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Biennial Report 1987-1988

WASTE MANAGEMENT PROGRAMS

- **Grants and Assistance**
- **Waste Tires**
- **Stabilization and Containment Facility Siting**

**Minnesota
Pollution
Control
Agency**

**Minnesota
Environmental
Quality
Board**

November 15, 1988

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November 15, 1988

On October 7, 1988 Governor Rudy Perpich signed an executive order transferring the Minnesota Waste Management Board's (WMB) programs to the Minnesota Pollution Control Agency (MPCA) and the Environmental Quality Board (EQB).

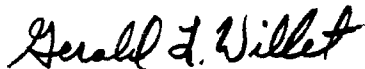
By streamlining government programs we will achieve a higher level of efficiency and better serve our counties. Under the reorganization the new Office of Waste Management Grants & Assistance will work with local units of government on the distribution of grants, the monitoring of major recycling activities, and the management of solid waste planning and waste education activities.

The new Office of Waste Tire Management will continue developing and administering permits for waste tire collection, storage, transportation and processing. It will also continue to oversee the abatement of existing tire piles in our state and provide grants and loans to encourage tire recycling and processing.

The WMB's responsibility for siting a hazardous waste stabilization and containment facility in the state was assumed by the EQB, which is made up of eight state agency heads, five citizen representatives and a governor's representative.

We are committed to serving the citizens of Minnesota and our environment with greater efficiency and effectiveness under our new organization as we meet the variety of waste management challenges facing our state.

Sincerely,

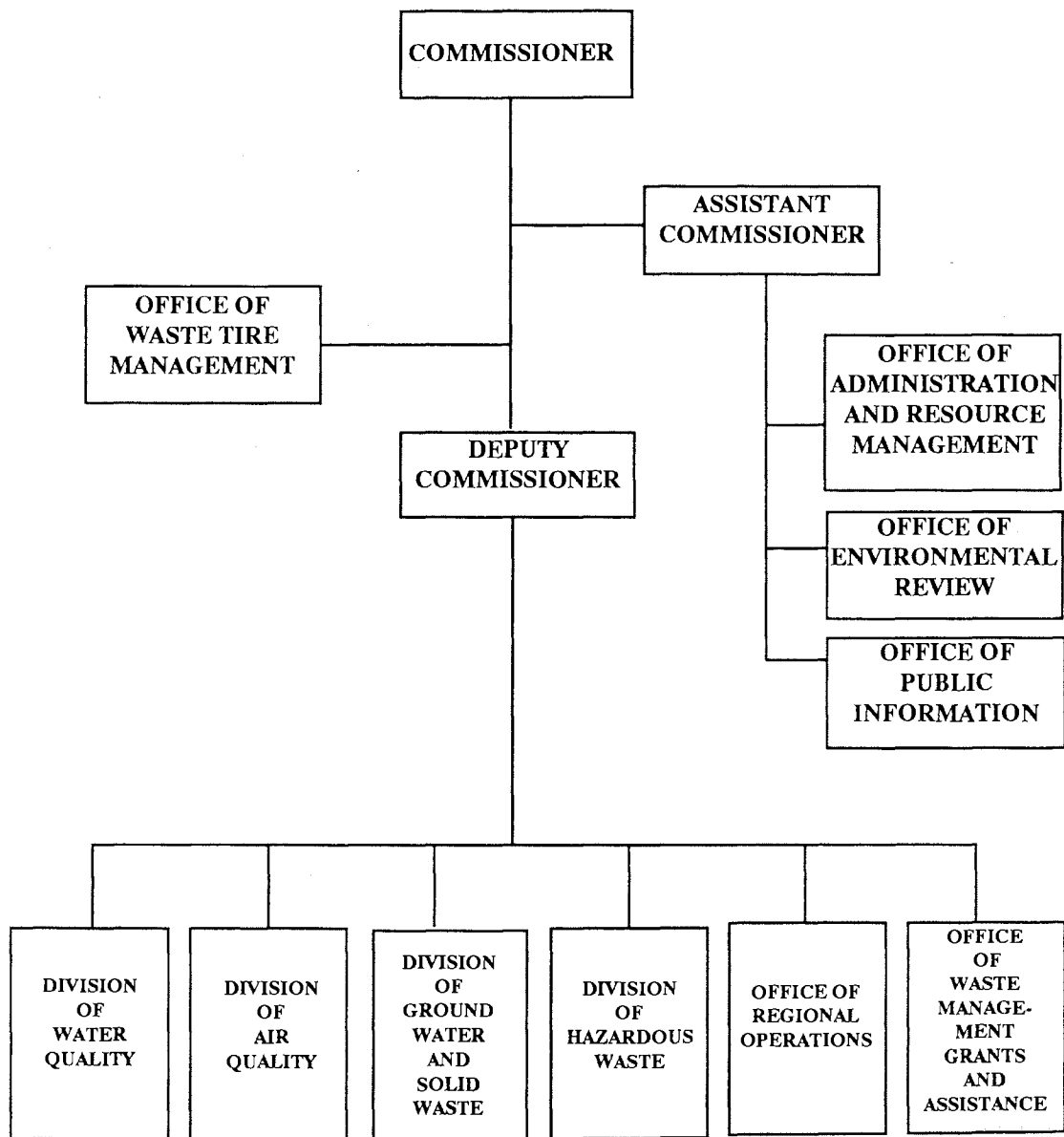


Gerald L. Willet
Commissioner
Minnesota Pollution Control Agency



John C. Ditmore
Chairman
Environmental Quality Board

**MINNESOTA POLLUTION CONTROL AGENCY
ORGANIZATION CHART**



**OFFICE OF WASTE MANAGEMENT
GRANTS AND ASSISTANCE**

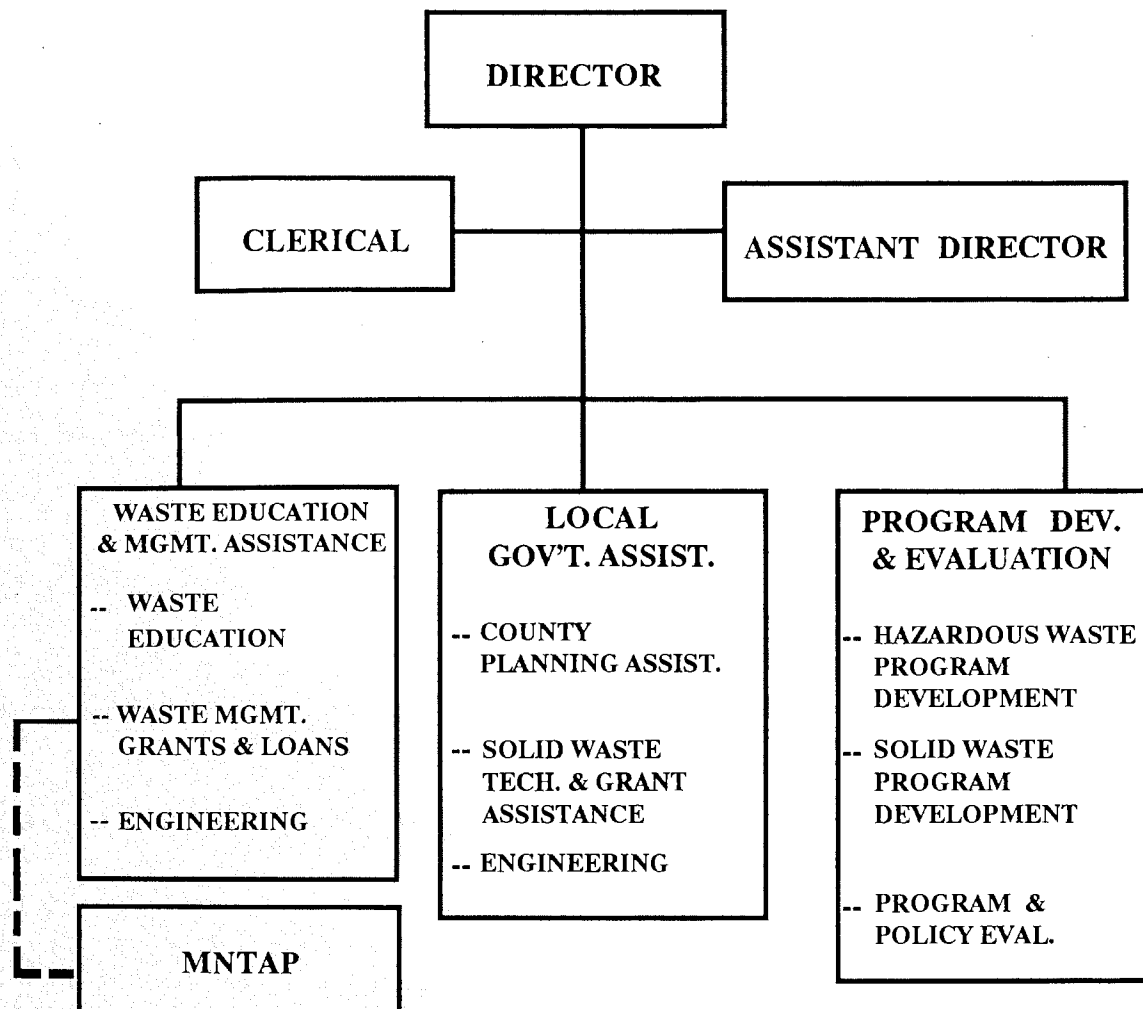


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Waste Management Programs

I. Waste Education and Management Assistance

Waste Education Program

The Waste Education Program, established by the Minnesota Legislature in 1987, is responsible for providing waste education to Minnesotans of all ages.

Minnesota Statute established the following objectives for the program:

- * To develop increased public awareness of and interest in environmentally sound waste management methods;
- * To encourage better informed decisions on waste management issues by business, industry, local governments and the public; and
- * To disseminate practical information about ways in which households and other institutions and organizations can improve the management of waste.

In response to this legislative mandate, the Chair of the WMB appointed fifteen members to a special task force -- the Waste Education Coalition. The Waste Education Coalition consists of representatives from those public agencies with responsibility for waste management or public education, including the MPCA, Metropolitan Council, Minnesota Environmental Education Board, Minnesota Department of Education, Minnesota Department of Agriculture, State Planning Agency, Environmental Quality Board,

education institutions and other public agencies, interested citizens, and industry. Since October 1987, this group has met on a monthly basis.

The Waste Education Coalition is designed to allow the participation of any interested individuals or groups. Participation by non-Coalition representatives is also encouraged.

The Waste Education Coalition is working with Minnesota's existing waste education providers as well as developing new providers to close gaps in the existing system. The Coalition adopted a mission statement describing its charge, objectives and goals. The Coalition's goals are:

- * To coordinate and provide resources for reliable, consistent sources of information and help eliminate conflicting messages about proper waste management techniques;
- * To provide an information clearinghouse and referral service to private developers, industry, agribusiness, waste haulers, environmental groups, educational institutions, citizen organizations, governmental entities, media, and other interested individuals or organizations;

The first few months of the Coalition's operation focused on developing an understanding of the current needs in the area of waste education. They also examined the Waste Education Roundtable Report which recommended:

- * The development of public information campaigns on waste topics;
- * Developing school programs and curricula on

waste topics for grades K-12 and advocating the implementation of these education programs; and

- * Conducting further research on audience needs, incentives, and educational delivery mechanisms.

Three committees focus on the following activities: clearinghouse, youth education, and community information and education. Each committee developed its own goals and timelines. The current goals and activities of each are described below.

1. Clearinghouse Committee

The Clearinghouse Committee is developing a waste education clearinghouse and referral system. A computer system has been installed to help manage clearinghouse data making materials and information convenient and accessible. The Clearinghouse is currently distributing informational materials. In addition to implementation manuals, videos, and general information on waste issues, over 60 waste education curricula programs exist in the clearinghouse.

2. Youth Education Committee

The Youth Education Committee surveyed Minnesota teachers to evaluate their attitudes about waste education. A final report of this study is available from the MPCA. This committee is also preparing for the development of curricula for grades K-6. A Request for Proposal for the development of a curriculum framework for grades K-6 and the completion of one instructional unit was issued November 1988. A developer will be

selected in March 1989 and the curriculum will be field tested in the fall of 1989.

3. The Community Information and Education Committee

Activities of this committee are targeted toward the adult population. The committee established a goal of exposing every county to waste education by the end of 1988. Activities will initially focus on educating county decision makers and solid waste officers. They will also provide them with tools to educate their constituents.

The committee is developing an overall educational campaign on recycling and composting, accompanied with a "how-to" manual. Counties, municipalities and other organizations will be able to use these materials. Evaluation of these materials will be implemented in various parts of the state.

Currently, the committee is using available public education materials and is developing new pieces such as brochures, news articles, fact sheets, advertisements, and audio productions.

The Waste Education Coalition sponsored a state-wide advertising campaign on recycling this fall. The Advertising Council, the organization which introduced Smokey the Bear, developed the public service announcements (PSAs) for television, radio, and newspapers. The Coalition contributed \$22,000 toward the cost of distributing the PSAs state-wide. The PSAs, which carried the Coalition's logo, were released in Minnesota during September 1988. Residents could call the toll-free number noted in the announcements for further recycling information.

Waste Management Programs

The Coalition is now in the stage of developing materials. Its budget, established at \$190,000 for the 1988-89 biennium, has been committed to administrative costs and the previously described activities, including the clearinghouse operation.

Waste Management Grants & Loans

Market Development Program

Created in 1987 as an amendment to the Waste Management Act, the Legislature created the solid waste Market Development Program to "assist and encourage the development of specific facilities and services needed to provide adequate, stable and reliable markets for recyclable materials generated in the state." The program contains the following two major elements:

1. Facility Development Proposals

Under this element of the Market Development Program staff can request proposals from persons seeking to develop facilities or services in the state that would result in the use of recyclable materials. Grants available under this section can be used to fund the cost of studies needed to ascertain how a facility using recyclable materials could be developed in Minnesota and whether it is feasible. Participants in this program are required to provide 50 percent of the cost of the funded study.

In April 1988, the WMB issued a Request for Proposals to those interested in developing a waste plastic recycling facility.

On September 22, 1988, an Albany, Minn., firm, Avon Plastics Inc., received a \$34,225 matching grant to study the feasibility of expanding its plant in Paynesville, Minn. Avon Plastics would recycle waste plastic for use in its lawn care products, as well as for sale to other plastic product manufacturers.

The MPCA will award additional grants to companies that applied for funding to build plastic recycling facilities in Minnesota. Future grants will seek to establish markets for used tin cans and to enhance markets for waste paper.

2. Public Procurement

Technical assistance is provided to political subdivisions and public agencies under this element of the program which encourages solid waste reduction and the development of markets for recyclable materials through procurement policies and practices. By implementing this authority staff accomplished the following:

- Contact was made with other states concerning the development of a single source of information regarding the buying and selling of recycled products. Staff generated enough interest in the product to encourage a private catalog producer to undertake the development of a national directory. The first issue of the directory is expected to be complete in 1989.
- A study designed by staff to test the performance of recycled paper for use in government offices addressed three issues -- the process, availability and quality. The Department of

Administration performed the study and the results indicated that recycled paper is available and will meet performance standards, but is more expensive than virgin stock.

- 1988 Minnesota Recycling Directory was published to provide a comprehensive listing of Minnesota collection locations and markets for recyclable materials. Updates to the directory will be provided on an annual basis.
- In cooperation with the Department of Administration, staff is developing legislation allowing the Department of Administration to purchase recyclable materials through special bids.

The Legislature amended the Waste Management Act in 1988 to include compost market development as a part of the overall market development program.

Hazardous & Industrial Waste Grant Programs

Amendments to the Waste Management Act in 1987 authorized grants for studies and/or projects addressing the management of nonhazardous industrial waste. Formerly, these grants were limited to hazardous waste projects.

Rules governing the existing grant programs for hazardous waste processing and reduction, were amended in late 1987 to include nonhazardous industrial waste projects.

In May 1988, four \$30,000 reduction grants were awarded to Minnesota companies. Another four

grants will be awarded by the MPCA in early 1989.

The WMB issued a Request for Proposals in May 1988 for "work leading to the development of a used oil management facility in Minnesota." In August 1988, the WMB approved a \$50,000 matching grant to Kinetics Technology International (KTI) of California, to study the feasibility of developing a used oil recycling facility in Minnesota. KTI will perform economic feasibility analysis, market analysis, and will identify and address barriers to the development of a used oil recycling facility in Minnesota.

Used Oil Task Force

The MPCA chairs an interagency/industry Used Oil Task Force. The task force, formed in 1986 to review, promote and improve used oil management in the state, continues these functions and serves an advisory role for state policies and programs addressing the management of used oil.

In order to assure that Minnesota's used oil will be collected and properly reused, the task force recommended the state develop a comprehensive management plan, preceded by a feasibility study on long-term used oil management options.

Used Oil Feasibility Study

The WMB entered into a contract with the Natural Resources Research Institute (NRRI) and the University of Minnesota (Duluth) in late 1986 to prepare a comprehensive report on used oil management in Minnesota. NRRI presented two reports entitled, "Feasibility Study on Long-Term

Waste Management Programs

Management Options for Used Oil in Minnesota,” and “Recommended Used Oil Management Plan for the State of Minnesota,” to the WMB in November 1987. An interagency review group discussed and evaluated the study, in particular the “Recommended Used Oil Management Plan.”

Used Oil Grant and Loan Programs

New programs designed to award loans to businesses for the purchase of used oil processing equipment and to award grants to counties to purchase and install storage tanks to collect used oil from the public are now to be implemented by the MPCA.

Rules are being drafted by the MPCA to govern the Used Oil Processing Equipment Loan Program. Grants will be awarded to counties under the Storage Tank Grant Program in early 1989.

Minnesota Technical Assistance Program (MnTAP)

The Minnesota Technical Assistance Program (MnTAP) was established in 1984, through a grant to the University of Minnesota, to provide technical assistance in the management of hazardous wastes. In 1987, the Legislature amended the Waste Management Act and increased MnTAP's responsibilities to include nonhazardous industrial waste. MnTAP encourages and assists Minnesota's waste generators in reducing the generation and improving the management of nonhazardous industrial and hazardous waste.

MnTAP is staffed by four technical professionals

with an annual budget of approximately \$290,000 for fiscal year 1989. This covers both hazardous and nonhazardous industrial waste technical assistance.

MnTAP's programs provide:

- * Up-to-date information on available waste reduction and treatment technologies through its Information Clearinghouse;
- * Telephone consultation for waste reduction and treatment questions by Minnesota generators;
- * On-site consultation for Minnesota generators;
- * Student interns to foster the concept of waste reduction in industry and to educate students in waste reduction;
- * Waste reduction and management advice to maximize the recycling and reclamation of wastes; and
- * Research awards to fund small-scale research projects on improved waste and reduction techniques.

II. Local Government Assistance

County Planning Assistance

Because the Waste Management Act requires all counties to complete a comprehensive county solid waste management plan, the MPCA provides counties with technical planning assistance.

Approving county comprehensive solid waste management plans and certifying the need for land disposal capacity are just a few goals of this program.

But the underlying goal is for counties to develop the local decision making process and a solid waste management plan that provides a way for improved waste management practices in the future.

In solid waste planning, counties examine their current situation, analyze ways of improving the system and select a course of action. The end result is the development of an integrated waste management system that is environmentally sound and economically viable.

Table 1 outlines the status of county plans outside of the metropolitan area.

Map 1 outlines the county planning status of plans submitted prior to September 27, 1988.

Map 2 outlines the multi-county planning activities in the state prior to April 15, 1988.

Solid Waste Designation Program (Flow Control)

In the Waste Management Act of 1980, the Minnesota Legislature specifically authorized solid waste management districts and counties to utilize the mechanism known as "flow control" for the purpose of assuring an adequate waste supply to a designated resource recovery facility. The legislature has amended the law over the years but the current law authorizes districts and

counties to implement the designation process. It states the procedures to be followed and provides for Office of Waste Management Grants & Assistance review at two stages of the process.

To date, designation plans have been approved for three counties: Dodge, Olmsted and Sherburne. In addition, designation plans were approved in March of 1988 for the Tri-County Solid Waste Management Commission (Stearns, Benton and Western Sherburne). The East Central Waste Commission's designation plan was approved in August 1988. A number of other counties are known to be actively considering the use of designation as a waste assurance mechanism.

Map 3 identifies counties with approved designation plans.

Solid Waste Technical & Grant Assistance

Since 1980, state government has worked to develop feasible and prudent alternatives to land disposal through a series of legislatively mandated programs. To achieve this goal, the Solid Waste Technical & Grant Assistance Unit encourages the development of waste processing facilities and waste management projects. This is done through the administration of four different technical assistance and grants programs described in the following paragraphs.

The Solid Waste Processing Facility Demonstration Program (DEMO)

A fund of \$8.8 million was established in 1980 to assist local units of government develop solid waste processing projects. Because the funds

Waste Management Programs

were generated by the creation of public debt, money could only be spent for public works of a capital nature. Expenditures from the fund are limited to grants and/or loans to cover the capital costs of solid waste processing projects.

In recognition of the funding available under the Capital Assistance Program (CAP), which is discussed later, and in an effort to preserve the "demonstration" element of the DEMO program, grant rules removed waste-to-energy and transfer station projects from eligibility under the DEMO program and established a maximum of \$400,000 per project. This change was intended to encourage the development of less capital intensive projects, such as composting and recycling projects.

Projects eligible for a grant or a loan under the revised DEMO Program are limited to:

- Recycling facilities;
- Special Waste Stream Processing (e.g., waste tires, wood waste) facilities; or
- Chemical, physical or biological modification facilities (e.g. composting).

Nine projects have been funded so far: three recycling facilities, two refuse-derived fuel (RDF) projects, one mass burn resource recovery facility, two recycling/composting projects, and one special waste stream (waste tires) processing project.

As of the summer of 1988, \$413,525 remained in the program fund. Table 2 summarizes the DEMO Program through July 1988.

Solid Waste Processing Facilities Capital Assistance Program (CAP)

The 1985 Legislature established the new CAP Program to encourage the development of solid waste processing facilities. The program differs from the DEMO Program since it does not require funded projects fulfill a "demonstration" element. As with the DEMO Program, the \$15 million appropriated was generated through state general obligation bonds thus restricting expenditures to public works of a capital nature.

In order to evaluate its programs and provide a basis for recommended changes, the WMB conducted a mail survey in 1986 of all county solid waste officers in the state -- 69 out of 87 responded. In addition, face to face interviews were conducted with approximately 20 county representatives who had been directly involved with the WMB's programs. To provide additional perspective, similar grant programs in other states were surveyed.

Legislation establishing this program made funding available for the capital costs of a solid waste processing project. A maximum limit was set of either 25 percent or \$2 million for other types of facilities.

The 1987 Legislature amended the authority for the CAP Program and authorized an additional \$4 million in bonding to fund recycling and composting costs, or \$2 million -- whichever is less.

Fourteen facilities have received financial assistance under this program -- five mass burn

facilities, eight transfer stations, and one special waste processing facility (waste tires). Six CAP grant applications are currently in the review process:

- Crow Wing County -- \$2 million for development of a municipal solid waste composting facility that has a capacity of 100 tons per day.
- Swift County -- \$623,900 for development of a small scale (20TPD) solid waste composting, recycling, and household hazardous waste processing facility;
- Aitkin County -- \$95,000 for the development of a recycling facility;
- Otter Tail County -- \$281,129 for development of a recycling redemption/processing center and eleven drop-off sites throughout the county;
- City of Moorhead -- \$253,646 for development and site preparation of a leaf and grass clipping composting project; and
- Mower County -- \$415,589 for development of a recycling facility.

These applications, if fully funded, will result in an additional CAP expenditure of \$1,253,675. Approximately nine additional CAP Grant applications are anticipated within the next 12 months. At this time, \$9 million remains to assist future local government applicants such that a shortfall of available funds is projected within the next biennium.

Table 3 provides a historical summary of the CAP program through August 1988. This table includes funding for the TEST program.

Solid Waste Reduction and Separation Program (LOW-TECH)

In 1987 the Legislature appropriated \$300,000 for the LOW-TECH Program which is designed to encourage projects involving waste reduction, waste separation and the collection of recyclable materials. The program gets its funding from general revenues. This makes funding the program more difficult but it allows funds to be spent on non-capital costs such as project administration and collection operations.

The rules developed for this program require applicants to fund 50 percent of the first year of the project, and the rules limit grants to \$50,000. The LOW-TECH program has been well received and all appropriated funds have been awarded. If funds had been available, up to 10 additional projects could have been funded.

Table 4 summarizes the projects funded by the LOW-TECH program to date.

Environmental Testing Grants Program (TEST)

The objective of the TEST Program is to provide grants to local units of government to help finance "the cost of tests needed to determine the appropriate pollution control equipment needed or the environmental effects of products or materials" produced by a solid waste processing facility.

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Local governments can acquire grants for 100 percent of the eligible costs. The maximum grant award is \$200,000. Eligibility criteria are the same as the CAP Program because grants are funded through G.O. Bonds. Therefore, only publicly owned projects are eligible.

Table 5 summarizes projects funded under the TEST program data.

III. Program Development & Evaluation

In close cooperation with other agency staff the Program Development & Evaluation unit plays a key role in the evaluation of existing programs and in the development of new programs which address waste management problems around the state. Program development activities may involve research to identify problems and potential solutions, creating and/or serving on internal, interagency, or broader task forces to clarify problems and develop solutions, working with legislative strategies, recommending program priorities, etc.

Acting as a service team which provides various types of research and reporting support to other waste management programs, the Program Development & Evaluation group monitors the development of state and federal regulations and legislation.

A key function of this program is to provide assistance as required in the development and passage of legislation needed to achieve overall goals.

Solid & Hazardous Waste Management Advisory Councils

Each Council is comprised of six members from local government, five from industries that work with solid waste or from industries that generate hazardous wastes, and six "at large" citizen members.

Both the Solid Waste Council and the Hazardous Waste Council advise the MPCA on state policies for managing both kinds of waste and meet on a monthly basis.

Council member names are listed at the end of this report.

Hazardous & Nonhazardous Industrial Waste Program Development

Overall planning activities since 1987 involved the development of the:

Nonhazardous Industrial Waste Report

The 1986 Minnesota legislature authorized the WMB to evaluate and make recommendations regarding the management of nonhazardous industrial waste in Minnesota. Amendments to the Waste Management Act in 1987 made the WMB responsible for encouraging improved management of this waste stream in the state.

The Nonhazardous Industrial Waste Report constitutes one key element of the response to this mandate. Four goals were established for the report:

- * To inventory the types, quantities and present management methods of nonhazardous industrial wastes generated in Minnesota. An emphasis should be placed on wastes presently evaluated through MPCA's codisposal process and other wastes which have limited in-state management options.
- * To identify alternative physical management methods for selected categories of nonhazardous industrial wastes if their present management methods are inappropriate.
- * To evaluate the potential for treating and/or containing certain nonhazardous industrial waste streams at the state's proposed waste stabilization/containment facility. (Results of this evaluation are not contained in The Nonhazardous Industrial Waste Report, but are discussed in the Facility Development Report for a stabilization and containment facility.)
- * To recommend policies and programs to encourage the use of preferred alternative management methods. An emphasis should be placed on improved and expanded waste education and technical assistance programs.

The development of the Nonhazardous Industrial Waste Report began during the summer of 1986. It was approved on October 22, 1987. A copy of the report may be obtained by contacting the MPCA.

Stabilization and Containment Facility Development Report

The WMB adopted a draft of the Stabilization and Containment Facility Development Report on June 30, 1988. It was then forwarded to the Legislative Commission of Waste Management. The final report must be approved before final decisions are made on facility sites, specifications, or operating conditions.

The report includes a conceptual plan describing and evaluating the proposed design and operation of the facility. It includes an evaluation of technical feasibility, and a description and evaluation of the types and quantities of hazardous waste and nonhazardous residual waste from hazardous waste processing that the facility would be designed to accept. It also includes a description and evaluation of technologies needed or desired at the facility for processing, stabilization, and containment, including above grade containment.

Procedures and standards for the operation of the facility are outlined in this report. It requires the use of reduction, recycling, and the recovery of any hazardous waste before the waste is accepted for stabilization when the alternative or other management method is feasible and prudent. It must also materially reduce adverse impacts on human health and the environment.

The report also evaluates:

- * the design and use of the facility for processing, stabilization, or containment of industrial waste, including technical and

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regulatory issues and alternative management methods;

- * whether feasible and prudent technologies may substantially reduce the possibility of migration of any hazardous constituents of wastes that the facility would be designed to accept;
- * the necessary and desirable physical, locational, and other characteristics of a site for the facility;
- * the prospects of conditions required for the regulatory delisting of residual waste from hazardous waste processing;
- * the feasibility of an interstate, regional approach to the management of hazardous waste; and
- * the economic feasibility analysis of the development and operation of the facility, including the anticipated use of the facility by Minnesota generators and sources of private and public financing which may be available or necessary for the development of the operation.

Stabilization & Containment Economic Feasibility Report

This report eventually became a section of the Facility Development Report, as required by statute. During the fall of 1987, a separate Economic Feasibility Report was drafted under a consultant contract with ICF, Inc. of Washington D.C.

Solid Waste Program Development

State Solid Waste Management Policy Report

This report is a comprehensive look at solid waste management activities outside of the metropolitan area. Recognizing the need to identify issues, trends and needs of solid waste management activities in the state, and to evaluate the current status of solid waste management planning and implementation, the legislature directed the WMB and the MPCA to jointly author and adopt this report in its 1987 amendments to the Waste Management Act.

To facilitate the preparation and development of the policy report a Joint Board Committee (JBC) was formed. It is composed of three members from the WMB, three members from the MPCA and one ex-officio member from the Metropolitan Council.

The JBC held seven public forums throughout the state to gather input, ideas and to identify issues of concern from those working on solid waste management in Minnesota. Forums were held in Rochester, St. Paul, Alexandria, Marshall, Grand Rapids, Thief River Falls, and Fosston, Minnesota between November 1987 and April 1988. Attendance ranged from 25 to 75 people, with many driving through snowy winter weather in order to attend. Summaries of the comments received at the forums are available from the agency.

A Solid Waste Policy Report Task Force was formed to advise the JBC on the draft chapters

and to discuss and recommend policy issues for inclusion in the report. The 15 member task force was composed of representatives from local government, county solid waste officers, solid waste industries, and citizen and public policy organizations working in the area of solid waste management. The task force met on a monthly basis from November 1987 to April 1988. They met again in October 1988, to review and comment on the full staff draft of the report and its recommendations.

Program & Policy Development

Hazardous and Industrial Waste Program Evaluation Report

1988 amendments to the Waste Management Act require an evaluation of hazardous and industrial waste programs and a report to the Legislative Commission on Waste Management with recommendations for further action. This report includes an evaluation of the hazardous and industrial waste grant and loan programs and of MnTAP. The report is due by November 1 of each even-numbered year.

Tire Program Progress Report

The legislature, in the 1988 amendments to the Waste Management Act, required a progress report on the Office of Waste Tires activities relating to the management of waste tires by November 15 of each year.

The report is submitted to the Legislative Commission on Waste Management.

IV. Office of Waste Tire Management

The Waste Tire Management Program, funded through appropriations from the Motor Vehicle Transfer Fee, consists of three major elements -- abatement, permitting, and processing-facility development -- which will be described in more detail.

The MPCA administers these programs with the goal of developing an integrated waste tire management system. To create such a system, the Office of Waste Tire Management identified a number of areas of need. Most critical to the success of the program is the development of adequate processing capacity.

In addition to the specific programs described below, the Office of Waste Tire Management, in cooperation with the public and the private sector, is engaged in activities such as tire-derived fuel test burns. These tests are designed to result in the development of successful and environmentally sound processing.

Waste Tire Dump Abatement

The legislature on July 1, 1985, prohibited the disposal of waste tires in the land. Since this time, tires have been stockpiled around the state. These stockpiles (or dumps) are defined as nuisances in the Minnesota statutes.

Waste tire abatement rules state that if a responsible tire dump owner (tire collector) cooperates and develops an acceptable plan for removal and processing of the waste tires, the MPCA will reimburse the tire collector for a part of the abatement

Waste Management Programs

cost incurred. If the tire collector is unwilling or unable to cooperate, the MPCA has the authority to issue an order authorizing staff to enter onto the property where the tire dump is located, take control of the waste tires and remove them for processing.

To facilitate enforcement actions under this program, a Request for Proposals was issued to waste tire processors interested in entering into contracts for processing tires generated through the waste tire abatement activities. Eleven proposals were received and contract negotiations are expected to begin soon.

Under the abatement program, the State of Minnesota has entered into three agreements with responsible waste tire collectors incorporating abatement plans. The Office of Waste Tire Management abated one tire dump pursuant to a consent order. Other waste tire dumps will be addressed when a waste tire processor is selected.

The 1988 Legislature added a program which authorizes counties to take abatement actions. To participate in this program, a county must submit an abatement plan to the MPCA for approval. Once the plan is approved, the state may fund up to 85 percent of the county abatement action costs. So far, abatement plans have been approved for Dakota and Goodhue counties.

Counties participating in the program are required to develop plans to prevent the redevelopment of waste tire dumps and submit them to the MPCA for approval.

Waste Tire Facility Permitting

The permitting program is designed to regulate the disposal and transportation of waste tires by requiring transporters to obtain identification numbers. Waste tire disposers are required to use transporters with these identification numbers.

Three types of waste tire facilities are eligible for permits under this program: transfer stations, storage facilities, and processing facilities. After permitting, these facilities are required to comply with standards governing safe operation and reporting requirements. In addition, any facility storing waste tires is required to provide financial assurance.

The Office of Waste Tire Management required waste tire facilities apply for permits by August 21, 1988. Seventeen applications were received. Applications for waste tire transporter identification numbers were due July 21, 1988. To date, fifty-two waste tire transporters have been issued identification numbers.

Waste Tire Facility Development Programs

Currently, the Office of Waste Tire Management administers several programs providing financial assistance to persons engaged in waste tire management activities. Grants may be awarded to persons interested in studying the technical and financial feasibility of waste tire processing facilities. One such grant funded a study of a facility that would process "oversize" waste tires (generally those generated by farming or mining operations) by "peeling" the rubber from the casings.

Under the same program, the MPCA may loan money for the capital cost of waste tire recycling facilities. 1988 amendments to this program authorized the funding for transportation equipment and equipment used by firms using tire-derived products in manufacturing operations. At this time, no loans have been awarded yet but interest in the program is high and several loan applications are being reviewed. Action on loan applications is expected in early 1989.

A program created by the 1988 legislature allows the MPCA to provide grants to counties for the capital costs of land, buildings and equipment associated with the development of waste tire collection sites. Rules for the administration of this program have been proposed and should become final before the end of 1988.

V. Stabilization & Containment Facility Development

Landmark legislation passed in 1986 changed one of the EQB's primary tasks. Under the new plan, the EQB will search for a site to locate a hazardous waste stabilization and containment facility for inorganic wastes. The facility will be owned by the state and operated under a contract with Ecostar.

The EQB established a voluntary siting process to select a site for a facility to treat and store the residues which remain following the treatment of hazardous industrial wastes. The facility would first "stabilize" the residual wastes, then safely store and monitor the stabilized residues in an above-grade RCRA-permitted containment cell.

The EQB is working with two counties -- Red Lake and Koochiching -- to evaluate potential study areas to host the facility. Each county identified study areas that are being evaluated using the Study Area Identification Process and the state has started contract negotiations with Koochiching County.

In accordance with state law, the EQB will report to the legislature on requirements for continued implementation of this program.

Table 1

STATUS OF COUNTY PLANS - GREATER MINNESOTA
October 28, 1988

APPROVED PLANS PRIOR TO
CERTIFICATE OF NEED (CON) -- 10

DATE APPROVED

Beltrami County *	(May 22, 1984)
Clearwater County *	(May 22, 1984)
Hubbard County	(May 22, 1984)
Mahnomen County *	(May 22, 1984)
Norman County *	(May 22, 1984)
Otter Tail County	(May 22, 1984)
Pennington County	(May 22, 1984)
Polk County *	(May 22, 1984)
Red Lake County	(May 22, 1984)
Olmsted County	(December 18, 1984)

* Partial update in 1986, no CON

APPROVED PLANS WITH
CERTIFICATES OF NEED ISSUED (27)

DATE APPROVED

Cook County	(December 18, 1985)
Dodge County	(March 25, 1986)
Carlton County	(April 22, 1986)
Douglas County	(July 22, 1986)
Pope County	(July 22, 1986)
Steele County	(June 23, 1987)
Benton County	(December 17, 1987)
Chisago County	(December 17, 1987)
Isanti County	(December 17, 1987)
Kanabec County	(December 17, 1987)
Mille Lacs County	(December 17, 1987)
Pine County	(December 17, 1987)
Sherburne County	(December 17, 1987)
Stearns County	(December 17, 1987)
Brown County	(February 25, 1988)
Todd County	(March 24, 1988)
Wright County	(March 24, 1988)
Rice County	(April 28, 1988)
Fillmore County	(April 28, 1988)
Morrison County	(June 27, 1988)
Le Sueur County	(July 28, 1988)
Nicollet County	(July 28, 1988)
St. Louis County	(July 28, 1988)
Sibley County	(July 28, 1988)
Waseca County	(July 28, 1988)
Mower County	(August 25, 1988)
Lake of the Woods County	(August 25, 1988)

**UNAPPROVED PLANS SUBMITTED
UNDER STATUTE (4)**

Becker County
Freeborn County
Aitkin County
Lake County

DATE SUBMITTED

(March, 1985)
(July, 1985)
(October, 1985)
(January, 1986)

**UNAPPROVED PLANS SUBMITTED
UNDER RULE (35)**

Wadena County
Martin County
Faribault County
Lac Qui Parle County
Chippewa County
Meeker County
Lyon County
McLeod County
Swift County
Cass County
Kandiyohi County
Pipestone County
Redwood County
Yellow Medicine County
Nobles County
Renville County
Crow Wing County
Jackson County
Lincoln County
Rock County
Itasca County
Murray County
Big Stone County
Traverse County
Stevens County
Grant County
Wabasha County
Winona County
Houston County
Wilkin County
Koochiching County
Kittson County
Marshall County
Roseau County
Blue Earth County

DATE SUBMITTED

(August, 1986)
(December, 1986)
(March, 1987)
(March, 1987)
(April, 1987)
(July, 1987)
(August, 1987)
(August, 1987)
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(August, 1988)
(August, 1988)
(September, 1988)
(September, 1988)
(September, 1988)
(October, 1988)

COUNTIES DEVELOPING PLANS (5)

Goodhue County
Cottonwood County
Western Lake Superior Sanitary District
Watonwan County

STATUS

75+% complete
<25% complete
<25% complete
<25% complete

Clay County

75% complete

DESIGNATION PLANS

APPROVED PLANS (5, for 10 counties)

DATE APPROVED

Olmsted County

(March 14, 1985)

Dodge County

(March 14, 1985)

Tri-County Solid Waste

Management Commission¹

(March 24, 1988)

Eastern Sherburne County

(April 28, 1988)

East Central Solid Waste Commission²

(August 25, 1988)

NO DESIGNATION PLANS UNDER REVIEW

DESIGNATION ORDINANCES

APPROVED ORDINANCES (2)

DATE APPROVED

Olmsted County

(1985)

Dodge County

(1985)

DESIGNATION ORDINANCES UNDER REVIEW

DATE SUBMITTED

Benton County

November, 1988

Sherburne County

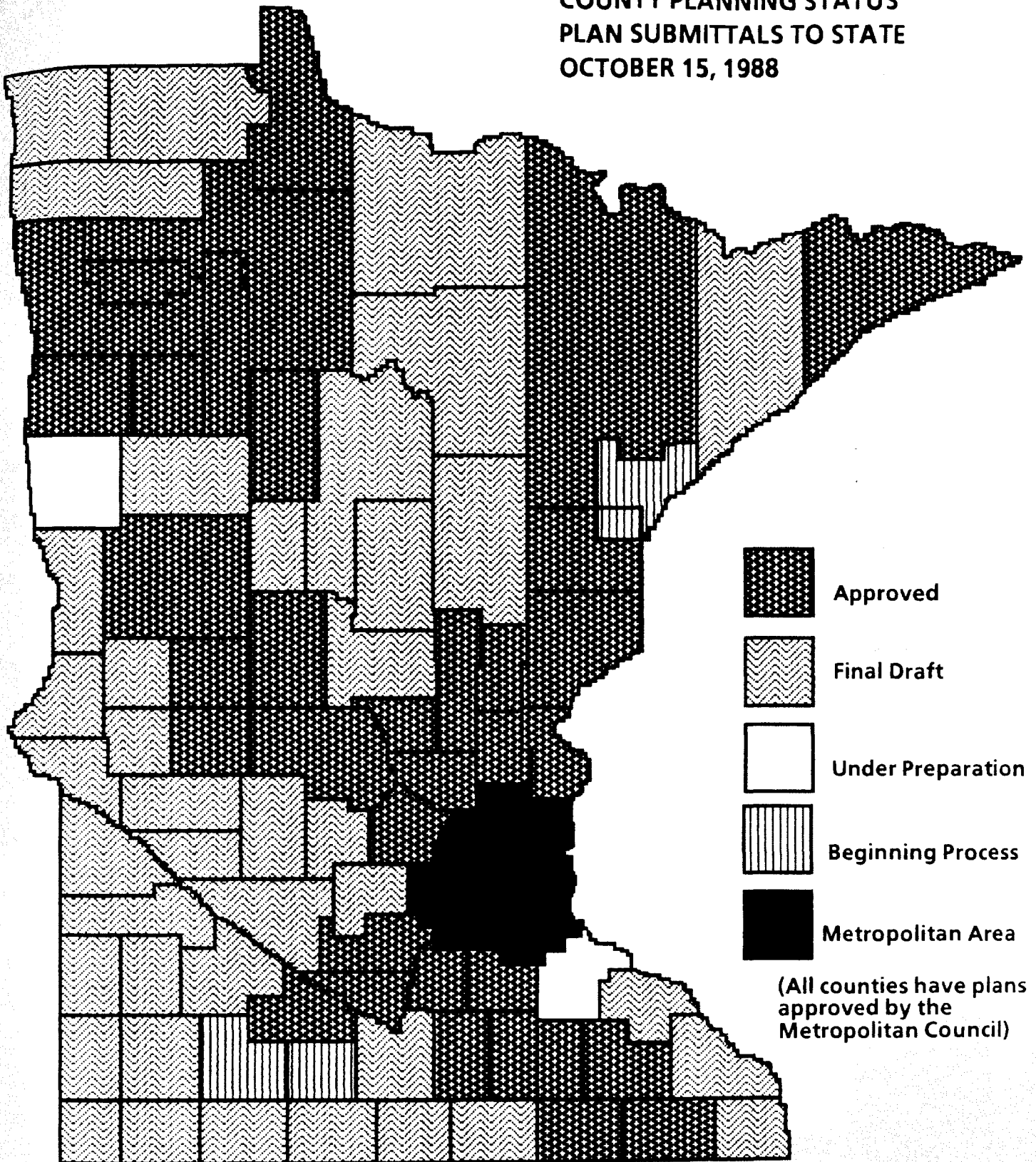
November, 1988

Stearns County

November, 1988

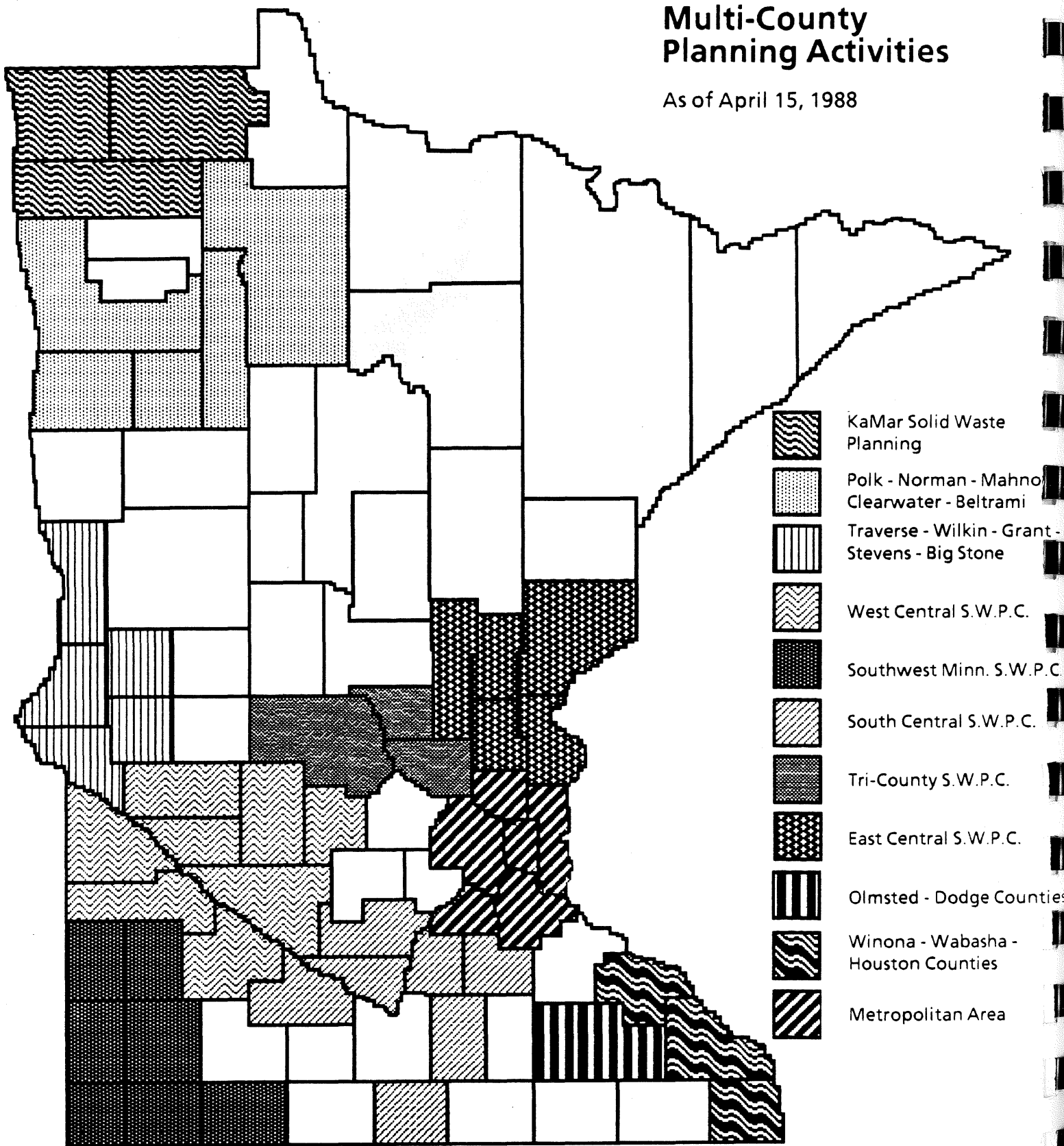
1. Benton, Stearns, and Western Sherburne Counties.
2. Chisago, Isanti, Kanabec, Mille Lacs, and Pine Counties.

COUNTY PLANNING STATUS
PLAN SUBMITTALS TO STATE
OCTOBER 15, 1988



Multi-County Planning Activities

As of April 15, 1988



DESIGNATION PLANS
(Outside Metropolitan Area)
September 27, 198

Approved

Under development

Table 2

**SOLID WASTE PROCESSING FACILITIES GRANT AND
LOAN (DEMO) DEMONSTRATION PROGRAM**

Program Appropriation	\$8,800,000
Administrative Funds Allocated	343,197
Funds Transferred to CAP Program	<u>3,600,000</u>
Subtotal	4,856,803
Awards to Date	<u>4,443,278</u>
TOTAL REMAINING	\$413,525

AWARDS

Ramsey County Recycled Materials Processing Facility (1984)	\$554,500	(277,250 grant/277,250 loan)
Pennington County dRDF Facility(1984)	782,413	(300,000 grant/482,413 loan)
City of Duluth Waste to Energy Facility (1985)	600,000	(300,000 grant/300,000 loan)
Olmsted County Waste to Energy Facility (1985)	600,000	(300,000 grant/300,000 loan)
Olmsted County Recycled Materials Processing Facility (1985)	644,150	(300,000 grant/344,150 loan)
Fillmore County Compost-Recycling Facility (1987)	399,960	(351,720 grant/48,240 loan)
Cook County Recycling Center (1987)	62,755	(62,755 grant)
St. Louis County Waste Tire Processing Facility (1987)	400,000	(290,000 grant/110,000 loan)
Lake of the Woods County Integrated Recycling and Composting Project (1988)	399,500	(199,750 grant/199,750 loan)
	<u>\$4,443,278</u>	

Table 3

SOLID WASTE PROCESSING FACILITIES
CAPITAL ASSISTANCE (CAP) PROGRAM
July 1985 Through August 1988

Program Appropriation	\$19,000,000
Administrative Funds Allocated	<u>990,000</u>
Subtotal	18,010,000
CAP Grants Awarded	7,908,412
Environmental Testing (TEST) Grants Awarded To Date	<u>252,597</u>
TOTAL REMAINING	\$ 9,848,991

AWARDS

Pope and Douglas Counties Waste to Energy Facility (1985)	\$1,600,000
Carlton County Transfer Station (1985)	94,562
Otter Tail and Becker Counties Transfer Stations (1985)	85,842
St. Louis County Tire Processing Facility (1986)	586,412
City of Fergus Falls Waste to Energy Facility (1986)	862,500
Dodge County Transfer Station (1986)	48,975
Polk County Waste to Energy Facility (1986)	1,493,750
Winona County Waste to Energy Facility (1986)	2,000,000
Hubbard County Transfer Station (1986)	86,825
Beltrami County Transfer Station (1987)	46,000
Stevens County Transfer Station (1987)	53,984
City of Red Wing Continuous Emissions Monitoring Equipment (1988)	14,875
Todd County Transfer Station (1988)	<u>72,187</u>
TOTAL	\$7,908,412

Solid Waste Management Projects
Funded Through The LOW-TECH
Grants Program

Table 4

July 1988

Applicant	Project Manager/ Operator	Project Type	Capacity: TPD Design/Opera- ting	Operational *projected	Award Date	% Project Costs for first year	Other Financing Sources	Project's Cost for First Year
Fillmore County	Fillmore County/ Private Haulers	Public Education Recyclable and Compostable Collection	12/	1988*	\$50,000 (April 28, 1988)	45	County Funds	\$112,158
Winona County	Winona County/ ORC Industries Inc.	Public Education, Recyclables Collection Truck	7/	1988*	\$50,000 (June 30, 1988)	35	County Funds	\$143,656
Swift County	Swift County/ Local Haulers	Public Education, Recyclables Collection, Collection Trailer, Drop Boxes	2/	1989*	\$37,500 (August 25, 1988)	28	County Funds	\$134,590
Goodhue County	Cannon Valley Environmental Coalition/Local Hauler	Public Education, Recyclables Collection, Containers, Trailers	2/	1988*	\$37,500 (August 25, 1988)	35	County Funds, City of Cannon Falls, Local Hauler	\$105,067
Mower County	Mower County/Cedar Valley Rehabilitation Workshop	Public Education, Curbside and Drop-off box, Recyclables Collection Trailer	2/	1988*	\$37,500 (August 25, 1988)	15	County Funds	\$252,333
Douglas County	Douglas County/ Local Hauler	Public Education Curbside and Drop-off box Recyclables Collection Collection Trailer	2/	1988*	\$37,500 (August 25, 1988)	35	County Funds	\$107,019

Table 5

Environmental Testing Projects
Funded Through the TEST Program

July 1988

Location Owner/Operator (if different)	Facility Type	Project Type	Requested Grant Amount	Award Date	% Project Costs Funded
Duluth: WLSSD	Modification of RDF Processing	Air Quality Ash Characterization	\$95,155	\$95,155 (October 22, 1987)	100
Fosston: Polk County	Waste to Energy	Air Quality	\$89,180	\$82,180 (January 28, 1988)	92
Red Wing: City of Red Wing	Waste to Energy	Air Quality	\$71,747	\$69,297 (May 26, 1988)	97
Thief River Falls: Pennington County	RDF Facility	Particulate Emissions Testing	\$ 5,965	\$ 5,965 (May 26, 1988)	100

Solid Waste Funded Projects

Lake of the Woods - a \$199,750 grant and a \$199,750 loan to build three integrated recycling and composting facilities.

Pennington County -- a \$782,413 grant and loan to build a densified refuse-derived fuel facility in Thief River Falls. Also, a \$5,965 grant under the TEST Program for environmental testing of air emissions from the facility.

Polk County -- \$1.5 million grant to help build a \$7.9 million solid waste resource recovery plant (WRRP) near Fosston. Plant will handle waste from Polk, Norman, Mahanomen, Clearwater, and Beltrami Counties. Also, a \$82,180 grant to conduct air emissions testing at the WRRP.

Hubbard County -- \$86,825 grant to help build two solid waste transfer stations.

Otter Tail/Becker Counties -- \$85,842 grant to build transfer stations in Detroit Lakes and Henning.

Todd County -- a \$72,187 grant to build a transfer station near Browerville.

Fergus Falls -- \$862,500 to help build a \$4.35 million waste-to-energy plant providing steam to the Regional Treatment Center. Plant will handle waste from Otter Tail, Grant, Stevens, Wilkins, Traverse, Becker, Hubbard, Wadena and Todd Counties.

Douglas County -- \$37,500 LOW-TECH grant to fund a public education and recyclables collection program.

Stevens County -- \$53,984 grant to help build a \$215,934 transfer station near Morris that provides waste to the Fergus Falls Waste-to-Energy Facility.

Pope/Douglas Counties -- \$1.6 million grant to help build a \$6.5 million waste-to-energy plant in Alexandria.

Swift County -- a \$37,500 grant under the LOW-TECH Program to integrate recycling program with composting facility.

Dodge County -- an award of \$48,975 to build a transfer station near Mantorville that provides waste to the Rochester waste-to-energy facility.

Beltrami County -- a \$46,000 grant to help fund a \$186,000 solid waste transfer station near Bemidji.

St. Louis County -- a \$586,400 grant for a \$3 million waste tire processing plant in Babbitt. Plant can process 3.5 million tires per year.

St. Louis County -- a \$290,000 grant and a \$110,000 loan for an expansion of the tire processing plant in Babbitt.

Cook County -- a \$62,755 grant to help fund a \$125,510 county-wide recycling program.

Duluth -- a \$600,000 grant and loan to install a waste separation/shredder as part of the WLSDD project.

Duluth -- a \$95,155 grant awarded under the TEST Program for air quality testing, a characterization, residual analysis and feedstock testing at WLSDD.

Carlton County -- a \$94,562 grant to build a transfer station near Carlton.

Ramsey County -- a \$609,750 grant and loan to build a recycled materials processing facility in St. Paul.

City of Red Wing -- \$14,875 grant to install continuous emissions monitoring equipment at the city's incinerator. Also, a \$69,297 grant under the TEST Program for environmental testing of air emissions from the incinerator.

Goodhue County -- a \$37,500 grant under the LOW-TECH Program to fund a public education/recycling program.

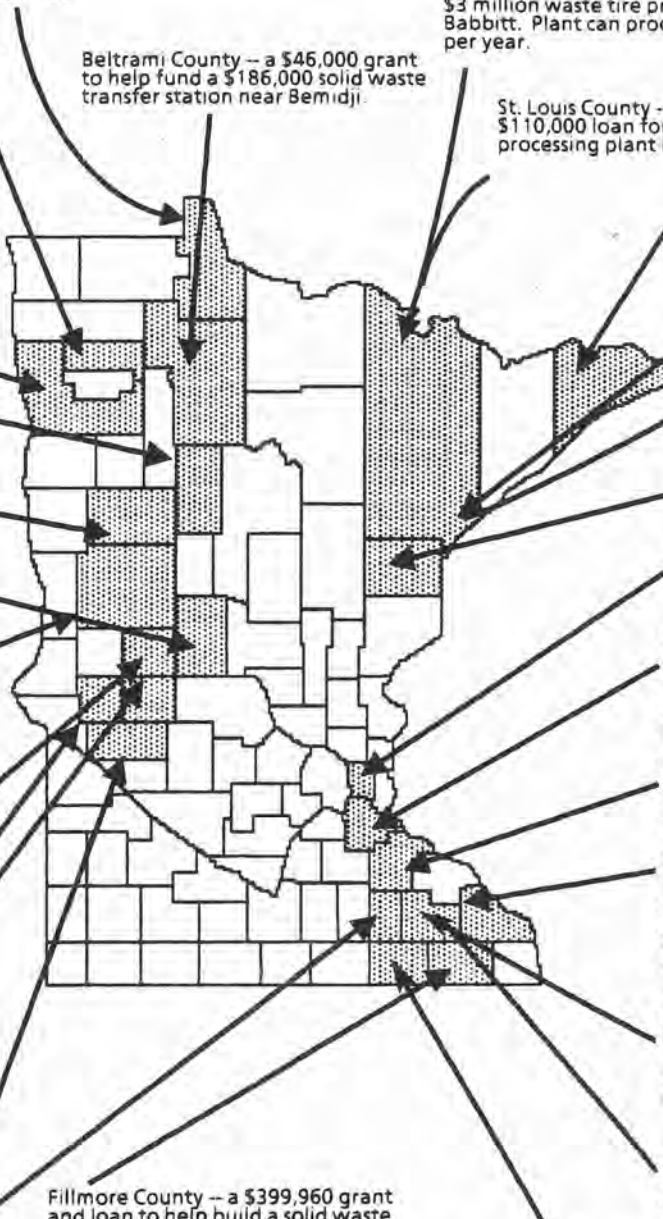
Winona County -- a \$2 million grant to help fund a \$12.9 million solid waste incinerator to handle solid waste from Winona, Wabasha, and Houston Counties, and from two counties in Wisconsin. Also, a \$50,000 grant under the LOW-TECH Program to fund a public education and recyclable collection truck project.

Olmsted County -- a \$600,000 grant and loan to help build a 200 ton/day mass burn waste-to-energy project in Rochester serving Olmsted, Dodge, and parts of Wabasha and Goodhue Counties.

Olmsted County -- a \$644,000 grant and loan to build a recycled materials processing plant in Rochester serving Olmsted and Dodge Counties.

Fillmore County -- a \$399,960 grant and loan to help build a solid waste composting plant in Preston. Also, a \$50,000 grant under the LOW-TECH Program to fund a program of recyclable materials collection and public education.

Mower County -- a \$37,500 grant under the LOW-TECH Program to fund a recycling program.



Waste Education Coalition Members

Al Withers
Minnesota Department of Agriculture

John Miller
Minnesota Department of Education

Sunny Jo Emerson
Metropolitan Council

Bob Bystrom
Minnesota Environmental Education Board

Andy Keller
Clean Water Action

Kevin O'Connor
Padilla Speer Beardsley

Dick Stanford
Northern States Power

Charles Hawkins
State Planning Agency/EQB

Tom Gries
Minnesota Pollution Control Agency

Don Holman
Willmar Community College

Dr. Ray Nelson
Bemidji State University

Bill Patnaude
Beltrami County Solid Waste Officer

Bruce Nelson
Alexandria Sanitary District

Susan Schmidt
Minnesota Project

* Terri Port
Minnesota Waste Management Board

* Past Member

SOLID WASTE MANAGEMENT ADVISORY COUNCIL
7/1/88 - 6/30/90

Government

Donald McCollum	Bagley (Clearwater County)	Commissioner
Michael Hanan	Fergus Falls (Otter Tail County)	SWO
Clifford Ketcham	Fairmont (Martin County)	Commissioner
Bob Roufs	Cohasset (Itasca County)	Commissioner
Ann Vohs	Faribault (Rice County)	Commissioner
Thomas Greig	Chisago City (Chisago County)	Commissioner

Industry

Mary Ayde	White Bear Lake (Ramsey County)	NSWMA
Barbara Ranson	Sebeka (Wadena County)	Civil Engineer
Stuart Hamilton	St. Cloud (Stearns County)	Recycler
Jeffrey Turner	Maple Grove (Hennepin County)	Consultant
Dale Henderson	Ramsey (Anoka County)	Waste Mgmt Inc.
Ronald Schaap	Worthington (Nobles County)	Sanitation Service & Landfill Mgr.

Citizen

Patrick Born	Minneapolis (Hennepin County)
Lowell Enerson	Oklee (Red Lake County)
Susan Schmidt	St. Paul (Ramsey County)
Louise Kuderling	Bloomington (Hennepin County)
Timothy Luken	Richmond (Stearns County)
Deborah Meister	St. Paul (Ramsey County)

Hazardous Waste Management Planning Council

Members of the 1988-90 Biennium
Updated September, 1988

DIANE JENSEN

Served on HWMPC as a Citizen Representative for past two years
State Director of Clean Water Action Project

DON HOLMAN

Environmental Science and Chemistry Instructor at North Hennepin Com. College
Served on HWMPC as Citizen Representative for past two years
Current Co-Chair of WMB Waste Education Coalition
Past member of WMB Waste Education Roundtable

FAY THOMPSON

Served on HWMPC as Citizen Representative for past eight years
Hazardous Waste Officer for the University of Minnesota
Professor of Environmental Health at U of M

GREGORY LIE

Head Supervisor, Hennepin County Hazardous Waste Division
Served on HWMPC as Local Government Representative for past three years

ROGER MARTIN

Served on HWMPC for past four years
HWMPC Chair 1986-88 Biennium
Manager, Unisys Corp. Environmental Management Department
Current Chair, St. Paul Area Chamber of Commerce, Environmental Task Force

PAUL McCARRON

Served on HWMPC as Local Government Representative for past five years
Member of Minnesota House of Representatives (1973-82)
Current member of Anoka County Board of Commissioners
Current Director, Association of MN Counties Board of Directors
Current Member, Metropolitan Waste Control Commission

RAY NELSON

Served on HWMPC for past five years
HWMPC Vice-Chair, three years
Professor of Education with specialty in Environmental Education
Past member of WMB Waste Education Roundtable

KENNETH FORD

Served on HWMPC as Industry Representative for past four years
Corporate Manager of Environmental Affairs for Honeywell, Inc.

HENRY FRIEDRICH

Served on HWMPC as Industry Representative for past 2½ years
Employed by environmental consulting firm specializing in air pollution control

KATHERINE HALL

Served on the HWMPC as Industry Representative for past two years
Employed by Donaldson Company, manufacturer of air, fluid, and micro-particulate filtration products

CORT PLATT

Served on HWMPC as Industry Representative for past four years
Owner of a Precious Metal Platers, a Minnesota electroplating firm
Current Director on the National Board of Directors of the Metal Finishers Assn.

BRIAN KRAWIECKI

New HWMPC Member, 1988-90 Term, Local Government Representative
Sanitarian for Otter Tail County
Serves on the Comprehensive Local Water Planning Board

MARCIA ANDERSON

New HWMPC Member, 1988-90 Term, Citizen Representative
Member of Northstar Chapter of the Sierra Club
Sierra Club's Hazardous Waste Task Force; Co-Chair

PATTY MURTO

New HWMPC Member, 1988-90 Term, Local Government Representative
County Commissioner; Carlton County

LEE HOLDEN

New HWMPC Member, 1988-90 Term, Local Government Representative
Supervisor, Ramsey County Hazardous Waste Division
Chair, Metropolitan Inter County Hazardous Waste Task Force from 1980-86
Current Member of Metropolitan Inter County Hazardous Waste Task Force

JAMES MOEN

New HWMPC Member, 1988-90 Term, Citizen Representative
Appointed September, 1988 per WMB Chair decision to expand Council to 18 Members
Attorney, practice: Corporate, Real Estate, Environmental Law
Member, Hennepin County Bar Assn. Environmental Law Committee
Member, Minnesota State Bar Assn. Environmental Law Section

PHILLIP THEOBALD

New HWMPC Member, 1988-90 Term, Local Government Representative
Appointed September, 1988 per WMB Chair decision to expand Council to 18 Members
Martin County Commissioner-18 Years
Association of Minnesota Counties, District Chair
Martin County Solid Waste Commission-15 Years