328,424.50
Chanhassen	425			331,287.50		88,357.50	419,645.00
Chaska	410			319,595.00		.00	319,595.00
Circle Pines	134			104,453.00		18,679.60	123,132.60
Columbia Heights	590			459,905.00		45,194.00	505,099.00
Coon Rapids	1,360			1,060,120.00		189,584.00	1,249,704.00
Cottage Grove	590			459,905.00		.00	459,905.00
Crystal	920			717,140.00		70,472.00	787,612.00
Deephaven	142			110,689.00		29,521.80	140,210.80
Eagan	1,670			1,301,765.00		132,264.00	1,434,029.00
Eden Prairie	1,490			1,161,455.00		309,771.00	1,471,226.00
Edina	2,790			2,174,805.00		213,714.00	2,388,519.00
Empire Township	20			15,590.00		1,584.00	17,174.00
Excelsior	112			87,304.00		23,284.80	110,588.80
Falcon Heights	425	5		335,185.00		32,938.00	368,123.00
ration nergines	425	5		3337203.00			
Farmington	415			323,492.50		32,868.00	356,360.50
Forest Lake	328			255,676.00		25,124.80	280,800.80
Forest Lake Twp.	138			107,571.00		10,570.80	118,141.80
Fridley	1,420			1,106,890.00		166,548.00	1,273,438.00
Gem Lake	10			7,795.00		766.00	8,561.00
Golden Valley	1,350			1,052,325.00		103,410.00	1,155,735.00
Greenfield	5			3,897.50		1,039.50	4,937.00
Greenwood	22			17,149.00		4,573.80	21,722.80
Hastings	615			479,392.50		.00	479,392.50
Hillton	31			24,164.50		2,374.60	26,539.10
Hilltop	815			635,292.50		63,479.40	698,771.90
Hopkins	55			42,872.50		4,213.00	47,085.50
Hugo				12,0,2130		-,	

Local Government	Est. Flow (MG)	Lake Overflow Adjustments	Treatment Works	Service _Area	<u>Total</u>
Independence	8		\$    6,236.00	\$ 1,663.20	\$    7,899.20
Inver Grove Heights	525		409,237.50	41,580.00	450,817.50
Lake Elmo	1		779.50	76.60	856.10
Laketown Township	21	·	16,369.50	4,365.90	20,735.40
Lakeville	990		771,705.00	78,408.00	850,113.00
Landfall	23		17,928.50	1,761.80	19,690.30
Lauderdale	80		62,360.00	6,128.00	68,488.00
Lexington	55		42,872.50	7,667.00	50,539.50
Lilydale	22		17,149.00	1,685.20	18,834.20
Lino Lakes	45		35,077.50	6,273.00	41,350.50
Little Canada	390		304,005.00	29,874.00	333,879.00
Long Lake	123		95,878.50	25,571.70	121,450.20
Mahtomedi	153		119,263.50	11,719.80	130,983.30
Maple Grove	1,060		826,270.00	147,764.00	974,034.00
Maple Plain	110		85,745.00	22,869.00	108,614.00
Maplewood	1,790		1,395,305.00	137,114.00	1,532,419.00
Medicine Lake	14		10,913.00	1,072.40	11,985.40
Medina	92		71,714.00	13,989.30	85,703.30
Mendota	12		9,354.00	919.20	10,273.20
Mendota Heights	575		448,212.50	44,045.00	492,257.50
Minneapolis	24,900		19,409,550.00	1,907,340.00	21,316,890.00
Minnetonka	2,190		1,707,105.00	455,301.00	2,162,406.00
Minnetonka Beach	28		21,826.00	5,821.20	27,647.20
Minnetrista	74		57,683.00	15,384.60	73,067.60
Mound	410		319,595.00	85,239.00	404,834.00
Mounds View	480		374,160.00	66,912.00	441,072.00
New Brighton	910		709,345.00	126,854.00	836,199.00
New Hope	1,055		822,372.50	80,813.00	903,185.50
Newport	120		93,540.00	9,504.00	103,044.00
North Oaks	17		13,251.50	1,302.20	14,553.70
North St. Paul	590	-	459,905.00	45,194.00	505,099.00
Oakdale	725		565,137.50	55,535.00	620,672.50
Oak Park Heights	130		101,335.00	10,296.00	111,631.00
Orono	230		179,285.00	<b>47,817.00</b>	227,102.00
Osseo	108		84,186.00	15,055.20	99,241.20
Plymouth	2,390		1,863,005.00	183,074.00	2,046,079.00
Prior Lake	430		335,185.00	89,397.00	424,582.00
Ramsey	11		8,574.50	3,320.90	11,895.40
Richfield	990		771,705.00	75,834.00	847,539.00

	Est. Flow	Lake Overflow		Service	met el
Local Government	(MG)	Adjustments	Works	Area	Total
Robbinsdale	515		\$ 401,442.50	\$ 39,449.00	\$ 440,891.50
Rosemount	155		120,822.50	12,276.00	133,098.50
Roseville	1,850	50	1,481,050.00	145,540.00	1,626,590.00
ROSEVIIIE	1,000	50	1/101/050100	,.	-,,
St. Anthony	415		323,492.50	31,789.00	355,281.50
St. Bonifacius	35		27,282.50	7,276.50	34,559.00
St. Louis Park	2,490		1,940,955.00	190,734.00	2,131,689.00
St. Durb rurs	-,				
St. Paul	17,855	(55)	13,875,100.00	1,363,480.00	15,238,580.00
St. Paul Park	142		110,689.00	11,246.40	121,935.40
Savage	295		229,952.50	5,940.00	235,892.50
buvaye			•		
Shakopee	925	•	721,037.50	192,307.50	913,345.00
Shoreview	840		654,780.00	76,904.00	731,684.00
Shorewood	285		222,157.50	59,251.50	281,409.00
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South St. Paul	1,990		1,551,205.00	157,608.00	1,708,813.00
Spring Lake Park	240		187,080.00	33,456.00	220,536.00
Spring Park	114		88,863.00	23,700.60	112,563.60
Spring rank			,	·	·
Stillwater	890	,	693,755.00	.00	693,755.00
Stillwater Twp.	1		779.50	.00	779.50
Tonka Bay	70		54,565.00	14,553.00	69,118.00
			·		
Vadnais Heights	295		229,952.50	22,597.00	252,549.50
Victoria	70		54,565.00	14,553.00	69,118.00
Waconia	180		140,310.00	37,422.00	177,732.00
haconica			·		
Wayzata	255		198,772.50	53,014.50	251 <b>,</b> 787.00
West St. Paul	1,040		810,680.00	79,664.00	890,344.00
White Bear Lake	875		682,062.50	67,025.00	749,087.50
white bear lake	0.0		<b>,</b>	·	
White Bear Township	o 300		233,850.00	22,980.00	256,830.00
Willernie	16		12,472.00	1,225.60	
Woodbury	685		533,957.50	52,471.00	
moore l	005				
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TOTAL

\$80,684,486.00 \$ 9,522,447.70 \$90,206,933.70

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 10 260 00 St. Paul, Minn. : |b Metropolitan Waste Control Commission, |c
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  14 650 O Sewage disposal [z Minnesota ]z Twin Cities metropolitan area.
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  15 780 00 Metropolitan Waste Control Commission (Minn.). |t Budget,
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#### Construction Fund - Revenues & Expenditures

\$ 26,785,000 FUND BALANCE - December 31, 1986 **REVENUES:** Certified Federal Grants (Schedule 8) \$10,193,681 Less Contingency Reserve for Final Audits 750,000 \$ 9,443,681 Net Certified Federal Grants 17,889,638 Certified State Grants (Schedule 9) 3,900,000 Investment Income (Schedule 10) 50,000 Miscellaneous 45,948,000 Bond Sale 3/25/87 \$77,231,319 Total Estimated Revenues EXPENDITURES: Previously Authorized Projects Encumbered & Unencumbered Balance \$137,613,468 66,765,194 Approp. Adjustments (Schedule 11) Total Previously Authorized \$204,378,662 Projects 2,500,000 Total New Projects (Schedule 13) \$206,878,662 Total Estimated Expenditures Local Funds Applied (Expenditures-\$129,647,343 Revenues)

ESTIMATED FUND BALANCE

\$(102,862,343)

SCHEDULE 7

#### CERTIFIED FEDERAL GRANIS

Project No.	<u>Grant</u>	Project	Total Grants Receivable	Earned As Of 12/31/86	Balance Due	Estimated Arcunt 1987	Estimated Arcunt 1988
74-01(407)	000-05	MWIP Sludge Incinerator	\$ 7,195,713	\$ 7,195,713	-0-	-0-	-0-
74-01(408)	000-06	MWIP Sludge Processing	56,653,725	56,653,725	-0-	-0-	-0-
75-01	999-01	Facilities Planning	1,225,772	1,225,772	-0-	-0-	-0-
76-07	100-02	MWIP Retrofit Process Control Step III	10,194,600	6,837,341	3,357,259	2,554,605	802,654
7 <del>6-5</del> 5	999-02	Facilities Planing	1,970,672	1,970,672	-0-	-0-	-0-
78-01	999-03	Facilities Planing	352,092	352,092	-0-	-0-	-0-
79-06	008-02	Hastings Plant Inprovements Step III	6,233,400	6,169,495	63,905	63,905	-0-
<b>798</b> 0	103-02	MWIP Add'1. Secondary	14,679,789	14,679,789	-0-	-0-	-0-
77-05	134-01	Lover Beltline Interceptor	2,245,350	2,067,776	177,574	177,574	-0-
82-56	097-01	MWIP Screen & Grit Rehab.	3,140,555	945,281	2,195,274	1,434,027	550,000
82-57	097-02	MWIP Primary Settling Tank Rehab.	5,103,725	1,824,202	3,279,523	2,562,418	550,000
82-58	097-03	MWIP Secondary Treatment Rehab.	2,168,925	2,051,872	117,053	117,053	-0-
82-59	005-01	Blue Lake Sludge Thick. Facil.	2,220,570	1,365,381	855,189	496,164	353,125
83-52	051-01	Maple Plain Plant Inprovements	1,274,020	1,126,116	147,904	147,904	-0-
		IDIALS	<u>\$114,658,908</u>	<u>\$104,465,227</u>	<u>\$10,193,681</u>	<u>\$7,553,650</u>	<u>\$2,255,779</u>

#### CERTIFIED SHALE GRANIS

Project No.	Grant	Project	Total Grants Receivable	Earned As Of 12/31/86	Balance	Estimated Amount 1987	Estimated Amount 1988
74-01(407)	000-05	MWIP Sludge Incinerator	\$ 1,439,143	1,439,143	-0-	-0-	-0-
74-01(408)	000-06	MWIP Sludge Processing	11,330,745	11,330,745	-0-	-0-	-0-
75-01	999-01	Facilities Planning	245,154	245,154	-0	-0-	-0-
76-07	100-02	MWIP Retrofit Process Control	2,038,920	1,367,467	671,453	510,923	160,530
7 <del>6-</del> 55	999-02	Facilities Planning	394,135	394,135	-0-	-0-	-0-
77-05	134-01	Lower Beltline Interceptor	449,070	413,555	35,515	35,515	-0
78-01	999-03	Facilities Planning	75,448	75,448	-0-	-0-	-0-
79-06	008-02	Hastings Plant Improvements Step III	1,246,680	1,122,012	124,668	124,668	-0-
<b>79-8</b> 0	103-02	MWIP Add'1. Secondary	2,935,958	2,935,958	-0-	-0-	-0-
82-55	150-01	Mpls. Fast Interceptor	17,827,317	963,023	16,864,294	1,000,000	1,000,000
82-58	097-03	MWIP Secondary Treatment Rehab.	433,785	240,077	193,708	193,708	<b></b> .

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TOTALS

\$38,416,355

\$20**,**526,717

\$1,864,814

\$17,889,638

\$1,160,530

#### SUMMARY OF INVESTMENT INCOME

Investment earnings for period January through December, 1987 based on average investment balance of \$30 million and yield of 7% \$2,100,000

Investment earnings for period January through December, 1988 based on average investment balance of \$30 million and yield of 6%

1,800,000

TOTAL

\$3,900,000

SCHEDULE 10

<del>.</del>					•			
PROGRAM	PROJECT DESCRIPTION	STEP	PREVIOUSLY	ADDITIONAL	TOTAL	EXPENDITURES	ENCUMBERED	UNEMCUMBERED
NUMBER		APPROVAL	APPROPRIATED	APPROPRIATIONS	APPROPRIATIONS	DEC 31, 1986	BALANCE	BALANCES
	<u> </u>			· · · · · · · · · · · · · · · · · · ·	<b></b>	·		
4								
	MTCE & DISPATCH BLDG	III	\$2,850,000	\$0	\$2,850,000		\$153,181	\$280,456
1	MWWTP-SLUDGE PROCESS	<u> </u>	\$11,800,066		\$11,800,066	\$11,727,038	<u></u>	\$73,028
	NWWTP-SLUDGE BLDG	III	\$101,605,000		\$101,605,000	\$101,034,965	\$7,050	\$562,985
1	RESIDUAL SOLIDS MGMT	1	\$1,774,798	\$100,000	\$1,874,798	\$1,758,185	\$2	\$116,611
1	ENG SERV NPDES PERM	I_	\$195,000	<u>Óê</u>	\$195,000	\$126,621		\$68,379
1	MWWTP-RETROFIT PROC	III	\$17,750,000	\$0	\$17,750,000	\$12,699,794	\$4,100,507	\$949,699
1	COMBINED SEWER STUDY	I	\$3,058,600	\$200,000	\$3,258,600		\$6,079	\$279,633
	LOWER BELTLINE INTCP	<u>III</u> _	\$4,150,000	\$0	\$4,150,000	-	\$34,001	\$391,858
	FUTURE SYSTEM CONFIG	1	\$524,363	-	\$724,363	\$502,989	\$0	
	HASTINGS WWTP EXPAN	III	\$9,513,625	\$0	\$9,513,625	\$9,230,479	\$11,400	\$271,746
	NWWTP ADDL SECONDARY	<u> </u>	\$21,036,775			\$20,744,062	\$256,082	\$36,631
1	OVERHEAD (NOT REIMBURS		\$150,000	\$0	\$150,000	\$106,704	- \$0	•
1	GRANTS ADMINISTRAT	I	\$365,000	\$100,000	\$465,000	\$226,636	\$14	-
	OVERHEAD METRO FIELD	<u>I</u>	\$2,052,813	\$1,096,194	\$3,149,007		\$17,060	
1	LAKE GERVAIS INTCP	III	\$7,325,000	\$0	\$7,325,000	\$6,516,670	\$92,189	-
i i	PLANNING PROG BUD SYS		\$969,000	\$0	\$969,000	\$394,617	\$0	
	CAB_INTERCEPTOR	<u> </u>	\$17,320,000			\$16,151,750	\$169,053	
	LAKE ANN INTCP	III	\$12,700,000	\$3,000,000	\$15,700,000	\$644,721		\$14,346,444
	EXCELSION LIFT STAT	III	\$1,500,000	\$0	\$1,500,000	\$106,374	\$61,355	\$1,332,271
	INTERCEPTOR REHAB	<u>ILIII</u>	\$100,000		\$100,000	• · · · · ·	\$0	•
	MPLS EAST INTCP	III	\$41,000,000	\$0	\$41,000,000		\$21,119,972	\$3,922,864
	NWWTP SCREEN & GRIT	III	\$8,750,000	\$0	\$8,750,000	\$3,665,914	\$3,414,789	
	HWWTP PRIMARY TREAT	<u> </u>	\$13,535,000	\$0	\$13,535,000		\$4,534,721	
1	HWWTP SECONDARY TREAT		\$4,550,000	\$0	\$4,550,000	\$4,030,211	\$201,126	-
1	BLUE LAKE PLANT SLUD	III	\$4,800,000	\$0	\$4,800,000	\$3,360,361	\$1,385,397	•
	CHASKA PLANT IMPR		94,650,000	\$0	\$4,650,000		\$3,280,816	
-	MAPLE PLAIN INTCP	III	\$2,625,000	80	\$2,625,000	\$2,325,362	\$183,653	\$115,985
	MINNESOTA RIVER STUDY	I	\$175,000	\$0	\$175,000	\$99,910	\$1,400	\$73,690
-	NWWTP ENERGY STUDY	I	\$235,000	\$0	\$235,000			\$200,097
	NWWTP FIRE DETECTION	III	\$625,000	\$0	\$625,000	\$15,530	\$0	
	LIFT STATION ELEC SYS	-	\$175,000	\$0	\$175,000	\$1,525	\$0	-
	METER LIFT STATION AL		\$5,000,000	<u> </u>	\$5,000,000	\$322,751	\$517,649	• •
	NWWTP DISINFECTION	III	\$5,500,000	\$200,000	\$5,700,000	\$5,275,513	\$128	\$424,359
1	LINO LAKE 2ND INTCP	III	\$450,000	\$0	\$450,000	\$445,246	\$48,991	-
-	MISC CAPITAL IMPROVE	<u>III_</u>	93,300,188	<u></u>	\$3,300,188	-	\$85,438	
	NEW BRIGHTON INTOP	III	\$1,452,000	\$173,000	\$1,625,000	\$280,708	\$768,868	\$575,424
	BOSEMOUNT PLANT REPL	III	\$5,300,000	\$0	\$5,300,000	\$54,319	\$127,641	\$5,118,040
	SENECA SLUDGE HANDLE		\$3,900,000	\$1,500,000	\$5,400,000	\$174,366	\$166,119	
1	HETRO PLANT WATER IMP		\$450,000	\$0	\$450,000	\$19,304	\$0	•
	BLUE LAKE PLANT EXP	II	\$750,000	\$2,250,000	\$3,000,000	\$107,566	\$0	\$2,892,434
	EMPIRE PLANT EXP	<u></u>	8850,000	\$15,000,000	#15,850,000	<u> </u>		
4	METRO PLANT STUDIES	I	\$1,100,000	\$600,000	\$1,700,000	\$656,122	\$25,070	\$1,018,808
	SENECA PLANT STUDY	II	\$625,000	\$2,375,000	\$3,000,000	\$109,470	\$5,430	\$2,885,100
	SA 1 STUDY FOR REG SY		\$100,000		\$100,000_	\$380		
	NETER STATION INPR	III	\$2,250,000	\$1,250,000	\$3,500,000	\$83,014	. \$0	\$3,416,986
	SAVAGE INTCP	III	\$6,000,000	80	\$6,000,000	\$270,981	\$202,544	•
10201	HETRO LAB NODIF	111	\$821,000	\$0_	\$821,000	<b> \$760,656</b>	\$12,004	\$48,340

SCHEDULE 11

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FINANCIAL STATUS - CURRENT PROJECTS

1	8562 METRO PLANT ASH BASIN	II	\$800,000	\$0	\$800,000	\$35,440	\$0	\$764,560	
2	8563 LAKEVILLE LIFT STAT	III	\$1,100,000	\$400,000	\$1,500,000	\$166,786	\$0	\$1,333,214	
3	8565 MISC CAPITAL IMPROVE		\$1,200,000	80	\$1,200,000	\$743,322	\$148,537	\$308,141	
4	8566 MIDDLE BELTLINE INTCP	III	\$22,300,000	\$0	\$22,300,000	\$2,577,259	\$857,397	\$18,865,344	
4 5 6	8567 ORONO INTCP IMPROVE	III	\$1,600,000	\$800,000	\$2,400,000	\$167,678	\$144,412	\$2,087,910	
	8568 EAGAN INTCP		\$1,500,000	\$0	\$1,500,000	\$129,042	\$18,477_	\$1,352,481	
7	8653 STILLWATER PLANT EXP	II	\$500,000	\$500,000	\$1,000,000	\$4,706	\$0	\$995,294	
8	8654 NPLS 38TH ST INTCP	III	\$1,500,000	90	\$1,500,000	\$75,735	\$1,000	\$1,423,265	
э	8655 PLYNOUTH INTCP	111	\$1,120,000	\$8,380,000	\$9,500,000		\$42,839	\$9,383,787	
10	8656 BLAINE INTERCEPTOR	II	\$1,700,000	\$0	\$1,700,000	\$323	\$0	\$1,699,677	
	8658 JOINT INTCP REHAB	I	\$250,000	\$0	\$250,000	\$1,491	\$0	\$248,509	
2	8659 JOINT INTCP ACCESS	I	\$100,000	\$25,000	\$125,000		\$96,000	\$16,405	
3	8660 TROUT BROOK INTCP	III	\$6,950,000	\$1,550,000	\$8,500,000	\$205,661	\$377,696	\$7,916,643	
15	8665 MISC CAPITAL IMPROVE	II	\$4,000,000	\$0	\$4,000,000	\$392,499	\$98,259	\$3,509,242	
16	8751 ANOKA WWTP PHASEOUT		\$300,000	<u>\$0</u>					· —
_	8752 MWWTP EFFLUENT PUNP	II	\$200,000	\$0	\$200,000	\$0	\$0	\$200,000	
17 18	8753 PLANNING - CAPITAL	I	\$1,044,000	\$1,066,000	\$2,110,000	\$0	\$0	\$2,110,000	
	8754 MPLS-EAST PHASE 2			\$26,000,000	\$26,000,000	\$0		\$26,000,000	
19	8755 NWWTP-RBS IMPROVENNT	III	\$900,000	80	\$900,000	\$0	\$0	\$900,000	
2 1							•		
22	TOTALS		\$382,772,228	\$66,765,194	4440 527 472	\$245,158,760	eA2 A02 101	\$160,895,481	
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Project Title Seneca Maintenance & Dispatch Building

Number

72-07

#### Project Description:

Consists of the design and construction of a 34,000 square foot building to provide for a centralized maintenance and computer center.

#### Project Status:

Authorization:	Included in the Waste Management Policy Plan as a previously approved
	system improvement.
Step I:	Completed
Step II:	Completed

Step III: Completion in mid 1987.

Objectives for 1988: Close out project.

#### Objectives for Future Years:

1989 - N/A 1990 - N/A 1991 - N/A 1992 - N/A

#### Appropriations

1987 Budget(87 Amendment)\$ 2,850,000	
Expenditures to 12/31/86	2,416,363
Balance Required	433,637
Total Funds Required	2,850,000
Additional Appropriation	
Total 1988 Budget 2,850,000	

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	<u>State Grants</u>	Metropolitan Funds	<u>Total</u>
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988	\$	\$	\$ 2,416,363 15,000 5,000	\$ <u>2,416,363</u> <u>15,000</u> <u>5,000</u>
Third Quarter 1988				·····
Fourth Quarter 1988				
1989 1990			, <del></del>	••• <u>•</u> ••••••••••••••••••••••••••••••••
1991		<u> </u>		
1992 Estimated Contingency Funds			413,637	413,637
Total			2,850,000	2,850,000

SCHED:pap 3.13.87

SCHEDULE 11-2

1987 budget amendment reduction of \$500,000.

Additional Appropriation

Rationale for

#### Project Description:

This project consists of two sludge incinerators. This contract will be for the incinerators furnished and installed in the sludge processing building. The project is complete and eligibility of construction grant funding for a construction claim has to be resolved.

#### Project Status:

Authorization: Included in the Waste Management Policy Plan as a previously approved system improvement project.

Step I: Completed Step II: Completed Step III: Completed

Objectives for 1988: Close out project.

#### Objectives for Future Years

#### Rationale for Additional Appropriation

#### Appropriations

1987 Budget	\$11,800,066	
Expenditures to 12/31/86		<u>11,727,038</u>
Balance Required		73,028
Total Funds Required		11,800,066
Additional Appropriation	None	
Total 1988 Budget	11,800,066	

#### Proposed Expenditures and Funding Sources

1987	<u>otal</u>
1989	727,038 5,000 5,000
	800,066

SCHED:pap 3.13.87

#### Project Description:

This project consists of a building complex to house sludge incinerators, waste heat recovery facilities, sludge drying facilities and storage and loadout area. Equipment included in the the sludge processing building includes rotary sludge dryers, gas cleaning systems, waste heat boilers and incinerator modifications. Remaining improvements consist of installation of silencers and a study on the incinerator emissions.

#### Project Status:

Authorization:Included in the Waste Management Policy Plan as a previously approved<br/>system improvement project.Step I:CompletedStep II:CompletedStep III:Completed

Objectives for 1988: Resolve pending appeal on grant eligible items for construction grant findings. Complete installation of silencers. Complete study.

#### Objectives for Future Years

1989 - Review study on emissions. 1990 - N/A 1991 - N/A 1992 - N/A

#### Rationale for Additional Appropriation

Matronalitan

#### Appropriations

1987 Budget	\$101,605,000
Expenditures to 12/31/86	101,034,965
Balance Required	570,035
Total Funds Required	101,605,000
Additional Appropriation	None
Total 1988 Budget	101,605,000

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989	\$_56,653,725	\$ <u>11,330,745</u>	\$ 33,050,495 50,000 50,000 50,000 50,000 50,000 50,000	\$ 101,034,965 50,000 50,000 50,000 50,000 50,000 50,000
1990 1991 1992 Fatimated Contingonal Funds			270,035	270,035
Estimated Contingency Funds Total	56,653,725	11,330,745	33,620,530	101,605,000

SCHED:pap 3.13.87

Project Title Residual Solids Management

Number 75-01

#### Project Description:

The objective of the study is to develop a technically, economically and environmentally acceptable system for the reuse and/or disposal of residual solids, such as ash, grit, screenings and sludge from all the Commission's treatment plants. Immediate ash and sludge disposal needs will be analyzed and alternatives for a long-range system will be refined, including the determination of the viability of economically marketed heat dried sludge.

#### Project Status:

Authorization: This project included in the Waste Management Policy Plan as a study.

Step I: Step II: Step III:

Objectives for 1988: To complete a study of residual solids management needs for facilities other than the Metropolitan, Blue Lake and Seneca Plants.

#### Objectives for Future Years

1989 - N/A 1990 - N/A 1991 - N/A 1992 - N/A

#### Rationale for Additional Appropriation

Makes and the a

Appropriations

1987 Budget	\$ <u>1,774,798</u>
Expenditures to 12/31/86	1,758,185
Balance Required	116,613
Total Funds Required	1,874,798
Additional Appropriation	100,000
Total 1988 Budget	1,874,798

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	<u>State Grants</u>	Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$ <u>1,225,772</u>	\$ <u>245,154</u>	\$ 287,259 16,613 10,000 40,000 40,000 10,000	\$ 1,758,185 16,613 10,000 40,000 40,000 10,000
Total	1,225,772	245,154	403,872	1,874,798

SCHED:pap 3.13.87

#### Project Description:

The MPCA, in accordance with the terms of PL 92-500, Water Pollution Control Act Amendments, 1972, has issued NPDES permits for each of the treatment plants under the jurisdiction of the MWCC. The permits for the plants which remain as permanent facilities will require updating and review. Each plant has its individual problems and requirements and it will be necessary to determine the impact of the proposed revisions to each permit. The permits for the combined sewer overflow points will also be reviewed in this program.

#### Project Status:

Authorization: This project is included in the Waste Management Plan as a study.

Step I: Step II: Step III:

Objectives for 1988: Continue program to develop information for permits.

#### Objectives for Future Years

1	989
1	990
1	991
1	992

#### Rationale for Additional Appropriation

#### Appropriations

1987 Budget	\$ 195,000	
Expenditures to 12/31/86		126,621
Balance Required		68,379
Total Funds Required		195,000
Additional Appropriation	None	
Total 1988 Budget	195,000	

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	<u>State Grants</u>	Metropolitan Funds	Total
То 12/31/86	\$	\$	\$ <u>126,621</u>	\$ 126,621
1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990			5,000 5,000 5,000 5,000	5,000 5,000 5,000 5,000
1991 1992			48,379	48,379
Estimated Contingency Funds Total			195,000	195,000

SCHED:pap 3.13.87

#### SCHEDULE 11-6

Project Title MWWIP Retrofit Process Control

Number 76-07

Additional Appropriation

#### Project Description:

The project will add several existing plant process areas to the plant's computer system. Each area to be monitored and/or controlled is connected to the computer system through existing and new field process instruments wired to termination cabinet/multiplexer units.

#### Project Status:

Authorization:	Included in the Waste Management Policy Plan as a previously approved
	system improvement project.
Step I:	Completed
Step II:	Completed
Step III:	To be completed in 1988.

#### Objectives for 1988:

To start-up all affected process areas on the computer and begin the one year performance certification period.

#### Objectives for Future Years

1989 - Finalize project, complete performance certification and O&M Manual revisions per MPCA requirements.

- 1990 N/A
- 1991 N/A
- 1992 N/A

#### Appropriations

1987 Budget	\$17,750,000	
Expenditures to 12/31/86		12,777,850
Balance Required		4,972,150
Total Funds Required		17,750,000
Additional Appropriation	None	
Total 1988 Budget	17,750,000	

#### Proposed Expenditures and Funding Sources

<u>Yea</u>	ar	Fed. Grants	State Grants	Metropolitan Funds	Total
198 Fir Sec Thi Fou 198	rst Quarter 1988 cond Quarter 1988 ird Quarter 1988 urth Quarter 1988 39	\$ <u>6,837,341</u> 2,554,605 <u>375,000</u> <u>354,112</u> 66,042 7,500	\$ <u>1,367,467</u> 510,923 75,000 70,822 13,208 1,500	\$ <u>4,494,986</u> (65,528) 50,000 <u>47,216</u> 8,806 1,000 20,000	\$ <u>12,699,794</u> 3,000,000 500,000 472,150 88,056 10,000 20,000
199 199 199	91			<u> </u>	<u> </u>
	timated Contingency Funds		·····	960,000	960,000
	Total	10,194,600	2,038,920	5,516,480	17,750,000

#### Project Description:

The study had determined the environmental impact of the combined sewer overflow on the Mississippi River and formulated an abatement program leading towards the reduction or elimination of combined sewer overflow. The study included an assessment of combined sewer overflows, general planning of the abatement program and preliminary engineering of the required abatement facilities. Work will continue to develop operation plans for the regulators and effectiveness verification of separated areas and other information to fulfill the permit conditions.

#### Project Status:

Authorization:	Included in the Waste Management Policy Plan as a study.
Step I:	Completed
Step II:	Projects defined in the study are designed or under design.
Step III:	Construction of projects underway.

Objectives for 1988: Continue monitoring CSO NPDES permit compliance, reporting.

#### Objectives for Future Years

1989	-	Satisfy	permit	requirements.
1990			11	
1991	-		11	
1992	-		11	

#### Appropriations

1987 Budget	\$ 3,058,600	
Expenditures to 12/31/86		2,972,888
Balance Required		85,712
Total Funds Required		<u>3,058,600</u>
Additional Appropriation	200,000	
Total 1988 Budget	3,258,600	

#### Rationale for Additional Appropriation

Number

Additional funds are needed to develop operation plans, verify separated area effectiveness and develop a model to monitor the CSO.

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	<u>State Grants</u>	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$ 	\$ <u>394,135</u>	\$ 608,077 50,000 58,500 58,500 59,000 59,712	\$ 2,972,888 50,000 58,500 58,500 59,000 59,712
Total	1,970,676	394,135	893,789	3, 258,600

SCHED:pap 3.13.87

SCHEDULE 11-8

77-05

Project Description:

The project provides for the construction of a new interceptor to replace the existing under capacity line and also modifications to the under sized regulator. The interceptor extends from near the intersection of Warner Road & Highway 61 to the joint interceptor at Childs Road.

#### Project Status:

Authorization: Included in the Development Program for years 1978-1982. Step I: Completed Step II: Completed Step III: Completed

Objectives for 1988: Close out project.

#### Objectives for Future Years

1989 - N/A 1990 - N/A 1991 - N/A 1992 - N/A

#### Appropriations

#### Rationale for Additional Appropriation

1987 Budget	\$ 4,150,000	
Expenditures to 12/31/86		3,724,141
Balance Required		41 <u>5,85</u> 9
Total Funds Required		4,150,000
Additional Appropriation	None	
Total 1988 Budget	4,150,000	

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	<u>State Grants</u>	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$ <u>2,067,776</u> <u>177,574</u>	\$ 413,555 35,515	\$1,242,810 (208,089) 5,000 	\$ 3,724,141 5,000 5,000 415,859
Total	2,245,350	449,070	1,455,580	4,150,000

SCHED:pap 3.13.87 Project Title Future System Configuration

#### Project Description:

The purpose is that of determining the most cost effective solution on a regional basis, including an evaluation of non-monetary factors of each alternative.

#### Project Status:

Authorization: Included in the Waste Management Policy Plan as a study. Step I: Study to begin in 1988. Step II: Step III:

Objectives for 1988: To evaluate specific areas in the sewer planning for the Woodbury area and Elm Creek Watershed to meet policy plan issues.

#### Objectives for Future Years

1989 - N/A 1990 - N/A 1991 - N/A

1992 - N/A

#### Appropriations

# 1987 Budget \$ 524,363 Expenditures to 12/31/86 502,989 Balance Required 221,374 Total Funds Required 2,724,363 Additional Appropriation 200,000 Total 1988 Budget 724,363

#### Rationale for Additional Appropriation

To provide funds for specific studies of sewer planning issues.

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$ <u>75,448</u>	\$ 75,449 21,374 25,000 75,000 75,000 25,000	\$ 502,989 21,374 25,000 75,000 75,000 25,000
Total	352,092	75,448	296,823	724,363

SCHED:pap 3.13.87 Project Title Hastings WWTP Expansion

Number

79-06

#### Project Description:

The Hastings WWTP was expanded to treat an average daily wastewater flow of 2.3 mgd. Existing units were rehabilitated and additional units added. The plant provides primary treatment followed by activated sludge treatment, effluent chlorination and solids treatment by digestion. A new odor control system and a new sludge loading building were constructed. Odor control improvements will be provided as part of this project.

#### Project Status:

Authorization:Included in the Waste Management Policy Plan & Development Program by<br/>amendment in 1979.Step I:CompletedStep II:CompletedStep III:To be completed in 1987.

Objectives for 1988: Close out project.

#### Objectives for Future Years

1989 - N/A 1990 - N/A 1991 - N/A 1992 - N/A

#### Rationale for Additional Appropriation

#### Appropriations

1987 Budget	\$ 9,513,625	
Expenditures to 12/31/86		9,230,479
Balance Required		283,146
Total Funds Required		9,153,625
Additional Appropriation	None	
Total 1988 Budget	9,513,625	

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	<u>State Grants</u>	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$ <u>6,169,495</u> <u>63,905</u>	\$ <u>1,122,012</u> <u>124,668</u> 	\$ <u>1,938,972</u> (178,573) <u>5,000</u>     	\$ 9,230,479 10,000 5,000 268,146
Total	6,233,400	1,246,680	2,033,545	9,513,625

SCHED:pap 3.13.87

SCHEDULE 11-11

#### Project Description:

Project consists of adding four additional aeration tanks and three additional final clarifiers to the existing four east battery aeration tanks and nine clarifiers. Coarse bubble diffuser, similar to those in the existing aeration tanks, were installed in three new aeration tanks and fine bubble diffusers were installed in the fourth tank.

#### Project Status:

Authorization:	Included in the Development Program by amendment.
Step I:	Completed
Step II:	Completed
Step III:	Completed except for resolution of grant funding on several change
-	orders.

Objectives for 1988: Close out project.

#### Objectives for Future Years

1989 - N/A 1990 - N/A 1991 - N/A 1992 - N/A

#### Rationale for Additional Appropriation

#### Appropriations

1987 Budget	\$ <u>21,036,77</u> 5
Expenditures to 12/31/86	20,744,062
Balance Required	<u>292,71</u> 3
Total Funds Required	<u>21,036,77</u> 5
Additional Appropriation	
Total 1988 Budget	21,036,775

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Metropolitan Funds	<u>Total</u>
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990	\$_14,679,789	\$_2,935,958_ 	\$_3,128,315 5,000 5,000	\$ 20,744,062 5,000 5,000
1992 Estimated Contingency Funds			282,713	282,713
Total	14,679,789	2,935,958	3,421,028	21,036,775

SCHED:pap 3.13.87

Project Title \_\_\_\_ Overhead (Not Reimburseable)

Number 79-96

Rationale for

Additional Appropriation

#### Project Description:

This program accumulates Construction Department overhead costs not reimburseable by the Federal Government.

#### Project Status:

Authorization: Overhead for all construction projects. Step I: Step II: Project is being phased-out. Step III:

#### Objectives for 1988

Objectives for Future Years

1989 - N/A 1990 - N/A 1991 - N/A 1992 - N/A

#### Appropriations

\$ 150,000	
	106,704
	43,296
	150,000
None	
150,000	
	None

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	<u>State Grants</u>	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988	\$	\$	\$ <u>106,704</u> <u>43,296</u>	\$ <u>106,704</u> <u>43,296</u>
Third Quarter 1988 Fourth Quarter 1988 1989 1990				
1991 1992 Estimated Contingency Funds				
Total			150,000	150,000

SCHED:pap 3.13.87

#### SCHEDULE 11-12 A

Project Description: To consolidate the grant management functions of the Commission.

## Project Status: This will be an on-going program within the Commission.

365,000

100,000

Authorization: Overhead costs for construction fund. Step I: Step II: Step III:

## Objectives for 1988

To administer federal and state construction grants and other financial assistance grants.

226,636

238,364

465,000

## Objectives For Future Years

1989 - Continue Program

1990 - Continue Program

1991 - Continue Program

1992 - Continue Program

Expenditures to 12-31-86

Balance Required .

Total 1988 Budget

Total Funds Required Additional Appropriation

## Appropriations

1987 Budget

## Rationale for Additional Appropriation

Additional funds are necessary
to continue the construction
grants program in 1988.

## Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Metropolitan Funds	Total
To 12/31/86	\$	\$	<b>\$</b> 226,636	<b>\$</b> 226,636
1987	······································	· · · · · · · · · · · · · · · · · · ·	138,364	138,364
First Quarter 1988			25,000	25,000
Second Quarter 1988			25,000	25,000
Third Quarter 1988			25,000	25,000
Fourth Quarter 1988			25,000	25,000
1989				
1990				
1991				
1992				
Estimated Contingency Fi	unds			
Total			\$ 465,000	\$ 465,000

Number

#### Project Description:

This program provides for the administration of the department and for indirect costs associated with its operations. It includes such non-labor expenses as motor vehicle purchase and operation, travel, training, office equipment and supplies, publications, rent, utilities and printing. It provides for labor expenses such as those associated with attending staff meetings, training, developing budgets, moving to the new office building, records management, personnel administration and general department management.

Project Status:

Authorization: Step I: Step II: Step III:

Objectives for 1988: Continue program.

Objectives for Future Years

1989 - Continue program. 1990 - Continue program. 1991 - Continue program. 1992 - Continue program.

## Appropriations

1987 Budget	\$ 2,052,813	
Expenditures to 12/31/86		1,083,849
Balance Required		2,065,158
Total Funds Required		3,149,007
Additional Appropriation	1,096,194	
Total 1988 Budget	3,149,007	

## Rationale for Additional Appropriation

Provide additional funds for Engineering/Construction Dept. in 1988.

## Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ <u>1,083,869</u> <u>852,793</u> 270,000 <u>270,000</u> 270,000 <u>273,849</u> <u>128,496</u>	\$ 1,083,869 852,793 270,000 270,000 270,000 273,849 128,496
Total			3,149,007	3,149,007

Project Title Lake	e Gervais Interceptor
--------------------	-----------------------

Number

81-51

This project provides for a new gravity interceptor starting from the Beltline Interceptor near the intersection of Highways 61 and 36 in Maplewood and going in a westerly and northwesterly direction to the Lake Gervais Lift Station where the proposed interceptor will connect to the existing Little Canada Interceptor. The construction of this interceptor will allow the existing and over capacity Lake Gervais Lift Station to be modified and the forcemain to be phased out of service.

#### Project Status:

Authorization:Included in the 1978-1982 Development Program.Step I:CompletedStep II:CompletedStep III:Completed

Objectives for 1988: Close out project.

#### Objectives for Future Years

1989 - N/A 1990 - N/A 1991 - N/A 1992 - N/A

#### Rationale for Additional Appropriation

Matwanalitan

#### Appropriations

1987 Budget	\$ 7,325,000	
Expenditures to 12/31/86		6,516,670
Balance Required		808,330
Total Funds Required		7,325,000
Additional Appropriation	None	
Total 1988 Budget	7,325,000	

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	<u>State Grants</u>	Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$_6,516,670 5,000 5,000 	\$ <u>6,516,670</u> <u>5,000</u> <u>5,000</u> <u>798,330</u>
Total			7,325,000	7,325,000

This project provides for continuation of comprehensive long range Commission planning in coordination with various agencies. The program provides resources for the implementation of facility planning studies to update previous work.

#### Project Status:

Authorization: Included in prior capital budgets with concurrence of the Met Council. Step I: Ongoing studies Step II: Step III:

#### Objectives for 1988

Complete any remaining studies begun in 1987.

## **Objectives For Future Years**

1989 - N/A

1990 - N/A

1991 - N/A

1992 - N/A

#### Appropriations

## Rationale for Additional Appropriation

1987 Budget \$	969.000	
Expenditures to 12-31-86		394,617
Balance Required		574,383
Total Funds Required		969,000
Additional Appropriation	None	
Total 1988 Budget	969,000	

## Proposed Expenditures and Funding Sources

Year	Fed. Grants	<u>State Grants</u>	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990	\$	\$	\$ 394,617 394,383 80,000	\$ 394,617 394,383 80,000
1991 1992 Estimated Contingency Fun Total	nds		100,000 \$ 969,000	100,000 \$ 969,000

Project Title CAB Interceptor

82-52 Number

#### Project Description:

This CAB Interceptor consists of an interceptor from the existing Brooklyn Park Interceptor northwesterly up to Champlin. The interceptor will provide gravity service up to the southwest corner of the old village limits of Champlin and provide a future outlet for the phaseout of the Anoka Plant via a lift station and forcemain. This project consists of a 9 mile gravity interceptor, ranging in size from 42 inch to 66 inch in diameter. The interceptor consists of two projects which were constructed from 1983 to 1985.

#### Project Status:

Authorization: Included in the Development Program for years 1981-1986.

Step I: Completed Step II: Completed Step III: Completed

Objectives for 1988: To resolve construction and financial issues and close out project.

#### Objectives for Future Years

1989 - N/A 1990 - N/A 1991 - N/A 1992 - N/A

#### Rationale for Additional Appropriation

Matronalitan

#### Appropriations

1987 Buðget	\$ <u>17,320,00</u> 0
Expenditures to 12/31/86	<u>16,151,75</u> 0
Balance Required	<u>1,168,25</u> 0
Total Funds Required	<u>17,320,00</u> 0
Additional Appropriation	None
Total 1988 Budget	<u>17,320,00</u> 0

## Proposed Expenditures and Funding Sources

Year	Fed. Grants	<u>State Grants</u>	Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989	\$	\$	\$ <u>16,151,750</u> <u>468,250</u> <u>5,000</u>	\$ <u>16,151,750</u> <u>468,250</u> <u>5,000</u>
1990 1991 1992		- <u></u>	······································	
Estimated Contingency Funds			695,000	695,000
Total	- <u></u>		17,320,000	17,320,000

SCHED: pap 3.13.87

Project Title Lake Virginia Lift Station

Number 82

82-53-326

#### Project Description:

Improvements to the lift station include removal of the existing pumps, motors and controls and the installation of six new pumps with a capacity of 2,400 gpm each for a firm station capacity of 12,000 gpm. The new pumps would be powered by 150 horsepower motors, three of which would have variable speed controls. The discharge piping would be revised to fit the new pumps. The existing valves would be replaced with plug valves and arranged to allow two pumps with variable speed controls to pump to the Excelsior Lift Station at a rate of approximately 2,000 gpm each. Surge control valves would be installed on each pump. A building addition will be required to house new controls and to provide for installation of stairways into the wet well and dry well. Other miscellaneous improvements include a fence around the odor control equipment, replacement of the wet well platform, additional ventilation equipment and additional roof insulation.

#### Project Status:

Authorization: Included in the 1984-1988 Development Program by amendment. Step I: Completed Step II: Completed in 1987. Step III: Substantial completion in 1988.

Objectives for 1988: Substantial completion of project.

## Objectives for Future Years

1989 - Close out project. 1990 1991 1992

## Rationale for Additional Appropriation

#### Appropriations

Based on revised construction cost estimates.

1987 Budget	\$ <u>1,092,038</u>	(Est. component of	total	82-53	budget)	
Expenditures to 12/31/86		22,380			<u> </u>	
Balance Required		1,327,620				
Total Funds Required		1,350,000				
Additional Appropriation	<u>257,962</u>					
Total 1988 Budget	1,350,000					

## Proposed Expenditures and Funding Sources

Year	Fed. Grants	<u>State Grants</u>	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ <u>22,380</u> <u>350,000</u> <u>200,000</u> <u>300,000</u> <u>200,000</u> <u>50,000</u> <u>227,620</u>	\$ <u>22,380</u> <u>350,000</u> 200,000 <u>300,000</u> 200,000 50,000 227,620
Total			1,350,000	1,350,000

SCHED:pap 3.13.87

Project Title \_\_\_\_ Lake Virginia Forcemain

## Project Description:

The forcemain is 30" in diameter and is designed to convey 17.3 mgd (12,000 gpm). The Lake Virginia Forcemain will be 16,500 feet long. The project begins at the Lake Virginia Lift Station, running easterly along 62nd Street to Church Street. The forcemain follows State Highway 7 from Church Street to State Highway 41. The forcemain turns south on Highway 41 for approximately 3,000 feet before connecting to the Lake Ann Interceptor.

#### Project Status:

Authorization: Included in the 1984-1988 Development Program by amendment. Step I: Completed Step II: Completed in 1987 Step III: Substantial completion in 1988

Objectives for 1988: Substantial completion.

#### Objectives for Future Years

1989 - Close out project. 1990 1991 1992

#### Rationale for Additional Appropriation

#### Appropriations

1987 Budget\$ 1,597,611(Est. component of total 82-53 budget)Expenditures to 12/31/8632,741Balance Required1,942,259Total Funds Required1,975,000Additional Appropriation377,389Total 1988 Budget1,975,000

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ <u>32,741</u> 600,000 200,000 450,000 300,000 50,000 342,259	\$ <u>32,741</u> 600,000 200,000 450,000 300,000 50,000 342,259
Total			1,975,000	1,975,000

SCHED:pap 3.13.87

Project Title \_\_\_\_\_ Lake Ann Interceptor\_\_\_\_

Number

82-53-328

## Project Description:

The Lake Ann Interceptor will consist of 22,000 feet of 30" to 42" gravity interceptor. It begins at the end of the Lake Virginia Forcemain and continues southeasterly toward Galpin Lake Road. The pipe than continues east from Galpin Lake Road towards and along the western side of Lake Ann. North of State Highway 5, the pipe again turns east and then southeast, crosses State Highway 5 and enters the Chanhassen Lakes Industrial Park. The Lake Ann Interceptor parallels Chanhassen's existing Lake Ann trunk sewer through the industrial park and continues south beneath the railroad and then follows Riley Creek to the shore of Lake Susan. The pipe then follows the north shore of Lake Susan, crosses State Highway 101 and connects to the existing Lake Ann Interceptor, Phase I. The Lake Ann Interceptor provides MWCC interceptor service to Chanhassen and the upstream communities located west and southwest of Lake Minnetonka. The facility also provides local trunk sanitary sewer service to the area in Chanhassen north of State Highway 5.

#### Project Status:

Authorization: Included in the 1984-1988 Development Program by amendment. Step I: Completed Step II: Completed in 1987 Step III: Substantial completion in 1988

Objectives for 1988: Substantial completion.

#### Objectives for Future Years

1989 - Close out project. 1990 1991 1992

## Rationale for Additional Appropriation

#### Appropriations

1987 Budget\$ 4,246,817(Est. component of total 82-53 budget)Expenditures to 12/31/8687,032Balance Required5,162,968Total Funds Required5,250,000Additional Appropriation1,003,183Total 1988 Budget5,250,000State State State

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ 87,032 1,350,000 600,000 800,000 600,000 1,012,968	\$ 87,032 1,350,000 600,000 800,000 800,000 1,012,968
Total			5,250,000	5,250,000

SCHED:pap 3.13.87

Project Title Red Rock Interceptor

#### Project Description:

The Red Rock Interceptor will consist of a 20,500 foot, 42" to 54" gravity interceptor. It connects to the Lake Ann Interceptor at the Chanhassen Lift Station. The interceptor then follows the north and east shores of Rice Marsh Lake before turning east. The interceptor passes south of Mirchell Lake, crosses a railroad, heads southeast toward County Road 4. East of County Road 4, the interceptor follows a ravine through backyards of existing homes. The pipe is then routed along the west and south side of Red Rock Lake and through the proposed Red Rock Ranch development to Mitchell Road. It follows Mitchell Road and a ravine to the north side of Staring Lake and then follows Research Road to the Purgatory Creek Interceptor. A metering station will be installed downstream of the existing Chanhassen Lift Station.

#### Project Status:

Authorization:Included in the 1984-1988 Development Program by amendment.Step I:CompletedStep II:Completed in 1987.Step III:Substantial completion in 1988.

Objectives for 1988: Substantial completion.

Objectives for Future Years

1989 - Close out project. 1990 1991 1992

Appropriations

Rationale for Additional Appropriation Based on revised construction cost estimate.

1987 Budget	\$ 5,763,523	(est compon	ent of total
Expenditures to 12/31/86		118,116	82-53 budget)
Balance Required		7,006,884	
Total Funds Required		7,125,000	
Additional Appropriation	1,361,466		
Total 1988 Budget	7,125,000		

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	<u>State Grants</u>	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ 502,568 1,550,000 900,000 1,100,000 1,100,000 900,000 1,072,432	\$ 502,568 1,550,000 900,000 1,100,000 1,100,000 900,000 1,072,432
Total			7,125,000	7,125,000

This project consists of improvements to the existing Excelsior Lift Station, reconstruction of the surge relief manhole at the Galpin Lake Lift Station and construction of 400 ft. of parallel gravity sewer to relieve a capacity restriction in the Shorewood interceptor. The improvements at the Excelsior Lift Station will include an expanded wet well and dry well area, installation of 2 variable speed and 4 constant speed pumps and new electrical and mechanical equipment. The resulting station capacity will be 10 mgd.

#### Project Status:

Authorization:Included in the 1984-1988 Development Program in 1985.Step I:CompletedStep II:CompletedStep III:Begun in early 1987, continue to 1988

Objectives for 1988: To complete construction.

#### Objectives for Future Years

1989 - To finalize the project. 1990 - N/A 1991 - N/A 1992 - N/A

## Rationale for Additional Appropriation

Matronal itan

#### Appropriations

1987 Budget	\$ 1,500,000	
Expenditures to 12/31/86		106,374
Balance Required		<u>1,393,626</u>
Total Funds Required		<u>1,500,000</u>
Additional Appropriation	None	
Total 1988 Budget	1,500,000	

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ <u>106,374</u> 715,000 321,813 321,813 10,000 10,000 10,000 5,000	\$ 106,374 715,000 321,813 321,813 10,000 10,000 10,000 5,000
Total			1,500,000	1,500,000

Project Title Interceptor Reh	abilitation
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82-54 Number

Project Description:

This project will consist of design and construction services to rehabilitate numerous areas in the interceptor system. The rehabilitation services will be to primarily eliminate excessive inflow/infiltration in numerous reaches of the interceptor system.

#### Project Status:

Authorization: Included in the Development Program for years 1981-1986. Step I: Completed Step II: On Going Step III:

Objectives for 1988: Continue rehabilitation efforts.

#### Objectives for Future Years

## Rationale for Additional Appropriation

Metropolitan

#### Appropriations

1987 Budget	\$ <u>100,000</u>	
Expenditures to 12/31/86		4,957
Balance Required		95,043
Total Funds Required		100,000
Additional Appropriation	None	
Total 1988 Budget	100,000	

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ <u>4,957</u> <u>5,000</u> <u>1,000</u> <u>1,000</u> <u>1,000</u> <u>1,000</u> <u>86,043</u>	\$ <u>4,957</u> <u>5,000</u> <u>1,000</u> <u>1,000</u> <u>1,000</u> <u>1,000</u> <u>86,043</u>
Total			100,000	100,000

SCHED:pap 3.13.87

Project Title <u>Minneapolis East Interceptor</u>

Number 82-55

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## Project Description:

The project consists of the construction of about four miles of ten foot diameter parallel interceptor on the existing Minneapolis East Interceptor. Phase I of the interceptor, between 2nd and Main and Lake Street, will be the initial construction. Phase II design will be updated under this program and construction initiated in a future program.

#### Project Status:

Authorization:	Included in the Development Program for years 1981-1986.
Step I:	Completed
Step II:	Completed
Step III:	Phase I construction underway.

Objectives for 1988: Completion of Phase I.

#### Objectives for Future Years

## Rationale for Additional Appropriation

## Appropriations

1987 Budget	\$41,000,000	
Expenditures to 12/31/86		15,957,164
Balance Required		25,042,836
Total Funds Required		41,000,000
Additional Appropriation	None	
Total 1988 Budget	41,000,000	

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 - future Estimated Contingency Funds	\$	\$ 963,023 1,000,000 250,000 250,000 250,000 1,000,000 1,000,000 1,000,000 1,000,000 8,364,294 3,500,000	<pre>\$ 14,994,141 11,000,000 3,792,836 2,750,000 2,250,000 (250,000) (1,000,000) (1,000,000) (1,000,000) (1,000,000) (8,364,294)</pre>	\$ 15,957,164 12,000,000 4,042,836 3,000,000 2,500,000 3,500,000
Total		17,827,317	23,172,683	41,000,000

The MWWTP West Pretreatment Facilities, located in the Screen & Grit Building, is required to provide treatment to about 1/3 of the flow arriving at the Plant and is particularly important in handling high storm-related flows. The facility has seen almost 50 years continuous service and requires rehabilitation to increase the level of treatment provided & the process reliability. The project includes repairs and improvements to the grit and screenings handling system, flow metering and electrical, mechanical and control systems.

#### Project Status:

Authorization:	Included in the Development Program for years 1981-1986.
Step I:	Completed
Step II:	Completed
Step III:	Initiated in early 1986, to be completed in 1988.

Objectives for 1988: To complete construction and initiate operation.

#### Objectives for Future Years

1989 - Finalize project, complete performance certification and O&M Manual Revisions per MPCA requirements.

- 1990 N/A 1991 - N/A
- 1992 N/A

Rationale for Additional Appropriation

Mahanaalihaa

#### Appropriations

1987 Budget	2	•\$	8,	,750	,000	
Expenditure	es to 12/31/	′86				3,665,914
Balance Req	puired					5,084,086
Total Funds	Required					8,750,000
Additional	Appropriati	on	_NC	ne		
Total 1988	Budget		8,	,750	,000	

## Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990	\$ <u>945,281</u> <u>1,434,027</u> <u>137,500</u> <u>137,500</u> <u>137,500</u> <u>137,500</u> <u>137,500</u> <u>211,247</u>	\$	\$ 2,720,633 565,973 112,500 112,500 112,500 112,500 112,500 172,839	\$ 3,665,914 2,000,000 250,000 250,000 250,000 250,000 384,086
1990 1991 1992 Estimated Contingency Funds			1,700,000	1,700,000
Total	3,140,555		5,609,445	8,750,000

The MAWITP West Primary battery provides treatment to about 1/3 of the flow arriving at the Plant and is particularly important in handling high storm-related flows. The facility has seen almost 50 years continuous service and requires rehabilitation to increase the level of treatment provided and the process reliability. The project includes repairs and improvements to the sludge and scum handling systems, structural condition and electrical, mechanical and control systems.

#### Project Status:

Authorization:	Included in the Development Program for years 1981-1986.
Step I:	Completed
Step II:	Completed
Step III:	Initiated in early 1986, to be completed in 1988.

Objectives for 1988: To complete construction and initiate operation.

## Objectives for Future Years

1989 - Finalize project, completed performance certification and O&M Manual revisions per MPCA requirements.

1990 - N/A 1991 - N/A 1992 - N/A

1992 197

#### Rationale for Additional Appropriation

Metropolitan

## Appropriations

1987 Budget	<b>\$</b> 13,535,000	
Expenditures to 12/31/86	·	6 <b>,2</b> 31,173
Balance Required		7,293,827
Total Funds Required		13,535,000
Additional Appropriation	None	
Total 1988 Budget	<u>13,535,00</u> 0	

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	<u>State Grants</u>	<u>Funds</u>	<u>Total</u>
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991	\$ 1,824,202 2,562,418 137,500 137,500 137,500 137,500 137,500 167,105	\$	\$ 4,406,971 637,582 112,500 112,500 112,500 112,500 136,722	\$ 6,231,173 3,200,000 250,000 250,000 250,000 250,000 303,827
1991 1992 Estimated Contingency Funds			2,800,000	2,800,000
Total	5,103,725		8,431,275	13,535,000

The MAWIP West Secondary battery provides treatment to about 1/2 of the plant flow and successful operation is critical in achieving compliance with the plant's discharge permit. Lack of adequate redundancy in the electrical power supply system and deficiencies in the scum removal facilities were addressed through this project to enable the facility to fulfill its operational requirements. The project included a second high voltage power feed and electrical transformer and scum system improvements, consisting of new motorized skimming equipment and a building to house it.

#### Project Status:

Authorization:	Included in the Development Program for years 1981-1986.
Step I:	Completed
Step II:	Completed
Step III:	Construction substantially complete, into one year start-up period.

Objectives for 1988: Continue operation of rehabilitated facility to generate data for preparation and submission of Performance Certification.

Objectives for Future Years

- 1989 N/A
- 1990 N/A
- 1991 N/A
- 1992 N/A

Appropriations

## Rationale for Additional Appropriation

Mahamal itan

1987 Budget	\$ 4,550,000	
Expenditures to 12/31/86	<u></u>	4,030,211
Balance Required		1,419,789
Total Funds Required		4,550,000
Additional Appropriation	None	
Total 1988 Budget	4,550,000	

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988	\$ <u>2,051,872</u> <u>117,053</u>	\$ <u>240,077</u> <u>193,708</u>	\$ <u>1,738,262</u> (95,972) <u>5,000</u>	\$ <u>4,030,211</u> 214,789 5,000
Fourth Quarter 1988		·····		- <u></u>
1989 1990				
1991 1992			<u></u>	
Estimated Contingency Funds			300,000	300,000
Total	2,168,925	433,785	1,947,290	4,550,000

SCHED:pap

The project will provide a sludge thickener complex with 4 additional thickening tanks to allow the current 2 primary tanks, which is presently being used to store & thicken sludge to be returned to use as a primary tank. The project will also provide a sludge loadout building for truck hauling. The project will provide an electrical building which will furnish primary power for the existing plant, for this project & for future expansion.

#### Project Status:

Authorization:	Included in the Development Program for years 1981-1986.
Step I:	Completed
Step II:	Completed
Step III:	To be substantially completed in 1987.

Objectives for 1988: Project certification, close out.

#### Objectives for Future Years

## Rationale for Additional Appropriation

#### Appropriations

1987 Budget	\$ 4,800,000	
Expenditures to 12/31/86	· <u></u>	3,157,954
Balance Required		1,642,046
Total Funds Required		4,800,000
Additional Appropriation	None	
Total 1988 Budget	4,800,000	

## Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Metropolitan Funds	<u>Total</u>
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990	\$ <u>1,365,381</u> <u>496,564</u> <u>188,125</u> <u>55,000</u> <u>55,000</u> <u>55,000</u> <u>55,500</u>	\$	\$ <u>1,994,980</u> <u>1,029</u> <u>153,921</u> <u>45,000</u> <u>45,000</u> <u>45,000</u> <u>45,000</u>	\$ 3,360,361 497,593 342,046 100,000 100,000 100,000 10,000
1991 1992 Estimated Contingency Funds			290,000	290,000
Total	2,220,570		2,579,430	4,800,000

The present pure oxygen activated sludge wastewater treatment plant will be expanded to 1.66 mgd with organic treatment capacity expanded to 4,400 pounds per day. Improvements include a new headworks building, influent pumping, conversion of one sludge holding tank to two pure oxygen activated sludge tanks, additional final clarifier, new chlorine tank, dechlorination, upgraded effluent pumping, new outfall sewer, new sludge thickener, new sludge pumping, odor removal units with associated buildings, electrical and piping.

#### Project Status:

Authorization:	Included in the 1982-1986 Development Program.
Step I:	Complete
Step II:	Complete
Step III:	Began in late 1986, continue through 1988.

Objectives for 1988: To complete construction and finalize the project.

## Objectives for Future Years

1989 - N/A 1990 - N/A 1991 - N/A 1992 - N/A

#### Rationale for Additional Appropriation

Makunan ali kan

#### Appropriations

1987 Budget	s 4,650,000	
Expenditures to 12/31/86	* <u></u>	953,646
Balance Required		3,696,354
Total Funds Required		4,650,000
Additional Appropriation	None	
Total 1988 Budget	4,650,000	

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ 953,646 2,000,000 396,354 350,000 350,000 300,000 300,000	\$ 953,646 2,000,000 396,354 350,000 350,000 300,000 300,000
Total			4,650,000	4,650,000

Project Title <u>Maple Plain Interceptor</u>

Number 83-52

Rationale for

Additional Appropriation

Project Description:

This project consists of a lift station and forcemain to phase the Maple Plain Treatment Plant out of service and includes demolition of plant site.

Project Status:

Authorization:Included in the Development Program for 1981-1986.Step I:CompletedStep II:CompletedStep III:Completion in mid 1987.

Objectives for 1988: N/A

Objectives for Future Years

1989 - N/A 1990 - N/A 1991 - N/A 1992 - N/A

Appropriations

 1987 Budget
 \$ 2,625,000

 Expenditures to 12/31/86
 2,325,362

 Balance Required
 299,638

 Total Funds Required
 2,625,000

 Additional Appropriation
 None

 Total 1988 Budget
 2,625,000

## Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$ <u>1,126,116</u> <u>147,904</u> 	\$	\$ <u>1,206,096</u> (97,904) 	\$ <u>2,325,362</u> 50,000
Total	1,274,020		1,357,830	2,625,000

Project Title Minnesota River Study

Number 83-53

#### Project Description:

This study will provide for additional information relating to more restricted water quality standards which may be required by MPCA. The comprehensive study is needed to validate the permit issuance process and provide information that is needed by the Commission for presentation at public hearings on the proposed NPDES permit.

#### Project Status:

Authorization: Approved as a study in the 1983 Capital Budget. Step I: Completed Step II: Step III:

Objectives for 1988

#### Objectives for Future Years

## Rationale for Additional Appropriation

#### Appropriations

1987 Budget	\$_175,000	
Expenditures to 12/31/86		99,910
Balance Required		75,090
Total Funds Required		175,000
Additional Appropriation	None	
Total 1988 Budget	175,000	

## Proposed Expenditures and Funding Sources

Year	Fed. Grants	<u>State Grants</u>	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ <u>99,910</u> 25,000	\$ <u>99,910</u> 25,000
Total			175,000	

Project Title Metro System Energy Stu	le Metro System Energy S	tudy
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Number

83-54

Project Description:

The project consists of Step I services to conduct studies on electrical power systems, HVAC systems with emphasis on the identification and analysis of energy conservation opportunities such as peak demand shaving, heat recovery and other ways of managing energy use.

Project Status:

Authorization: Approved as a study in 1983 Capital Budget. Step I: Preliminary work completed. Additional study required. Step II: Step III:

Objectives for 1988: Complete the study.

Objectives for Future Years

1989 - Implement recommendations. 1990 1991 1992

## Rationale for Additional Appropriation

Metropolitan

#### Appropriations

1987 Budget	\$ 235,000	
Expenditures to 12/31/86		34,903
Balance Required		200,097
Total Funds Required		235,000
Additional Appropriation	None	
Total 1988 Budget	235,000	

## Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ <u>34,903</u> <u>5,000</u> <u>50,000</u> <u>50,000</u> <u>45,097</u>	\$ <u>34,903</u> 5,000 50,000 50,000 45,097
Total			235,000	235,000

83-55

#### Project Description:

A comprehensive, automatic fire and hazardous chemical detection/alarm system and a plant security system will be designed and installed at the Metro Wastewater Treatment Plant. Approximately 200 smoke detectors, 200 manual fire alarm stations and 300 public address speakers will be installed at a minimum of 40 different zones. The security system will detect intrusion at a minimum of six locations. The system will be controlled by a central processing computer connected to a zone control unit in each zone by fiber optics. The present security systems and detection systems for hydrogen sulfide, chlorine and sulfur dioxide gas leaks, oil spills and fire will be incorporated into the new system.

#### Project Status:

Authorization:	Included in the 1986-1990 Development Program.
Step I:	Completed
Step II:	Complete in 1987
Step III:	Begin in 1987, completed in 1988.

Objectives for 1988: Complete installation and have system fully operational.

#### Objectives for Future Years

1989 - N/A 1990 - N/A 1991 - N/A 1992 - N/A

#### Rationale for Additional Appropriation

#### Appropriations

1987 Budget	\$ 625,000	
Expenditures to 12/31/86		15,530
Balance Required		609,470
Total Funds Required		625,000
Additional Appropriation	None	
Total 1988 Budget	625,000	

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ 15,530 50,000 140,000 140,000 140,000 139,470	\$ <u>15,530</u> <u>50,000</u> <u>140,000</u> <u>140,000</u> <u>140,000</u> <u>139,470</u>
Total			625,000	625,000

83-56

Project Description:

This project consists of a survey of electrical, mechanical equipment at the lift stations. This project will provide for the information to determine the need for replacement of existing equipment with new reliable and efficient equipment.

## Project Status:

Authorization: Approved as a study in the 1983 Capital Budget. Step I: Preliminary work completed, Step II: Step III:

Objectives for 1988: Complete study.

#### Objectives for Future Years

1989 - Implement recommendations. 1990 1991 1992

#### Rationale for Additional Appropriation

#### Appropriations

1987 Budget	\$ 175,000	
Expenditures to 12/31/86		1,525
Balance Required		<u>173,475</u>
Total Funds Required		175,000
Additional Appropriation	None	
Total 1988 Budget	175,000	

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ <u>1,525</u> <u>5,000</u> <u>40,000</u> <u>40,000</u> <u>40,000</u> <u>48,475</u>	\$ <u>1,525</u> <u>5,000</u> <u>40,000</u> <u>40,000</u> <u>40,000</u> <u>48,475</u>
Total			_175,000	175,000

SCHED:pap 3.13.87

Project Title <u>Metering & Lift Station System Improvements</u> Number\_ 83-57

#### Project Description:

This project is to provide a new computer, remote transmission unit and associated equipment to replace the existing Alarm & Metering Telemetry System. The system will monitor over 200 remote sites for lift station alarms, meter flows, sewage regulators and river quality monitors. The existing system has become obsolete and difficult to maintain because many components are no longer manufactured to readily available.

#### Project Status:

Authorization: Approved as a study in the 1983 Capital Budget. Step I: Completed Step II: Completed Step III: Begun in 1986, complete in 1988.

Objectives for 1988: Complete construction.

#### Objectives for Future Years

#### Rationale for Additional Appropriation

#### Appropriations

1987 Budget	\$ 5,000,000	
Expenditures to 12/31/86		322,751
Balance Required		4,677,249
Total Funds Required		5,000,000
Additional Appropriation		
Total 1988 Budget	5,000,000	

## Proposed Expenditures and Funding Sources

Year	Fed. Grants	<u>State Grants</u>	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ <u>322,751</u> <u>1,350,000</u> <u>750,000</u> <u>600,000</u> <u>475,000</u> <u>402,249</u> <u>1,100,000</u>	\$ <u>322,751</u> <u>1,350,000</u> 750,000 <u>600,000</u> 475,000 402,249 <u>1,100,000</u>
Total			5,000,000	5,000,000

Project Title MWWTP Disinfection

Number

Rationale for

Additional Appropriation

Make minor improvements to insure proper operation of the system to meet water quality standards.

83-58

Project Description:

The NPDES permit requires compliance with stringent effluent chlorine residual standards by June 1, 1986. It also requires construction of such facilities to be started 1/1/85. Engineering design was initiated in January, 1984 and was completed in mid 1984. The design provides new dechlorination facilities using sulfur dioxide. The project includes improvements to existing chlorination process to make it compatible with dechlorination and plant wide practices such as computer control.

#### Project Status:

Authorization: Included in the Development Program as an amendment in 1984.

Step I:CompletedStep II:CompletedStep III:Completed

Objectives for 1988: Continue monitoring performance, close out project.

#### Objectives for Future Years

#### Appropriations

1987 Budget	\$ 5,500,000	
Expenditures to 12/31/86		<u>5,275,513</u>
Balance Required		224,487
Total Funds Required		5,500,000
Additional Appropriation	200,000	
Total 1988 Budget	5,700,000	

## Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ <u>5,275,513</u> <u>224,487</u> <u>50,000</u> <u>50,000</u> <u>50,000</u> <u>50,000</u>	\$ <u>5,275,513</u> <u>224,487</u> <u>50,000</u> <u>50,000</u> <u>50,000</u> <u>50,000</u> <u>50,000</u>
Total			5,700,000	5,700,000

Project Title Lino Lakes Interceptor

#### Number 83-61

Rationale for

Additional Appropriation

#### Project Description:

The project involves the construction of 2,800 L.F. of 24-inch gravity sewer to serve Urban Service District No. 2 in the City of Lino Lakes. This interceptor, which discharges into the North Suburban Interceptor (4-NS-523), has a peak capacity of 4.15 mgd

#### Project Status:

Authorization:	Included in the Development Program by amendment in 1983.
Step I:	Complete
Step II:	Complete
Step III:	Begun in mid 1986, complete in early 1987.

Objectives for 1988: To finalize the project.

#### Objectives for Future Years:

1989 - N/A 1990 - N/A 1991 - N/A 1992 - N/A

#### Appropriations

1987 Budget	\$ 450,000	
Expenditures to 12/31/86		445,246
Balance Required		4,754
Total Funds Required		450,000
Additional Appropriation	None	•
Total 1988 Budget	450,000	

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	<u>State Grants</u>	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ <u>445,246</u> 0 0 0 0 0 0 0 0 0 0 4,754	\$ <u>445,246</u> 0 0 0 0 0 0 0 0 0 0 4,754
Total			450,000	450,000

This program provides for additional miscellaneous improvements to the wastewater treatment plants and the interceptor system. The projects are proposed to provide for more effective operations and eliminate deficiencies in the system.

#### Project Status:

Authorization: Step I: Step II: Step III:

The projects will be completed by the end of the second quarter of Objectives for 1988: 1987 with the So. St. Paul Plant Demolition Project.

## Objectives for Future Years

1989 - N/A 1990 - N/A 1991 - N/A 1992 - N/A

Appropriations

## Rationale for Additional Appropriation

# 1007 Dudget

1987 Budget	\$3,300,188	
Expenditures to 12/31/86		3,076,641
Balance Required		223,547
Total Funds Required		3,300,188
Additional Appropriation	None	
Total 1988 Budget	3,300,188	

## Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Metropolitan Funds	<u>Total</u>
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ <u>3,039,851</u> <u>86,790</u> 0 <u>0</u> 173,547	\$ <u>3,039,851</u> <u>86,790</u> 0 
Total			3,300,188	3,300,188

# PROJECT 83-65 MISCELLANEOUS CAPITAL IMPROVEMENTS

Project	Capital Project Cost
Administration - Consists of completed projects, general investigations of need for improvements, preliminary engineering and small projects and contingency.	2,770,213
So. St. Paul Plant Demolition - Consists of work necessary to demolish most of the existing structures.	250,000
Trunk Sewer Rehabilitation	249,975
Savage Meter Station Improvements - Provides for Commission meter	30,000
to determine flow from a collection system.	3,300,188

Project Title New Brighton Interceptor

Number 84-51

## Project Description:

The project consists of 3300 L.F. of 24-inch gravity sewer to serve the north central sewer district in the City of Arden Hills. The new interceptor will begin at the western border of the City of Arden Hills, proceed westerly along the north side of Highway I-694 and terminate at an existing 42-inch sewer in New Brighton. The interceptor's hydraulic capacity of 4.2 mgd will relieve capacity restrictions in an existing trunk sewer and provide reserve capacity for additional growth and development in this area.

## Project Status:

Authorization:	Approved as an amendment to the Development Program in 1984.
Step I:	Completed
Step II:	Complete in early 1987.
Step III:	Begin in mid 1987, complete in late 1987.

Objectives for 1988: To finalize the project.

#### Objectives for Future Years

1989 - N/A 1990 - N/A 1991 - N/A 1992 - N/A

#### Appropriations

## Rationale for Additional Appropriation

 1987 Budget(87 Amendment)\$ 1,452,000

 Expenditures to 12/31/86
 280,708

 Balance Required
 1,344,292

 Total Funds Required
 1,625,000

 Additional Appropriation
 173,000

 Total 1988 Budget
 1,625,000

1987 budget amendment provided \$317,000 for design. The additional funds are needed to complete construction and resolve construction claims.

## Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ <u>280,708</u> <u>850,000</u> <u>169,292</u> <u>175,000</u> <u>50,000</u> <u>100,000</u> <u>100,000</u>	\$ 280,708 850,000 169,292 175,000 50,000 100,000
Total	·		1,625,000	1,625,000

SCHED:pap 3.13.87

The existing physical chemical plant will be replaced by a 0.705 mgd aerated pond system. The new 22 acre, 15 foot deep pond system consists of two aeration cells and one settling cell with a holding area. The design will feature a synthetic liner, coarse bubble diffusion and multiple draw-off controls. The plant headworks will be rehabilitated, a new pump/blower building and new chlorination equipment will be constructed.

#### Project Status:

Authorization:	Included in the 1984-1988 Development Program.
Step I:	Completed
Step II:	Started in 1987, complete late 1987.
Step III:	Begin early 1988, completed fall, 1988.

Objectives for 1988: Complete construction.

#### Objectives for Future Years

1989 - Complete 1 year certification. 1990 - N/A 1991 - N/A 1992 - N/A

## Rationale for Additional Appropriation

#### Appropriations

1987 Budget	\$ 5,300,000	,
Expenditures to 12/31/86		54,319
Balance Required		5,245,681
Total Funds Required		5,300,000
Additional Appropriation	None	
Total 1988 Budget	5,300,000	

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Metropolitan <u>Funds</u>	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ 54,319 100,000 100,000 900,000 1,000,000 900,000 1,245,681 1,000,000	\$ 54,319 100,000 100,000 900,000 1,000,000 1,245,681 1,000,000
Total			5,300,000	5,300,000

This project includes replacing the two existing sludge dewatering vacuum filters with two meter belt filter presses to supplement the existing two meter belt filter press. All units will be installed with rotating drum thickeners. Sludge treatment capacity will be increased. In addition, two bulk polymer storage tanks with a usable capacity of 9000 gallons will be installed. A permanent potassium permanganate feed system will be provided for odor control.

#### Project Status:

Authorization:	Included in the 1984-1988 Development Program and budgeted in 1985.
Step I:	Complete for now.
Step II:	Began in 1985. Design effort was put on hold in early 1987 to await
<b>-</b> -	completion of a residual solids management study for the southwest
	metropolitan area. Design expected to be continued in 1988.
Step III:	Construction is expected in 1989 through 1990.

Objectives for 1988: After completion of the residual solids management study, design will be reinitiated and will consider any applicable recommendations resulting from the solids study.

## Objectives for Future Years

1989 - Complete design and initiate construction. 1990 - Substantial completion late in year. 1991 - Finalize the project. 1992 - N/A

## Appropriations

Rationale for Additional Appropriation

Additional funds needed to provide for the total cost of the project based on more refined estimates.

\$ 3,	900,000	
		174,366
		3,725,634
		3,900,000
1,	,500,000	
5,	400,000	
	1,	\$ <u>3,900,000</u> <u>1,500,000</u> <u>5,400,000</u>

## Proposed Expenditures and Funding Sources

Year	Fed. Grants	<u>State Grants</u>	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988	\$	\$	\$ <u>174,366</u> 250,000	\$ <u>174,366</u> 250,000
Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988			45,000	45,000
1989 1990			2,875,634 2,000,000 5,000	2,875,634 2,000,000 5,000
1991 1992 Estimated Contingency Funds				
Total			5,400,000	5,400,000

Number 85-53

#### Project Description:

The project consists of a design for a new water main to supply the needs at the Metro Plant. The Plant is currently served by a small City main which is not adequate for fire protection. The new line would be about 3000 ft. in length and be about 12 inches in diameter and run parallel to the existing water supply line.

#### Project Status:

Authorization: Included in the 1981-1986 Development Program. Step I: Completed Step II: Completed in 1987 Step III: Begin in 1987, complete in 1988

Objectives for 1988: Close out project.

## Objectives for Future Years

## Rationale for Additional Appropriation

#### Appropriations

1987 Budget	\$ 450,000	
Expenditures to 12/31/86	- <u></u>	19,304
Balance Required		430,696
Total Funds Required		450,000
Additional Appropriation	None	
Total 1988 Budget	450,000	

## Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ 19,304 300,000 40,000 30,000 30,000 30,696	\$ 19,304 300,000 40,000 30,000 30,000 30,696
Total			450,000	450,000

The existing plant expanded to treat a 32 mgd average daily flow. A single stage activated sludge system providing nitrification and effluent aeration will be used to meet a more stringent waste load allocation. Plant headworks, pretreatment and primary treatment facilities and the aerated polishing pond will be rehabilitated or replaced. The existing secondary facility will be rehabilitated to treat half the flow and a new secondary plant constructed to treat the rest. New chlorination, dechlorination and effluent pumping equipment plant, instrumentation and control equipment and a maintenance and warehouse building will be built. Effluent dissolved oxygen will be increased by cascade aeration.

#### Project Status:

Authorization:	Included in the 1986-1990 Development Program.
Step I:	Completed
Step II:	Begin in early 1987, completed in 1988.
Step III:	Begin in 1990, continue until 1992.

Objectives for 1988: To substantially complete design.

#### Objectives for Future Years

1989 - Complete design, apply for grant funding. 1990 - Begin construction. 1991 - Continue construction. 1992 - Startup

#### Rationale for Additional Appropriation

Provide funds for design.

#### Appropriations

1987 Budget	\$ 750,00	0
Expenditures to 12/31/86		107,566
Balance Required		2,892,434
Total Funds Required		3,000,000
Additional Appropriation	2,250,00	0
Total 1988 Budget	3,000,00	0

## Proposed Expenditures and Funding Sources

Year	Fed. Grants	<u>State Grants</u>	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ 107,566 300,000 500,000 500,000 500,000 500,000 592,434	\$ 107,566 300,000 500,000 500,000 500,000 500,000 592,434
Total			3,000,000	3,000,000

The current project will be a 3 mgd expansion up to a 6 mgd capacity. It will consist of additional influent pumping capacity, one primary clarifier, expanded high rate activated sludge, one high rate clarifier, expanded nitrification activated sludge, one final clarifier, split flow around effluent filters, effluent pumping capacity, one chlorine contact tank, dechlorination facilities, gravity sludge thickeners, one digester, replacement of existing digester covers with steel covers, new digester heating and mixing system, replacement of existing centrifuges with belt filter presses, new control system, new instrumentation where required and misc. plant improvements, electrical & piping.

#### Project Status:

Authorization:	Included in the 1986-1990 Development Program.
Step I:	Complete
Step II:	To be initiated in 1987 and completed in 1988.
Step III:	To be initiated in 1988 and completed in 1991.

Objectives for 1988: To complete design and initiate construction.

#### Objectives for Future Years

1989 - Continue Construction 1990 - Substantial Completion 1991 - Finalize Construction 1992 - N/A

#### Appropriations

Rationale for Additional Appropriation

Provide funds for construction.

1987 Budget	s 850,000
Expenditures to 12/31/86	123,080
Balance Required	15,726,920
Total Funds Required	15,850,000
Additional Appropriation	
Total 1988 Budget	15,850,000

## Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ <u>123,080</u> 200,000 200,000 200,000 200,000 7,000,000 5,000,000 2,726,920	\$ 123,080 200,000 200,000 200,000 200,000 7,000,000 5,000,000 2,726,920
Total			15,850,000	15,850,000

The project consists of a study to conduct an intensive river survey in summer, 1985, to collect data for reverification of a computer model. The computer model refinement, including literature search on selected topics, field studies relative to deoxygenation rate and nitrification rate in the river, and other special studies. Supplementary assessment topics, including compliance issues, priority pollutants, monitoring and upstream water quality.

#### Project Status:

Authorization: The study was approved in the 1985 Capital Budget. Step I: Work on the study continues. Step II: Step III:

Objectives for 1988: Complete the study.

#### Objectives for Future Years

#### Rationale for Additional Appropriation

#### Appropriations

1987 Budget	\$ 200,000	
Expenditures to 12/31/86	_121	282
Balance Required	78	3.718
Total Funds Required	_200	.000
Additional Appropriation	None	
Total 1988 Budget	200,000	

## Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ <u>121,282</u> 5,000 5,000 5,000 5,000 5,000 5,000 5,000	\$ <u>121,282</u> 5,000 5,000 5,000 5,000 5,000 5,000 5,000 5,000
Total			200,000	_200,000

Number

## Project Description:

The purpose of the project was to estimate the plant capacity for potential sets of water quality based effluent limits and to estimate the plant's effluent quality under optimized operating conditions. The study was a requirement of the Metro Plant NPDES permit and was to be used in conjunction with a Mississippi River Waste Load Allocation Study to determine the level of treatment the plant should provide so that certain water quality standards are achieved in the river.

## Project Status:

Authorization:Approved in the 1985 Capital Budget.Step I:CompletedStep II:N/AStep III:N/A

#### Objectives for 1988: N/A

#### Objectives for Future Years

1989 - N/A 1990 - N/A 1991 - N/A 1992 - N/A

#### Appropriations

1987 Budget	\$	350,000	
Expenditures to 12/31/86	_		225,000
Balance Required			425,000
Total Funds Required			650,000
Additional Appropriation	_	300,000	
Total 1988 Budget	_	650,000	

## Rationale for Additional Appropriation

Metropolitan

Fine bubble aeration equipment, retrofit evaluation and other process improvements. Includes evaluation of recycle liquor treatment rotating biological surface performance.

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	<u>State Grants</u>	Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ 237,075 105,000 50,000 50,000 50,000 37,925 120,000	\$ 237,075 105,000 50,000 50,000 37,925 120,000
Total			650,000	650,000

Project Title Residual Solids Management

Number 85-56-317

## Project Description:

Develop a plan for sludge ash management, including ash recycling and backup ash landfilling. Evaluate feasible operating modes and costs. Perform market studies and product development work needed to achieve full scale ash utilization in asphalt or other recycling methods. Assimilate, evaluate and recommend actions regarding optimum use of the Metro Plant site for various competing uses, such as ash storage, dried sludge storage, emergency dewatered sludge storage and supplemental composting program. Integrate odor control and sludge loadout improvements.

#### Project Status:

Authorization: The study was approved in the 1985 Capital Budget. Step I: Very preliminary work done, need to complete. Step II: Step III:

Objectives for 1988: Complete the study.

#### Objectives for Future Years

#### Appropriations

1987 Budget	\$ 150,000	
Expenditures to 12/31/86		311
Balance Required		249,689
Total Funds Required		250,000
Additional Appropriation	100,000	
Total 1988 Budget	250,000	

## Rationale for Additional Appropriation

Methonelitan

Provide funds for additional evaluations to include rotary sludge drying, standby land application program, grit management, screening management.

## Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ <u>311</u> 5,689 <u>36,000</u> <u>36,000</u> <u>36,000</u> <u>36,000</u> <u>100,000</u>	\$ <u>311</u> <u>5,689</u> <u>36,000</u> <u>36,000</u> <u>36,000</u> <u>36,000</u> <u>100,000</u>
Total			250,000	250,000

Project Title MWWTP Odor Study/Non-Criteria Emission Report Number 85-56-318

#### Project Description:

The subject study was conducted as a requirement of the MWWIP Air Operating Permit. The odor study examined plant odor sources and their impacts and developed a work plan for reducing odorous emissions. The non-criteria study included chemical analysis of several incinerator exhaust gas samples for a variety of organic and inorganic substances.

#### Project Status:

Authorization:	Approved in the 1985 Capital Budget.
Step I:	Completed original report. Additional work required.
Step II:	N/A
Step III:	N/A

Objectives for 1988: Complete additional evaluations.

#### Objectives for Future Years

1989 - N/A 1990 - N/A 1991 - N/A 1992 - N/A

#### Appropriations

1987 Budget	\$ <u>300,000</u>	
Expenditures to 12/31/86		292,081
Balance Required		207,919
·Total Funds Required		500,000
Additional Appropriation	200,000	- <u></u>
Total 1988 Budget	500,000	
Total Funds Required Additional Appropriation		

#### Rationale for

Motropolitan

Additional Appropriation Update plant odor assessment and neighborhood survey and follow up work on non-criteria emissions/testing, air dispersion modeling, health risk assessment.

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ 292,081 7,919 50,000 50,000 50,000 50,000	\$ 292,081 7,919 50,000 50,000 50,000 50,000
Total			500,000	500,000

Evaluate capacity of the existing 5 pumps and their operation and maintenance. Analyze cost of providing a sixth pump for standby capacity which does not now exist. Also analyze cost and need of providing 2 added pumps (total). This is estimated to be 655 mpg pumping capacity (current capacity has been estimated at 585 mgd using all five pumps). Assess impact of bypassing when existing pump capacity is exceeded.

#### Project Status:

Authorization: The study was approved in the 1985 Capital Budget. Step I: Completed Step II: Step III:

Objectives for 1988

#### Objectives for Future Years

#### Rationale for Additional Appropriation

#### Appropriations

1987 Budget	\$ 50,000	
Expenditures to 12/31/86		4,061
Balance Required		45,939
Total Funds Required		50,000
Additional Appropriation	None	
Total 1988 Budget	50,000	

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ <u>4,061</u> <u>5,939</u> <u>40,000</u>	\$ <u>4,061</u> <u>5,939</u> 
Total			50,000	50,000

Evaluate potential uses of F&I #1 building, which is no longer in use. This would require removal of existing equipment and conversion to other uses. Potential uses identified to date include sludge loadout and/or sludge loading facility, warehouse space, lockers and showers, laboratory, training areas and offices. The best potential use may also be demolition of unused portions of the building and reserving the space for future expansion.

#### Project Status:

Authorization: The study was approved in the 1985 Capital Budget. Step I: The study has not begun. Step II: Step III:

Objectives for 1988: Preliminary work on the study.

#### Objectives for Future Years

1989 - Complete the study. 1990 1991 1992

#### Rationale for Additional Appropriation

Matwonal itan

#### Appropriations

1987 Budget	\$ <u>50,000</u>	
Expenditures to 12/31/86		1,312
Balance Required		48,688
Total Funds Required		50,000
Additional Appropriation	None	
Total 1988 Budget	50,000	:

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	<u>State Grants</u>	Funds	Total
To 12/31/86 1987 First Quarter 1988	\$	\$	\$ <u>1,312</u> <u>3,688</u>	\$ <u>1,312</u> <u>3,688</u>
Second Quarter 1988 Third Quarter 1988			5,000	5,000
Fourth Quarter 1988 1989 1990			40,000	40,000
1991 1992 Estimated Contingency Funds			· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
Total		. <u></u>	50,000	50,000

85-57

#### Project Description:

Proposed facilities call for a split flow single stage activated sludge plant. Treatment will consist of preliminary treatment, existing primary clarifier, split flow to new activated sludge facilities with final clarification, recombining of flow to expanded chlorine facilities, dechlorination and pure oxygen supper saturation of effluent. Other major improvements include a building expansion, modification of existing clarifiers, new aeration system, electrical improvements, new controls and instrumentation, odor control for headworks and primary clarifiers and electrical power distribution improvements.

#### Project Status:

Authorization:	Project approved in the 1985 Capital Budget.
Step I:	Set final effluent limits and complete in 1987.
Step II:	Initiate in 1987 and complete in 1988.
Step III:	Begin in 1991 and complete 1993.

Objectives for 1988: Complete development of plans and specifications.

#### Objectives for Future Years

1989 - Obtain Grant Funding 1990 - Obtain Grant Funding 1991 - Start Construction 1992 - Continue Construction 1993 - Finalize Project Completion

#### Appropriations

1987 Budget(87 Amendment)\$	625,000	
Expenditures to 12/31/86		109,470
Balance Required		2,890,530
Total Funds Required		3,000,000
Additional Appropriation	2,375,000	
Total 1988 Budget	3,000,000	

#### Rationale for Additional Appropriation

1987 budget amendment provided \$500,000 for plant expansion design.

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ <u>109,470</u> <u>300,000</u> <u>690,530</u> <u>700,000</u> <u>600,000</u> <u>600,000</u>	\$ 109,470 300,000 690,530 700,000 600,000 600,000
Total			3,000,000	3,000,000

SCHED:pap 3.13.87

SCHEDULE 11-52

Consists of a study to physically inspect all regulators. Document electrical, mechanical, structural, hydraulic and safety deficiencies, such as explosion proof electrical systems, adequate ventilation, lighting, access and work space. Update available documentation (record drawings) as necessary. Conduct hydraulic analysis of regulators individually and as a system and assess the condition and operational benefits versus costs of the fabridams versus fixed weirs.

#### Project Status:

Authorization: The study was approved in the 1985 Capital Budget. Step I: The study has not begun. Step II: Step III:

Objectives for 1988: Preliminary work on the study.

#### Objectives for Future Years

1989 - Complete the study. 1990 1991 1992

#### Rationale for Additional Appropriation

#### Appropriations

1987 Budget	\$ 100,000	
Expenditures to 12/31/86		380
Balance Required		99,620
Total Funds Required		100,000
Additional Appropriation	None	
Total 1988 Budget	100,000	

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988	\$	\$	\$ <u>380</u> 2,620	\$ <u>380</u> 2,620
Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds			<u>5,000</u> 92,000	5,000 92,000
Total			100,000	100,000

Project Title Meter Station Improvements

Number

Rationale for

Additional Appropriation

station modifications.

Project will include additional mete

85-59

#### Project Description:

The project will correct problems at 40 flow meter sites which are in need of replacement, rehabilitation, modification, consolidation or hydraulic improvements. Work will include structural, mechanical and electrical alterations. Also included in the project is the development of a standard meter specification to be applicable to all projects involving flow meters.

Project Status:

Authorization:	Included in the 1986-1990 Development Program.	The Step I study was
	approved in the 1985 Capital Budget.	
Step I:	Completed	
Step II:	Completed in early 1988.	
Step III:	Begin in mid 1988, continue into 1990.	

Objectives for 1988: To complete design and begin construction.

#### Objectives for Future Years

1989 - To substantially complete construction. 1990 - To finalize the project. 1991 - N/A 1992 - N/A

#### Appropriations

 1987 Budget
 \$ 2,250,000

 Expenditures to 12/31/86
 83,014

 Balance Required
 3,416,986

 Total Funds Required
 3,500,000

 Additional Appropriation
 1,250,000

 Total 1988 Budget
 3,500,000

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	<u>State Grants</u>	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ 83,014 100,000 100,000 100,000 200,000 2,000,000 816,986	\$ 83,014 100,000 100,000 100,000 200,000 2,000,000 816,986
Total			3,500,000	3,500,000

Project Title Savage Interceptor

Number 85-60

#### Project Description:

The present site of the Savage Plant will serve as the sight for a new 6.1 mgd lift station. It will allow the phase-out of the Savage Plant and convey sewage to the Seneca WWIP. Included in the project are a 12,500', 14" and 18" dual forcemain and a 10,800', 36" gravity line. The lift station will include a standby power generator.

#### Project Status:

Authorization:	Included in 1984-1988 Development Program by amendment in 1985.	•
Step I:	Complete	
Step II:	Complete	
Step III:	Initiated in 1987, substantial completion in 1988.	

Objectives for 1988: Substantial project completion.

#### Objectives for Future Years

1989 - Close out project. 1990 1991 1992

#### Rationale for Additional Appropriation

#### Appropriations

1987 Budget	\$ 6,000,000	
Expenditures to 12/31/86		270,981
Balance Required		5,719,019
Total Funds Required		6,000,000
Additional Appropriation	None	
Total 1988 Budget	6,000,000	

To provide for additional construction costs based on latest construction estimate.

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	<u>State Grants</u>	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ <u>270,981</u> <u>200,000</u> <u>1,300,000</u> <u>700,000</u> <u>1,000,000</u> <u>1,529,019</u>	\$ <u>270,981</u> <u>200,000</u> 1,300,000 <u>700,000</u> 1,000,000 1,000,000 1,529,019
Total			6,000,000	6,000,000

SCHED:pap 3.13.87

SCHEDULE 11-55

Number 85-61

#### Project Description:

Consists of the remodeling of the Central Lab (Metro Plant Lab) which will provide additional and improved facilities to: 1) To accommodate increased laboratory activities; 2) to allow for an increase in efficiency of personnel and equipment by centralization; and 3) to better provide for the overall safety and general welfare of laboratory personnel. The modifications are consistent with the long range plans to assign all Quality Control Department personnel to the Metro Plant.

#### Project Status:

Authorization: The project was approved in the 1984-1988 Development Program. Step I: Complete Step II: Complete Step III: Complete in 1987

Objectives for 1988: Close out project.

#### Objectives for Future Years

#### Rationale for Additional Appropriation

#### Appropriations

1987 Budget	\$ 821,000	
Expenditures to 12/31/86		760,656
Balance Required		60,344
Total Funds Required		821,000
Additional Appropriation	None	
Total 1988 Budget	821,000	

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ <u>760,656</u> <u>30,344</u> <u>5,000</u> <u></u>	\$ <u>760,656</u> <u>30,344</u> <u>5,000</u> <u></u>
Total	·			

SCHED: pap 3.13.87

Project Title Metro Plant Ash Basin

#### Project Description:

Consists of interim ash management at the Metro Plant which is required until the longterm plan, a central ash landfill can be provided. The project consists of a 50,000 cubic yard capacity ash basin and associated lining and decant system. The basin would be located in the vicinity of the existing ash basins at the Metro Plant.

Project Status:

Authorization:Not approved in the Development Program.Step I:CompleteStep II:75% completeStep III:Not planned.

Objectives for 1988: N/A

Objectives for Future Years

1989 - N/A 1990 - N/A 1991 - N/A 1992 - N/A

#### Appropriations

### Rationale for Additional Appropriation

1987 Budget	\$ 800,000	
Expenditures to 12/31/86		12,114
Balance Required		787,886
Total Funds Required		800,000
Additional Appropriation	None	
Total 1988 Budget	800,000	

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	<u>State Grants</u>	Metropolitan Funds	<u>Total</u>
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ <u>35,440</u> 	\$ <u>35,440</u> 
Total			800,000	800,000

Project Title \_\_\_\_\_ Lakeville Lift Station

Number

Rationale for

Additional Appropriation

project construction.

To provide necessary funds for

85-63

#### Project Description:

The existing Lakeville Lift Station has experienced insufficient capacity and other operational problems over the past several years. To remedy these problems, a new lift station will be constructed at the intersection of County Road 46 and Cedar Avenue in Apple Valley. The new lift station will be furnished with 4 pumps and will have a capacity of 6.5 mgd. It will be equipped with a standby power generator.

#### Project Status:

Authorization:	Project was included in the Development Program by amendment in 1985.
Step I:	Completed
Step II:	Complete in early 1987.
Step III:	Begin in mid 1987, complete in 1988.

Objectives for 1988: To substantially complete construction.

#### Objectives for Future Years

1989 - To finalize the project. 1990 - N/A 1991 - N/A 1992 - N/A

#### Appropriations

# 1987 Budget \$ 1,100,000 Expenditures to 12/31/86 166,786 Balance Required 1,333,214 Total Funds Required 400,000 Additional Appropriation 400,000 Total 1988 Budget 1,500,000

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	<u>State Grants</u>	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ <u>166,786</u> 500,000 200,000 200,000 233,214 190,000 10,000	\$ <u>166,786</u> 500,000 200,000 200,000 233,214 190,000 10,000
Total			1,500,000	1,500,000

This program provides for additional miscellaneous improvements to the wastewater treatment plant and the interceptor systems. The projects are proposed to provide for more effective operations and eliminate deficiencies in the system.

Project Status:

Authorization: The project was included in the 1985 Capital Budget. Step I: Step II: Step III:

Objectives for 1988: To initiate and complete the remaining projects in the programs.

#### Objectives for Future Years

1989 - N/A 1990 - N/A 1991 - N/A 1992 - N/A

# Additional Appropriation

Rationale for

## Appropriations

1987 Budget	\$ 1,200,000	
Expenditures to 12/31/86		743,322
Balance Required		456,678
Total Funds Required		1,200,000
Additional Appropriation	None	
Total 1988 Budget	1,200,000	

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	<u>State Grants</u>	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ 743,322 291,992 40,000 40,000 40,000 44,686	\$ 743,322 291,992 40,000 40,000 40,000 44,686
Total		·	1,200,000	1,200,000

# PROJECT 85-65 MISCELLANEOUS CAPITAL IMPROVEMENTS

Project	Capital <u>Project Cost</u>
Pre-Design Investigations to Access Need for Project Development	65,000
Seneca Plant - Consists of odor control improvements, engr. studies.	10,000
Interceptor Improvements - Consists of:	
Chanhassen Lift Station Influent Line Improvements - Consists of adding an 18-inch RCP bypass line to eliminate large drop into wet well	39,500
Septage Discharge Site Improvements - Consists of improving septage discharge sites as required for safety, aesthetics and maintenance.	20,000
Meter Station Improvements - Consists of improving meter hydraulics, maintenance access and equipment as problems are identified.	170,000
Burnsville Lift Station Study - Consists of evaluation of odor control, flow measurement, pumping capacity, structure.	10,000
Blue Lake Plant - Provides for odor control improvements for Screen Bldg.	0
Metro Plant Ventilation and Odor Control Improvements - Consists of	34,000
gravity thickener ventilation improvements, sludge storage ventilation	160,000
improvements and boiler feed water pump room ventilation modifications.	, 55,000
Metro Plant Process Piping and Conveying Improvements - Consists of an	85,000
effluent water line for incinerators 5 & 6, effluent water line for roll presses.	26,500
Metro Plant Building and Grounds - Consists of Maintenance Building locke and shower additions.	er 475,000
East Grit Dewatering Improvements - Consists of modifications to obtain drier grit for hauling.	50,000
	1 200 000

1,200,000

This project consists of approximately 13,000 feet of new sanitary sewer interceptor from Warner Road and Highway 61 to Lake Phalen.

#### Project Status:

Authorization:	Provided for in the 1984-1988 Development Program by amendment in 1985.
Step I:	Completed
Step II:	Completed
Step III:	Began in 1986, continue into 1989.

Objectives for 1988: To substantially complete construction.

#### Objectives for Future Years

1989 - To finalize project. 1990 - N/A 1991 - N/A 1992 - N/A

#### Rationale for Additional Appropriation

#### Appropriations

1987 Budget	\$11,850,000	
Expenditures to 12/31/86		1,557,000
Balance Required		10,293,000
Total Funds Required		11,950,000
Additional Appropriation	None	
Total 1988 Budget	11,850,000	

#### Proposed Expenditures and Funding Sources

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Year	Fed. Grants	<u>State Grants</u>	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988	\$	\$	\$ <u>1,557,000</u> <u>9,000,000</u> <u>200,000</u> <u>200,000</u>	\$ 1,557,000 9,000,000 200,000 200,000
Fourth Quarter 1988 1989 1990			43,000	43,000
1991 1992				
Estimated Contingency Funds			850,000	850,000
Total		- <u></u>		11,850,000

85-66-371 Number Project Title \_\_\_\_Beaver\_Lake\_Interceptor\_ Project Description: This project consists of approximately 12,000 feet of new sanitary sewer interceptor from Margaret and Etna Streets to Beaver Lake. Project Status: Authorization: Provided for in the 1984-1988 Development Program by amendment in 1985. Completed Step I: Completion in early 1987. Step II: Construction from mid 1987 into 1989. Step III: Objectives for 1988: To substantially complete construction. Objectives for Future Years 1989 - To finalize project. 1990 - N/A 1991 - N/A Rationale for 1992 - N/A Additional Appropriation Appropriations \$10,450,000 (1987 Budget Amendment) 1987 Budget Expenditures to 12/31/86 10,450,000 Balance Required 10,450,000 Total Funds Required Additional Appropriation None 10,450,000 Total 1988 Budget Proposed Expenditures and Funding Sources Metropolitan Funds Total Fed. Grants State Grants Year \$ 0 \$ 0 \$ To 12/31/86 4,300,000 4,300,000 1987 1,537,500 1,537,500 First Quarter 1988 1,537,500 1,537,500 Second Quarter 1988 1,537,500 1,537,500 Third Ouarter 1988 1,000,000 1,000,000 Fourth Quarter 1988 537,500 537,500 1989 1990 1991 1992 Estimated Contingency Funds 10,450,000 10,450,000 Total SCHED:pap 3.13.87

Project Title Orono Interceptor Improvements

85-67

#### Project Description:

This project will involve rebuilding four lift stations, eliminating one lift station, constructing 6,000 feet of 10" forcemain and 10,000 feet of 12" to 18" gravity interceptor. The improvements are needed to handle the increased flow from the City of Orono during wet weather periods.

#### Project Status:

Authorization: Included in the 1984-1988 Development Program. Step I: Complete Step II: Complete in 1987 Step III: Substantial completion in 1988.

Objectives for 1988: Substantial completion

#### Objectives for Future Years

1989 - Close out project. 1990 1991 1992

#### Appropriations

#### Rationale for Additional Appropriation

Based on revised estimate of project costs.

1987 Budget	\$ <u>1,600,000</u>	
Expenditures to 12/31/86		167,678
Balance Required		2,232,322
Total Funds Required		2,400,000
Additional Appropriation	800,000	-
Total 1988 Budget	2,400,000	

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ 167,678 500,000 400,000 400,000 332,322 200,000	\$ 167,678 500,000 400,000 400,000 332,322 200,000
Total			2,400,000	2,400,000

#### Project Title Eagan Interceptor Improvements

Number 85-68

#### Project Description:

A new lift station will be constructed adjacent to the existing lift station which will be salvaged and abandoned. At another station, the wet well will be expanded. Included in the project are a 80', 18" forcemain, a 25", 24" gravity line, a 14', 12" gravity line and a 720', 4" water main. The new lift station will include a standby power generator.

#### Project Status:

Authorization:	Included in the 1986-1990 Development Program.
Step I:	Completed
Step II:	Complete in mid 1987.
Step III:	Begin in late 1987, continue into 1989.

Objectives for 1988: To substantially complete construction.

#### Objectives for Future Years

1989 - To finalize the project. 1990 - N/A 1991 - N/A 1992 - N/A

#### Rationale for Additional Appropriation

#### Appropriations

1987 Budget	\$ 1,500,000	
Expenditures to 12/31/86		129,042
Balance Required		1,370,958
Total Funds Required		1,500,000
Additional Appropriation		
Total 1988 Budget	1,500,000	

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989	\$	\$	\$ <u>129,042</u> 500,000 270,958 200,000 200,000 190,000 10,000	\$ <u>129,042</u> 500,000 270,958 200,000 200,000 190,000 10,000
1990 1991 1992 Estimated Contingency Funds				
Total			1,500,000	1,500,000

Project Title <u>Stillwater Plant Expansion</u>

Number 86-53

Rationale for

Additional Appropriation

To provide funds for design.

#### Project Description:

The 1980 201 Facilities Plan Report recommended expansion of the Stillwater Plant to provide for advanced treatment of the combined Stillwater and Bayport wastewater flows. The facilities plan requires an update of wastewater flows, treatment alternatives and cost estimates. A design report, plans and specifications will be prepared based on the update.

Project Status:

Authorization:	Included in the 1986-1990 Development Program.
Step I:	Requires update.
Step II:	Begin in mid 1987.
Step III:	Begin in 1989, continue into 1991.

Objectives for 1988: To complete most of the design.

#### Objectives for Future Years

1989 - Begin Construction 1990 - Continue Construction 1991 - Complete Construction 1992 - Complete Certification Report

#### Appropriations

1987 Budget	\$	500,000	
Expenditures to 12/31/86			4,706
Balance Required			995,294
Total Funds Required			1,000,000
Additional Appropriation		500,000	
Total 1988 Budget	1	,000,000	

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ <u>4,706</u> <u>15,294</u> <u>280,000</u> <u>200,000</u> <u>200,000</u> <u>200,000</u> <u>100,000</u>	\$ <u>4,706</u> <u>15,294</u> <u>280,000</u> <u>200,000</u> <u>200,000</u> <u>100,000</u>
Total			1,000,000	1,000,000

The Minneapolis Separation plans proposed separating some interceptors into both sanitary and storm water conduits. This project consists of the installation of approximately 8,000 ft. of elliptical specially coated corrugated metal pipe in the bottom of MWCC interceptor 1-MN-341 which will discharge into another MWCC interceptor. Along this length, connections are being made to the cities newly constructed sanitary only sewer. The remaining top portion of the interceptor will serve as storm water conveyance which will discharge to the river.

#### Project Status:

Authorization:The project is included in the 1986-1990 Development Program.Step I:CompleteStep II:CompleteStep III:Began in 1987, complete in 1987.

Objectives for 1988: Close out the project.

#### Objectives for Future Years

Rationale for Additional Appropriation

Matronalitan

#### Appropriations

1987 Budget	\$1,500,000	
Expenditures to 12/31/86		75,735
Balance Required		1,414,265
Total Funds Required		1,414,265
Additional Appropriation	None	
Total 1988 Budget	1,500,000	

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	<u>State Grants</u>	Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ 75,735 1,414,265 10,000	\$ 75,735 1,414,265 10,000
Total			1,500,000	1,500,000

## SCHED: pap

3.13.87

This project consists of the construction of a new Plymouth Lift Station, approximately 11,000 L.F. of 36-inch forcemain, 19,000 L.F. of 42-inch forcemain and improvements to the New Hope Lift Station. The new Plymouth Lift Station will contain increased wet well volume, dry well space for 6 pumps and on site standby power. The ultimate station capacity will be 50 mgd. The capacity of the New Hope Lift Station will be upgraded to 14 mgd through the installation of upgraded pumps and related electrical equipment.

#### Project Status:

Authorization:	The project is in the 1986-1990 Development Program.
Step I:	Completed
Step II:	Complete in early 1988.
Ștep III:	Begin in 1988 and complete in 1989.

Objectives for 1988: To begin construction.

#### Objectives for Future Years

1989 - To substantially complete construction. 1990 - To finalize the project. 1991 - N/A 1992 - N/A

#### Appropriations

 1987 Budget(87 Amendment)\$ 1,120,000

 Expenditures to 12/31/86

 Balance Required

 Total Funds Required

 Additional Appropriation

 Total 1988 Budget

#### Rationale for Additional Appropriation

1987 budget amendment provided \$770,000 for design & construction of a short segment. The additional funds are needed for the construction phase.

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ 73,374 326,626 50,000 1,000,000 2,000,000 2,000,000 4,000,000 50,000	\$ <u>73,374</u> <u>326,626</u> <u>50,000</u> <u>1,000,000</u> <u>2,000,000</u> <u>2,000,000</u> <u>4,000,000</u> <u>50,000</u>
Total			9,500,000	9,500,000

SCHED:pap 3.13.87

SCHEDULE 11-67

Project	Title	Blaine	Interceptor
Protect	TILIE	prame	THEFTEDEDE

Number 86-56

#### Project Description:

The project consists of approximately 6,000 ft. of 21" gravity interceptor to serve southeastern Blaine and will connect to the existing MWCC interceptor, 4-NS-523, in Mounds View. The intersection point and alignment corridor have been agreed to with the City of Blaine. Construction of this project has the condition that it will proceed only after full assurance of Blaine's local sewerage system construction.

#### Project Status:

Authorization:The project is in the 1986-1990 Development Program.Step I:CompleteStep II:Has not begun, coordinate with City plans.Step III:

#### Objectives for 1988

#### Objectives for Future Years

Rationale for Additional Appropriation

#### Appropriations

1987 Budget	\$ 1,700,000	
Expenditures to 12/31/86		323
Balance Required		<u>1,699,677</u>
Total Funds Required		1,700,000
Additional Appropriation	None	
Total 1988 Budget	1,700,000	

#### Proposed Expenditures and Funding Sources

<u>r</u> .	Year	Fed. Grants State Grants		Metropolitan Funds	Total	
	To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988	\$	\$	\$ <u>323</u>	\$	
_	Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds			1,699,677	1,699,677	
	Total	- 		1,700,000	1,700,000	

This project will conduct rehabilitation work upon MWCC's Joint Interceptor (1-MS-100). The 9.2 mile long reinforced concrete pipe and reinforced sandrock tunnel facility was built from 1935 to 1938. It had annual walk through inspections and sporatic rehabilitation work until 1965. The last inspection was done in 1977 by camera on most of the deep tunnel. The results of the related access improvement project (86-59) will be used to help plan and design for this future rehabilitation work.

#### Project Status:

Authorization: The project is in the 1986-1990 Development Program. Step I: Begin in late 1987, complete in 1988. Step II: Step III:

Objectives for 1988: Complete the study.

#### Objectives for Future Years

#### Rationale for Additional Appropriation

#### Appropriations

1987 Budget	\$ 250,000	
Expenditures to 12/31/86		1,491
Balance Required		248,509
Total Funds Required		250,000
Additional Appropriation	None	
Total 1988 Budget	250,000	

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ <u>1,491</u> 8,509 60,000 60,000 60,000 60,000	\$ <u>1,491</u> <u>8,509</u> <u>60,000</u> <u>60,000</u> <u>60,000</u> <u>60,000</u> <u>60,000</u>
Total			250,000	250,000

Number

86-59

#### Project Description:

The study will consist of determining viable alternatives for gaining better and safer access to the 9.2 mile joint interceptor (1-MS-100) constructed from 1935 to 1938. The greatest concern is primarily between the Mississippi and Marshall Streets and along the interceptor to the east side of the downtown St. Paul area. Along this portion, there are presently only 9 large access points and it carrier about 2/3 of the MWWTP flow. There is no opportunity to reroute the flow if a failure on the interceptor occurs. The last inspection in 1977 determined the location of various small and large leaks. These leaks have the potential to develop large voids in the sandstone tunnel portions. Therefore, it is important to try to determine safe methods to inspect and maintain the interceptor.

#### Project Status:

Authorization: The project is in the 1986-1990 Development Program. Step I: Complete the study in 1987, 1988. Step II: Step III:

Objectives for 1988 : Complete the study.

#### Objectives for Future Years

#### Appropriations

1987 Budget	\$ LOO,000	
Expenditures to 12/31/86		12,595
Balance Required		112,405
Total Funds Required		125,000
Additional Appropriation	 25,000	
Total 1988 Budget	 125,000	

#### Rationale for Additional Appropriation

Funds are needed to plan for implementing recommendations from the study.

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ 12,595 77,405 10,000 10,000 15,000	\$ <u>12,595</u> 77,405 10,000 10,000 15,000
Total			125,000	125,000

SCHED:pap 3.13.87

SCHEDULE 11-70

Project Title Trout Brook Interceptor

Number

86-60

#### Project Description:

This project consists of construction of a sanitary sewer pipe adjacent to existing interceptors 1-SP-244, 1-SP-222 and 1-SP-220 in St. Paul. It will consist of approximately 4 miles (including lateral sewers) of gravity sewer varying in size from 21 inch diameter at its upstream connection to 60 inch diameter at its downstream connection to the Joint Interceptor. Numerous combined sewers and separate sanitary sewers will be connected to the new interceptor along its alignment. The connections will be regulated until such time that St. Paul has completed its sewer separation program. The capacity of the Trout Brook Interceptor will vary from approximately 35 cfs at its upstream end to 130 cfs at its downstream connection to the Joint Interceptor.

#### Project Status:

Authorization:The project is in the 1986-1990 Development Program.Step I:CompleteStep II:Complete in 1987Step III:Substantial completion in 1989.

Objectives for 1988: Continue construction.

Objectives for Future Years

1989 - Substantial completion. 1990 - Close out project. 1991 1992

Appropriations

#### Rationale for Additional Appropriation

To fund added costs as estimated for the project.

1987 Budget	\$ 6,950,000	
Expenditures to 12/31/86		205,661
Balance Required		8,294,339
Total Funds Required		8,500,000
Additional Appropriation	1,550,000	
Total 1988 Budget	8,500,000	

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	<u>State Grants</u>	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ 205,661 844,339 500,000 2,000,000 2,000,000 1,500,000 1,400,000 50,000	\$ 205,661 844,339 500,000 2,000,000 2,000,000 1,500,000 1,400,000 50,000
Total			8,500,000	8,500,000

#### SCHEDULE 11-71

86-65

#### Project Description:

This program provides for additional miscellaneous improvements to the wastewater treatment plant and the interceptor systems. The projects are proposed to provide for more effective operation and eliminate deficiencies in the system.

#### Project Status:

Authorization: This project was included in the 1986-1990 Development Program. Step I: Step II: Step III:

Objectives for 1988: To continue to initiate and construct the high priority projects in the programs.

#### Objectives for Future Years

1989 - To continue design and construction. 1990 - To complete construction. 1991 - N/A 1992 - N/A

#### Rationale for Additional Appropriation

Motropolitan

#### Appropriations

1987 Budget	\$ 4,000,000	
Expenditures to 12/31/86		392,499
Balance Required		3,607,501
Total Funds Required		4,000,000
Additional Appropriation	None	
Total 1988 Budget	4,000,000	

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ <u>392,499</u> <u>1,342,729</u> <u>250,000</u> <u>250,000</u> <u>250,000</u> <u>500,000</u> <u>500,000</u> <u>500,000</u>	\$ <u>392,499</u> <u>1,342,729</u> 250,000 250,000 250,000 500,000 500,000 264,772
Total			4,000,000	4,000,000

# PROJECT 86-65 MISCELLANEOUS CAPITAL IMPROVEMENTS

Project	Capital Project Cost
Cherokee Avenue Sewer Construction	185,000
Interceptor Reliability Equipment - Additional portable standby generators for lift stations, larger portable pump and piping for handling diversion pumping during emergency repairs.	250,000
Pt. Douglas Road Lift Station Improvements - Modify/replace pumps to match flow and head conditions.	50,000
Computerized Inventory Interceptor System - Adapt a computerized inventory system to existing interceptors to provide planning and management tool.	50,000
Brooklyn Park Lift Station & Forcemain Improvements - Increase pump capacity and improve odor control and forcemain.	200,000
Blue Lake Plant Improvements - Piping modifications for process control.	20,000
Metro Plant Odor Control Improvements - Improvements to chemical scrubber system ventilation systems for solids processing facilities. Add compost odor control system to supplement chemical scrubber systems.	r 200,000 t
Metro Plant Energy Conservation Improvements - Window panel insulation for F&I #2 and compressor building. HVAC survey of plant.	250,000
Pt. Douglas Road Interceptor Improvements - Relocate approximately 1,500 ft. of dual pipe outside of new highway improvements.	250,000
Metro Plant Alternative Power Supply for Gravity Thickening Units - This area does not have dual power supply at present.	150,000
Reconstruction of 1,000 ft. of 48" pipe $_{\rm MSB}$ 77-73 on State Highway 101, north of Highway 7 in the City of Minnetonka.	200,000
Meter Station Improvements - Consists of improving meter hydraulics, maintenance access and equipment as problems are identified.	250,000
Shakopee Lift Station Odor Control - Install control facilities, meter improvements and modify ventilation as needed.	140,000
Burnsville Lift Station Improvements - Improve ventilation, provide odor control, step II for pumping, piping and electrical modifications.	200,000
Moundsview Lift Station - New lift station roof, storage building for equipment, vehicles and standby generators.	100,000
France Avenue Interceptor Repair	165,000
Portland & Washington Regulator Modifications	100,000
Long Lake Lift Station Pump - Addition for peak flow.	40,000
Vadnais Hts. Lift Station Phase-Out Study	20,000

42

Metro Plant Improvements - Flow meters, control valves, density meters, sludge blanket sensors for sludge thickening processes.	150,000
Filter Modifications - Include modifying filter press system to achieve uniform feed to incinerators, modifying vacuum filter system to dewater thermally conditioned sludge and adding dewatering area field lab.	250,000
Effluent Foam Control System Improvements	75,000
HVAC Study - Plant wide study to recommend improvements to reduce energy costs.	100,000
Bio selector piping modifications.	50,000
Scum Piping Revisions to Remove Scum from West Activated Sludge	40,000
Provide Additional Administration Office Space	250,000
Incinerator 9/10 Hear Reclamation - Shaft cooling air.	75,000
Steam Flow Meters	40,000
Scum Burning System Modifications and #5 Fuel Oil Storage Tank	35,000
Ash Handling Improvements	65,000
Zero Hearth Burners for Odor Control	100,000

4,050,000

		•	
Project Title	Anoka W	MTP Phase-Out	

Number

87-51

#### Project Description:

The present site of the Anoka Plant will serve as the location for a new 5.7 mgd lift station. It will allow phase-out of the Anoka WWTP and convey sewage to the Metro WWTP. Included in the project is a 4,000 ft. 18-inch forcemain across the Mississippi River into Champlin connecting to the existing CAB interceptor. A new magnetic flowmeter will be required on this project.

#### Project Status:

Authorization: Complete Step I: To begin late in 1987, complete in 1988. Step II: Step III: To begin in 1989 and continue through 1990.

Objectives for 1988: Complete design.

#### Objectives for Future Years

1989 - Initiate construction (construction funds not requested in 1988 budget) 1990 - Complete construction. 1991 1992

#### Rationale for Additional Appropriation

#### Appropriations

1987 Budget	\$ 300,000	
Expenditures to 12/31/86		0
Balance Required		300,000
Total Funds Required		300,000
Additional Appropriation	None	
Total 1988 Budget	300,000	

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Metropolitan Funds	<u>Total</u>
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ 0 10,000 72,500 72,500 72,500 72,500 72,500	\$ <u>0</u> <u>10,000</u> <u>72,500</u> <u>72,500</u> <u>72,500</u> <u>72,500</u>
Total			300,000	300,000

Project Title MWWTP Effluent Pumping Station Improvements Number

87-52

#### Project Description:

The project will provide additional capacity and any necessary improvements to the existing effluent pumping station to be compatible with the capacity of the influent interceptor to the plant. The study for this (85-66-319) determined that one added pump (a sixth) was needed.

#### Project Status:

Authorization: The project is in the 1986-1990 Development Program. Step I: Complete Step II: Begin late in 1987, complete to 1988. Step III: Begin in 1989, complete in 1990.

Objectives for 1988: Complete design.

#### Objectives for Future Years

1989 - Initiate construction (construction funds not requested in 1988 budget).
1990 - Complete construction.
1991
1992 Rationale for

# Additional Appropriation

Mahmanalitan

#### Appropriations

1987 Budget	\$ 200,000	
Expenditures to 12/31/86		0
Balance Required		200,000
Total Funds Required		200,000
Additional Appropriation		
Total 1988 Budget	200,000	

#### Proposed Expenditures and Funding Sources

•	Year	Fed. Grants	State Grants	Metropolitan Funds	Total
	To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ <u>0</u> <u>10,000</u> <u>47,500</u> <u>47,500</u> <u>47,500</u> <u>47,500</u> <u>47,500</u>	\$ <u>0</u> <u>10,000</u> <u>47,500</u> <u>47,500</u> <u>47,500</u> <u>47,500</u>
	Total			200,000	200,000

The program provides for: 1) Commission long-range and facility planning, Implementation Plan coordination and preparations, and coordination and cooperation with Metropolitan Council on policy plans, implementation plans, and capital budget matters and 2) Council's planning and review activities relative to the Commission and development of revised policy plan.

#### Project Status:

Authorization: Authorized in the 1987 Capital Budget process. Step I: Step II: Step III:

#### Objectives for 1988

1) Commission to implement facility planning studies, complete Implementation Plan and coordinate with Council in planning and new Policy Plan development.

and efforts.

#### **Objectives For Future Years**

1989 - To continue the program.

1990 - To continue the program.

1991 - To continue the program.

1992 - To continue the program.

#### Appropriations

1987 Budget \$	1,044,000	
Expenditures to 12-31-86		0
Balance Required		2,110,000
Total Funds Required		2,110,000
Additional Appropriation	1,066,000	
Total 1988 Budget	2,110,000	

#### Rationale for Additional Appropriation

Mahmanalitan

2) Council to review Commission planning and

to complete applicable planning studies

Additional funds are necessary to carry on long range planning at the Council and Commission to complete the first Implementation Plan.

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Fur	\$	\$	\$ <u>0</u> <u>1,044,000</u> <u>250,000</u> <u>250,000</u> <u>300,000</u> <u>266,000</u>	\$ <u>0</u> <u>1,044,000</u> <u>250,000</u> <u>300,000</u> <u>266,000</u> <u></u>
Total	•			\$ 2,110,000

The project consists of the construction of about two miles of eight foot diameter parallel interceptor on the existing Minneapolis East Interceptor. Phase II of the interceptor extends from Third Avenue & Fifth Street N.E. and up to Marshall Ave. & 22nd St.

Project Status:

Authorization:	Included in the Development Program for years 1981-1986.
Step I:	Completed
Step II:	Design is being updated in early 1987.
Step III:	Construction will start in fall of 1987.

Objectives for 1988: Continue construction.

#### Objectives for Future Years

1989 - Complete construction. 1990 - N/A 1991 - N/A

1992 - N/A

#### Rationale for Additional Appropriation

Metropolitan

#### Appropriations

1987 Budget	\$0	
Expenditures to 12/31/86		0
Balance Required		26,000,000
Total Funds Required		0
Additional Appropriation	26,000,000	
Total 1988 Budget	26,000,000	

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988, Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ <u>0</u> 1,000,000 2,000,000 9,000,000 6,000,000 8,000,000	\$0  1,000,000 2,000,000 9,000,000 6,000,000 8,000,000
Total			26,000,000	26,000,000

Project	Title	Metro	Plant	RBS	Improvements
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Consists of new end stub shafts which have higher strength and are more resistant to corrosion. A spray water system will be included to control sludge buildup and enable more efficient operation. Improvements will be made to all 50 units.

Project Status:

Authorization:Included in the 1987 Budget by amendment.Step I:CompletedStep II:CompletedStep III:Completed

Objectives for 1988: To initiate and complete the construction.

#### Objectives for Future Years

1989 - N/A 1990 - N/A 1991 - N/A 1992 - N/A

#### Rationale for Additional Appropriation

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#### Appropriations

1987 Budget	\$ 900,000	
Expenditures to 12/31/86		0
Balance Required		0
Total Funds Required		900,000
Additional Appropriation	0	
Total 1988 Budget	900,000	

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ <u>0</u> <u>100,000</u> <u>200,000</u> <u>200,000</u> <u>200,000</u> <u>200,000</u>	\$ <u>0</u> 100,000 200,000 200,000 200,000 200,000
Total			900,000	900,000

#### SCHEDULE OF

# PROJECTS COMPLETED OR TO BE COMPLETED IN 1987

Project <u>Number</u> £

Project Description

79-96

Overhead (not reimbursable)

# SUMMARY OF NEW PROJECTS - REQUEST FOR FUNDING

Project No.	Project Name	Step	Estimated Costs
88-65	Misc. Capital Improvements	II, III	\$2,500,000

SCHEDULE 13

Number 88-65

#### Project Description:

This program provides for additional miscellaneous improvements to the wastewater treatment plant and interceptor systems. The projects are proposed to provide for more effective operation and eliminate deficiencies in the system.

#### Project Status:

Authorization: Step I: Step II: Step III:

Objectives for 1988: To initiate design and construction of the internal high priority projects in the programs.

#### Objectives for Future Years

1989 - To continue design and construction. 1990 -1991 - To complete construction. 1992 - N/A

#### Rationale for Additional Appropriation

#### Appropriations

1987 Budget	\$0
Expenditures to 12/31/86	0_
Balance Required	$\frac{2,500,000}{2,500,000}$
Total Funds Required	
Additional Appropriation	2,500,000
Total 1988 Budget	2,500,000

#### Proposed Expenditures and Funding Sources

Year	Fed. Grants	State Grants	Metropolitan Funds	Total
To 12/31/86 1987 First Quarter 1988 Second Quarter 1988 Third Quarter 1988 Fourth Quarter 1988 1989 1990 1991 1992 Estimated Contingency Funds	\$	\$	\$ <u>0</u> 50,000 50,000 50,000 400,000 650,000 550,000 550,000 200,000	\$ <u>0</u> 50,000 50,000 400,000 650,000 550,000 550,000 200,000
Total			2,500,000	2,500,000

#### SCHED:pap 3.13.87

SCHEDULE 13-1

PROJECT 88-65 MISCELLANEOUS CAPITAL IMPROVEMENTS

Project	Capital Project Cost
Mpls./St. Paul Regulator Improvements - Consists of structural, hydraulic and safety improvements for regulators returned to MWCC.	250,000
Seneca - Provide for improved plant odor control and necessary ventilation improvements.	150,000
Crystal Lift Station - Provide odor control for station.	100,000
Cottage Grove Interim Improvements - Upgrade grit removal, sludge pumping, chlorination facility and renovate filter building.	100,000
Metro Plant Computer Room Ventilation - Includes elimination of odorous/ corrosive air to certain computer rooms and improved ventilation for E/G computer room for personnel health and safety.	200,000
Underground Storage Tank Improvements - Include leak detection, corrosion protection, secondary containment as required by upcoming state and federal regulation changes.	200,000
Metro Plant Storm Sewer Modification - Consists of changing storm sewer discharge point to downstream of dechlorination facility.	250,000
Burnsville Lift Station Modifications - Provides construction funding for modifying electrical, pumping and structural improvements to forcemain.	200,000
Metro Plant Grit Dewatering - Provides for improvements to obtain drier grit.	250,000
Metro Plant Screenings - Provides for improvements to obtain drier screenings for disposal.	250,000
Metro Plant Warehouse Sprinkler System - Provides for adding an automatic sprinkler system for 7,500 sq. ft. of warehouse space to reduce fire risk	
Metro Plant Roadway & Parking Area Lighting - Provides for adding 5 units of outdoor lighting to the employee entrance and parking area and 12 unit of lighting to the roadway and parking areas near the effluent pump stati and new dechlorination facilities.	S
Metro Plant Internal Lighting Improvements - Consists of converting 950 units of incandescent and/or mercury vapor lamps in the tunnels and galleries to high pressure sodium vapor units.	125,000
Relocation of approximately 1,200 ft. of Interceptor MSB 70-25 in Eden Prairie along TH No. 5 to allow for highway improvements.	250,000
	2,500,000

SCHEDULE 13-2

# STATUS OF AUTHORIZED PERSONNEL

Department/Plant	Proposed Budget 1988	Budget 1987
Administration	22	22
Engineering/Construction	77	77
Quality Control	88	88
Planning	19	19
Operations Central Office Empire Metro - Operations Metro - Maintenance Seneca Blue Lake Anoka Savage Cottage Grove Chaska Bayport Stillwater Rosemount Hastings Interceptor	8 29 324 177 50 34 4 2 4 3 1 9 7 6 64	8 29 338 177 46 34 4 2 4 3 1 9 7 6 65
Administrative Services	_52	
Total	980	982

SCHEDULE 14

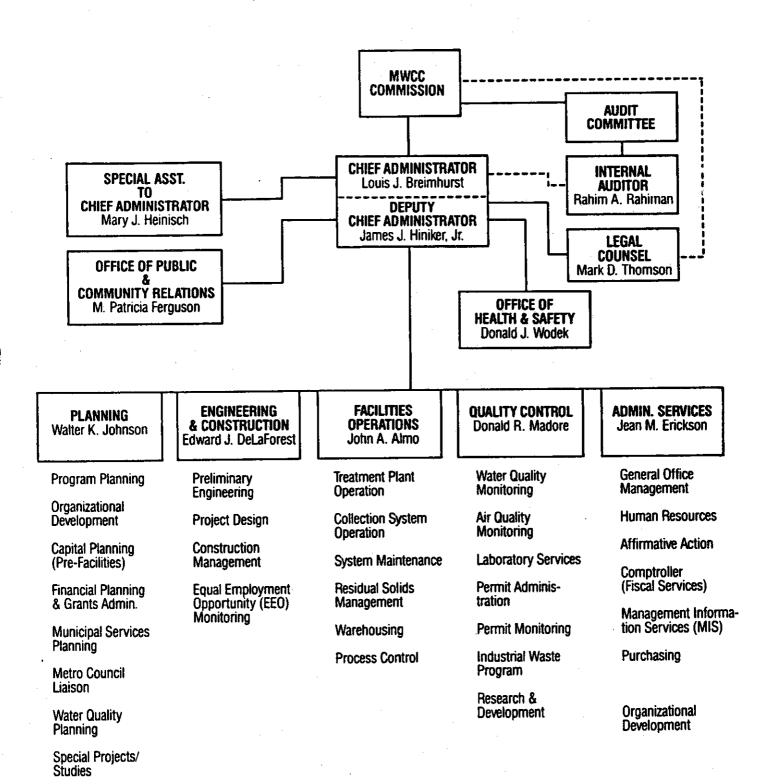
PROJECT #	PROJECT DESCRIPTION	AMOUNT
82-53	Lake Ann Interceptors	\$15,700,000
85-51	Rosemount Plant Repl.	4,300,000
-	Blue Lake Plant Expansion	3,000,000
85-54	Empire Plant Expansion	4,550,000
85-55	Seneca Plant Study	2,875,000
85-57		6,000,000
85-60	Savage Interceptor	400,000
85-63	Lakeville Lift Station	5,000,000
85-66	Middle Beltline Interceptor	
85-67	Orono Interceptor Improvements	2,400,000
85-68	Eagan Interceptor	500,000
86-53	Stillwater Plant Expansion	1,000,000
86-55	Plymouth Interceptor	1,525,000
86-60	Trout Brook Interceptor	2,000,000
86-65	Misc. Capital Improvements	2,750,000
87-51	Anoka WWTP Phase-out	300,000
87-52	Metro WWTP Effluent Pump Station	200,000
87-54	Mpls. East - Phase Two	2,000,000
88-65	Misc. Capital Improvements	500,000

TOTAL PROCEEDS REQUIRED

\$55,000,000

- 4. After 1992, Debt Service Requirements will be predicated on project needs of approximately \$35 million. Bond sales will be required less any amounts received from the new revolving loan fund. If monies are received from the revolving loan fund, the Debt Service Requirement will be the sum of debt service on any bonds sold plus the debt service required on the re-payment to the revolving loan fund. The principal reason that lower project needs are projected is based on the assumption that treatment works will not require any major funding until after the year 2000.
- 5. The composite interest rate on bond sales will approximate seven percent (7%).
- 6. Total flows will increase approximately 1% per year which is consistent with Metropolitan Council projections on growth.
- 7. Inflation will average 4% during this period. This includes labor, materials, and construction costs.
- Debt Service Requirements for reserve (unused) capacity will continue to be funded entirely through SAC charges through the year 1997.

#### SCHEDULE 15-1



**MWCC ORGANIZATIONAL CHART** 

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