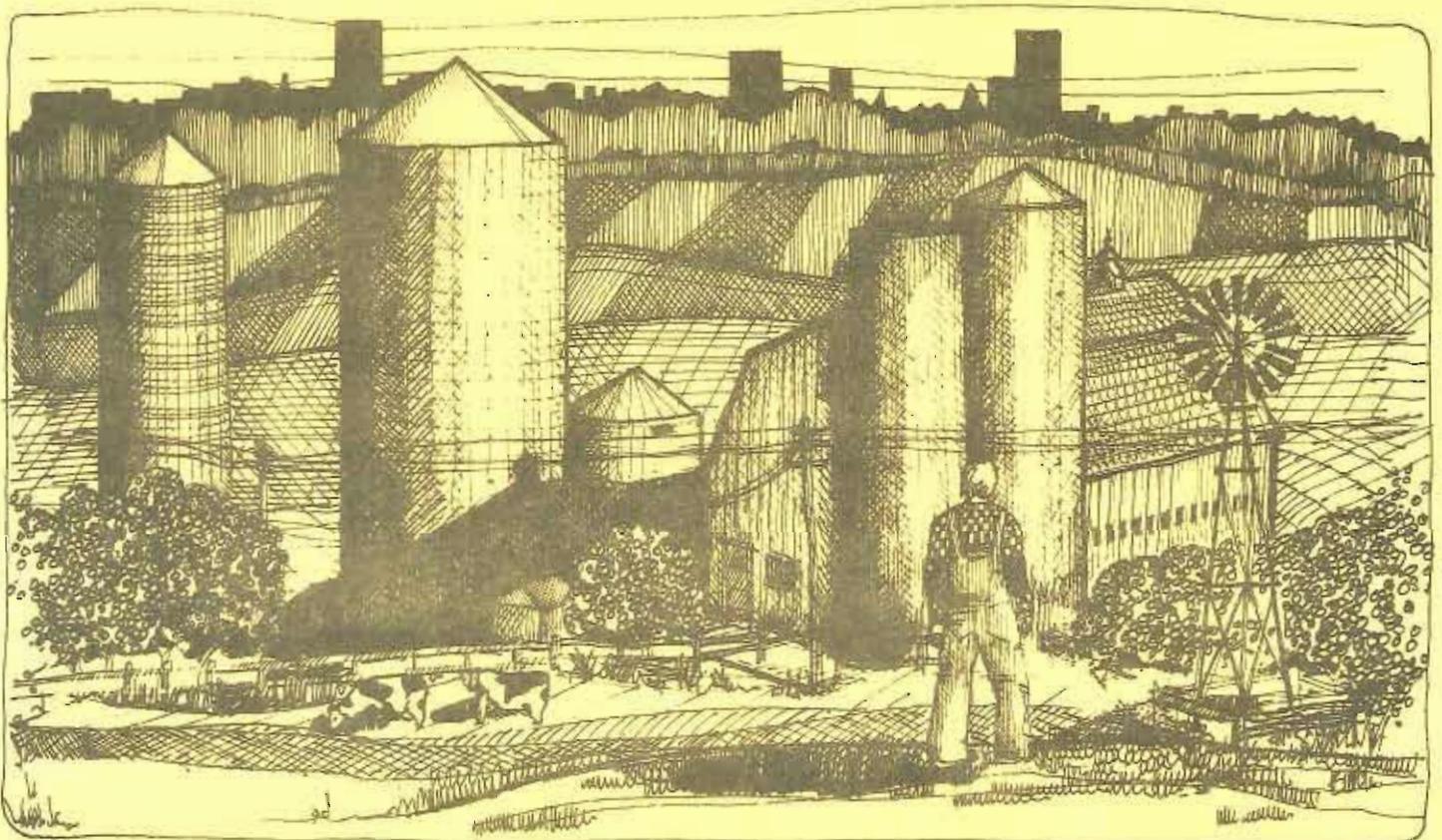


# Waukesha County Agricultural Land Preservation Plan



THE WAUKESHA COUNTY PARK AND PLANNING COMMISSION



THE WAUKESHA COUNTY  
AGRICULTURAL LAND PRESERVATION PLAN

Prepared by the staff of the Waukesha County  
Park and Planning Commission and financed in  
part through a joint grant from the  
Wisconsin Department of Agriculture, Trade and  
Consumer Protection and the Wisconsin  
Department of Development

Recommended by the Waukesha County Park and Planning  
Commission This 6th Day of November 1981

Adopted by the Waukesha County Board of Supervisors, Waukesha  
County, Wisconsin, this \_\_\_\_\_ day of \_\_\_\_\_, 1982

Certified by the Agricultural Lands Preservation Board  
this \_\_\_\_\_ day of \_\_\_\_\_, 1982.

## WAUKESHA COUNTY AGRICULTURAL LAND PRESERVATION PLAN

### ABSTRACT

Waukesha County since World War II has experienced dramatic change in terms of population increase and the conversion of agricultural lands to serve the needs of that increased population. Some of the factors which influenced that dramatic change included relatively inexpensive land, motor fuel and credit for home mortgages. Ease of access and the attraction of open spaces combined to fuel the flame of urban sprawl. At the same time, a somewhat uneasy feeling that the resources which it has been our good fortune to have are not being judiciously used. Various attempts to exert greater control through imposing a more rational system of land use regulation have not been successful. We see now an increasing awareness of the undesirable impacts of past actions. Urban sprawl and all of its offshoots has taken its toll. To correct or lessen those impacts will require a change of attitude towards future development.

The Waukesha County Agricultural Land Preservation Plan while providing significant land for development, seeks to protect environmentally sensitive lands and to sustain the agricultural base. The ground work has been laid in this plan to permit local decision makers in all the communities of Waukesha County to learn from the past and be guided in future decision making with confidence.

TABLE OF CONTENTS

	<u>PAGE</u>
CHAPTER I	
Introduction	I-1
Chapter 29 - Laws of 1977	I-9
Summary	I-13
CHAPTER II	
Natural Resource Base and Land Use	II-1
Agricultural Soils	II-1
Capability Groups of Soils Found in Waukesha County	II-1
Yield Predictions	II-14
Wetland Soils	II-19
Environmental Corridors	II-22
Water Resources	II-23
Existing	II-24
Existing Agricultural Practices	II-27
Growth Trends	II-30
Recent Trends in Agricultural Land Sales	II-34
Summary	II-40
CHAPTER III	
Agricultural Land Preservation Goals and Policies	III-1
Goals for Agricultural Land Preservation	III-1
Policies for Agricultural Land Preservation	III-2
Goals for Open Space and Environmentally Sensitive Lands	III-2
Policies for Open Space and Environmentally Sensitive Lands	III-2
Goals for Growth	III-3
Policies for Growth	III-3
Plan Modification and Review	III-4
Summary	III-4
CHAPTER IV	
Population and Land Utilization Forecasts	IV-1
Anticipated Growth and Change	IV-1
Adjusted Forecasts: Population and Land Use	IV-1
Factors Relevant to the Anticipated Growth Within Each of the Planning Analysis Areas	IV-4
Summary	IV-6
CHAPTER V	
Plan Preparation	V-1
Recommended Agricultural Land Preservation Plan	
Plan Methodology	V-1
Plan Description	V-3
Plan Implementation Policy	V-4
Recommended Natural Resource Preservation Areas	
Plan Methodology	V-4
Plan Description	V-5
Plan Implementation Policies	V-5
Recommended Urban Development Areas	
Plan Methodology	V-5
Map Descriptions and Criteria: Map 1	V-6
Map Descriptions and Criteria: Map 2	V-7
Recommended Land Uses	V-9
Agricultural Land Preservation Planning Maps	V-12

CHAPTER VI	Summary and Conclusion	VI-1
	Introduction	VI-1
	Inventory Analysis	VI-2
	Plan Implementation	VI-3
	Public Reaction to the Plan	VI-3
	Conclusion	VI-4

LIST OF FIGURES

<u>FIGURE</u>		<u>PAGE</u>
I-1	Population Comparisons	I-8
I-2	Development Densities	I-8
II-1	Predicted Average Acre Yields	II-15
II-2	Waukesha County Wetlands Inventory	II-20
II-3	Land Use Summary	II-26
II-4	Agricultural Land Use 1975	II-27
II-5	Residential Subdivision Lots 1960-1979	II-31
II-6	Acreage Converted to Residential Use 1970-1979	II-32
II-7	Recorded Subdivision Activity 1954-1979	II-33
II-8	1970-80 Regional Population Trends	II-34
II-9	Population Trends - Waukesha County	II-35
II-10	Average Price Per Acre Ag Land 1976-1978	II-36
II-11	Waukesha County Ag Land Sales 1976-1978	II-37
II-12	1977 Equalized Value - Real Estate	II-39
IV-1	Adjusted Forecasts - Population and Land Use	IV-3
V-1a	Recommended Land Uses under the Agricultural Land Preservation Plan - in acres (Planning Analysis Area basis)	V-9
V-1b	Recommended Land Uses under the Agricultural Land Preservation Plan - in acres (Township basis)	V-10

LIST OF MAPS

MAP A	Distribution of Known Conservation Practices in Waukesha County, 1975	II-28
MAP B -	Distribution of Livestock Operations in Waukesha County, 1975	II-29
MAP C -	Planning Analysis Areas	IV-2
MAP 1	Eagle Township	V-12
MAP 2	Eagle Township	V-13
MAP 1	Ottawa Township	V-14
MAP 2	Ottawa Township	V-15
MAP 1	Summit Township	V-16
MAP 2	Summit Township	V-17
MAP 1	Oconomowoc Township	V-18
MAP 2	Oconomowoc Township	V-19
MAP 1	Mukwonago Township	V-20
MAP 2	Mukwonago Township	V-21
MAP 1	Genesee Township	V-22
MAP 2	Genesee Township	V-23
MAP 1	Delafield Township	V-24
MAP 2	Delafield Township	V-25
MAP 1	Merton Township	V-26
MAP 2	Merton Township	V-27
MAP 1	Vernon Township	V-28
MAP 2	Vernon Township	V-29
MAP 1	Waukesha Township	V-30
MAP 2	Waukesha Township	V-31
MAP 1	Pewaukee Township	V-32
MAP 2	Pewaukee Township	V-33
MAP 1	Lisbon Township	V-34
MAP 2	Lisbon Township	V-35
MAP 1	Muskego Township	V-36
MAP 2	Muskego Township	V-37
MAP 1	New Berlin Township	V-38
MAP 2	New Berlin Township	V-39
MAP 1	Brookfield Township	V-40
MAP 2	Brookfield Township	V-41
MAP 1	Menomonee Township	V-42
MAP 2	Menomonee Township	V-43

APPENDICES

APPENDIX 'A'

Planning and Mapping Standards as adopted by the State Agricultural Land Preservation Board

APPENDIX 'B'

The Land Inventory and Monitoring Memorandum WI-1

APPENDIX 'C'

Listing of Maps prepared to support the plan.

APPENDIX 'D'

USDA Conservation Planning Memorandum 15 outlining Wetlands Policy for Soil Conservationists.

APPENDIX 'E'

The adopted Regional Objectives, Principles and Standards of the Year 2000 Land Use Plan.

APPENDIX 'F'

List of participants in the initial phase of the Agricultural Land Preservation Program in Waukesha County and the characteristics of lands in the program.

APPENDIX 'G'

Proposed Zoning Text Amendments to implement the Plan.

APPENDIX 'H'

SEWRPC Land Use 1975

APPENDIX 'I'

1978 Census of Agriculture preliminary report Waukesha County, Wisconsin  
U.S. Department of Commerce

## AGRICULTURAL PRESERVATION PLAN

### INTRODUCTION

#### Need to prepare plans and map agricultural lands in Waukesha County.

The Waukesha County Park and Planning Commission in its role as review agency for subdivision plats in Waukesha County has for some time been aware of the way in which productive farm lands were being converted irretrievably to urban uses<sup>1</sup>. On a case by case basis, the Commission has known more or less of the qualities individual farms or their operators possess. Because this view has been on a rather limited case by case basis and not comprehensive the Commission feels something has been lost in the overall management of the land resource in this county. The growth and development of Waukesha County has to a large extent occurred without the benefit of a General Development Plan or other similar document. The zoning maps for the various towns have been used in the past to represent the ultimate development schemes and have not been the tools of effective growth management.

On May 16, 1967<sup>2</sup>, the Waukesha County Board adopted by resolution the 1990 Regional Land Use and Transportation Plan as a guide for regional and community development. The effect of this adopted plan has not been great. Its most apparent positive impact has been in preserving the remaining high value elements of the primary environmental corridors. Not one community in Waukesha County has modified its zoning to conform to the adopted plan, nor has the plan been refined and modified to reflect any superior local concepts. However, some local communities have amended their land use management regulations to the effect that they would in part implement some of the goals and objectives of the various adopted elements of the Regional Plan. County Board adoption of the Regional Plan is not in and of itself sufficient basis for either approval or denial of subdivision plats nor has it been an effective tool of growth management. Since on a

- 1 Waukesha County Park and Planning Commission files monitoring subdivision activity in all Waukesha County communities verify this fact.
- 2 The 1990 Regional Land Use Plan has been amended and updated as two distinct but interrelated plan elements of the Regional Plan: the year 2000 Regional Land Use Plan adopted 8/21/79 and the year 2000 Regional Transportation Plan adopted 7/18/78.

countywide basis so much residentially zoned land exists, the real issue has been: When will lands be converted which already possess permissive zoning? Another correlative issue "Agricultural Land Preservation" has simmered on a rear burner for some time as is reflected in a report of the Waukesha County Agricultural and Natural Resource Council dated June, 1969 which involves the task at hand. This ad hoc council utilizing the staff of the Waukesha County - University Extension Office, was comprised of elected officials as well as lay members and produced "A Citizen's Guide to Urbanization".

The recommendations of this report and the challenge leveled by the Chairman of the Waukesha County Board of Supervisors to apply those recommendations is still pertinent today. Those recommendations are shown below. The participation by more than 49 citizens in this effort makes it an extremely valuable work which the present work attempts to build upon in addressing the recommendations made then. Those recommendations are:

1. that in order to bring about more effective, economical and desirable use of our land resources, Waukesha County municipalities should adopt exclusive agricultural zoning ordinances as a means of controlling "leapfrog" development; further they should take positive steps to encourage a greater proportion of residential growth contiguous to areas presently served by public utilities or where installation of such public utilities are feasible and possible.
2. that in order to have citizens and planning and local government officials better informed on the potentials for obtaining more desirable community development, the Waukesha County-University Extension should expand its educational programs on effective land use planning and zoning.
3. that because of the large sums of monies expended to compile the data and information and because of desirable effect on the community that application of this information could have, local officials and planning bodies should be encouraged to consult with and make more use of the data and information available through the Southeast Wisconsin Regional Planning Commission (SEWRPC) in helping to solve local zoning and development problems.

4. that in order to minimize the cost of future development to both the private and the public sector, the County Board of Supervisors should adopt a subdivision control ordinance to achieve the following:
  - a. to minimize soil erosion and subsequent waterway sedimentation and water pollution
  - b. to prevent developments on the PROPOSED rights-of-way of transportation routes as developed in the regional transportation plan
  - c. to insure adherence to the recommendations of the soil survey in all phases of development and in particular to septic waste disposal systems
  - d. to retard or discourage "leapfrog" development and to encourage a larger proportion of future urban development to be served by a municipal type sewer and water utilities.
5. that in order to encourage preservation of open space, water recharge, wildlife and recreational areas and to prevent undesirable development of these areas, the County Board of Supervisors should adopt a county-wide lakeshore land and floodplain control ordinance.
6. that in order to prevent further deterioration of the environment and natural resources and to safeguard human health, the County Board of Supervisors should adopt a county-wide sanitary ordinance.
7. that in order to better inform citizens about the purpose and the effect of (1) lakeshore and floodplain (2) sanitary, and (3) subdivision control ordinances that the Council has proposed to the County Board of Supervisors, appropriate departments of the County should cooperate in a series of public information meetings.
8. that in order to provide for needed coordination in zoning and land use planning between the various municipalities; and in order to administrate the lakeshore and floodplains and subdivision control ordinance, support should be given the County Park and Planning Department in its efforts to meet the ever-changing conditions in a rapidly growing county.

9. that in order to provide county citizens, planners and government officials with up-to-date information upon which to base crucial and far-reaching decisions, the County Board of Supervisors should appropriate its proportional share of the cost and take the lead in requesting that the following three studies as recommended by SEWRPC be undertaken at once.

STUDY #1. THE COSTS AND BENEFITS OF RESIDENTIAL DEVELOPMENT---  
AN ECONOMIC AND FINANCIAL ANALYSIS.

This guide would set forth the monetary cost and benefits of various types of residential development in a regional environment, including strictly rural areas, as well as urban core areas, and the types of development patterns occurring between these two extremes, and the impact of such development on county and local taxes. In addition, this guide would include model ordinances, regulations, procedures and/or resolutions to assist the local units and agencies of government in carrying out recommendations contained in the guide for adjusting the kind and rate of local development to the fiscal capabilities of local government.

STUDY #2. THE PRESERVATION AND RESERVATION OF AGRICULTURAL  
LANDS IN AN URBANIZING REGION

This guide would set forth the problems related to the preservation of agricultural land use and development in a rapidly urbanizing region, together with attendant tax assessment and zoning problems in at least the following three types of situations:

- A. Agricultural areas proposed in an adopted regional land use plan to remain in agricultural use indefinitely.
- B. Agricultural areas proposed in an adopted regional land use plan to be developed for urban purposes with a relatively short time horizon of five to ten years.
- C. Agricultural areas proposed in an adopted regional land use plan to be developed for urban purposes within a relatively long time horizon of 20 to 25 years.

It is anticipated that the planning guide, together with the aforementioned guide on residential development would be extremely useful in the curtailment of urban sprawl, ineconomies of unplanned rural as well as urban developments and the destruction of prime agricultural lands.

This guide would also include model ordinances, regulations, procedures and/or resolutions to assist the local units and agencies of government in carrying out recommendations set forth in this guide.

### STUDY #3 THE PRESERVATION AND RESERVATION OF ENVIRONMENTAL CORRIDORS

This guide would set forth the problems relating to both urban and rural development of areas of the region containing significant elements of the natural resource base, including surface water and floodlands, lake shorelands, steep topography, unusual geologic features, prime woodlands and wildlife habitats and wet soils. This guide would also include model ordinances, regulations, procedures and/or resolutions to assist the local units and agencies of government in carrying out the recommendations set forth in this guide.

10. that in the event that the other six counties of the Southeast Wisconsin Region decline to participate in the above studies, the County Board of Supervisors should appropriate the necessary funds and request the SEWRPC to conduct these studies solely within the county.
11. that because local government and planning officials are generally lay people with a limited amount of time to devote to public service, because the subject matter they deal with is relatively technical and because the acceptance and adoption of land use plans depends upon an informed citizenry; the SEWRPC should develop, along with the various planning guides, an accompanying compendium or handbook of these planning guides that could be more readily understood, used and accepted by the average citizen.

12. that in conjunction with public funded programs to alleviate municipal and private pollution problems, the County Board of Supervisors and all other state and local governmental agencies should also make public monies available on the same basis for abatement of pollution problems resulting from livestock waste and other farm caused pollution.
13. that townships and cities of the county provide for the disposal of dead animals within their municipality and that the state laws be changed to permit the county to provide or contract for such services on a county-wide basis.
14. that because of its contribution to water pollution and possible affect on wildlife ecology, the county municipalities should explore alternative methods (including mechanical) of removing snow and ice from streets and roads in place of the large tonnage of salt now being used.
15. that because it is in the public interest to preserve open spaces, farm lands, and forests, and because such lands are now being converted to more intensive use due to existing assessment policies that result in high property taxes; that legislation be enacted to permit assessment to be based on current use rather than on market value.
16. that Waukesha County and its municipalities investigate the feasibility of requiring developers of new residential sites to set aside an amount of money based on a formula to be determined by the Park and Planning Commission; and that this money be placed in escrow at the time of sale for use in the development of schools and neighborhood recreational areas.
17. that because mineral resources of the county contribute significantly to the economy, the mining of these resources should be encouraged, provided adequate controls can be agreed upon regarding restoration of the site, truck traffic and safeguards to water and air pollution.
18. that in the public interest and for the benefit of our youth, legislation should be enacted to provide for exceptions to the present child labor law that would provide for employment of minors in nonhazardous occupations with consent of parents or guardians; and that would provide compensation for such employment on a basis commensurate with their skills and productivity without regard to minimum wage standards.

Since the above recommendations were made in the late 1960's, a number of positive accomplishments have been achieved. A comprehensive shoreland and floodland protection ordinance has been implemented. A subdivision control ordinance for these areas has been enacted and the County Board of Health has adopted a sanitary code which applies countywide. Probably more important than what has happened is what has not happened: the control over leap frog development is non-existent and the coordination in zoning and land use planning between various municipalities which was called for earlier has not become a reality in any meaningful sense.

Of the three studies recommended the first has been addressed in part by the Regional Land Use Plan for the year 2000 and if the county undertakes the preparation of a County Development Plan the cost-benefit analysis called for will probably be greatly refined. The second study is the task at hand, that is the preservation of agriculture lands in an urbanizing county. The third study is one to which we can look to with some satisfaction as the County Board of Supervisors has adopted the Regional Park and Open Space Plan as the County Park and Parkway Plan thus providing the Waukesha County Park and Planning Commission with the means to preserve the primary environmental corridors as an adjunct to its subdivision review role.

Agricultural Land Preservation is more sharply in focus today than in recent past due primarily to the state program of income tax credits. In the period prior to 1955, the pattern which development took in Waukesha County to a large degree was simply an extension of existing development. The cities and villages as centers of business, social and administrative activity were also the areas of highest population in terms of concentration. Today the picture is substantially different with population distribution becoming more and more diffuse. A number of former towns have incorporated, others have lost ground through annexation and a substantial amount of farmland has been developed at densities which make the extension of public sewer and water service unnecessarily difficult and expensive. The population composition of town versus incorporated places for 1950, 1960, and 1970 as well as the estimated population composition for 1980 are shown below.

FIGURE I-1

POPULATION COMPARISONS (Towns vs. Municipalities)

	1950	1960	1970	1980
Towns	42,451 (49%)	44,930 (28%)	49,495 (21%)	71,517 (26%)
Municipalities	43,550 (51%)	113,319 (72%)	181,843 (79%)	208,809 (74%)
Total	85,901	158,249	231,338	280,326

Source: U.S. Census

The irony associated with the above population increases concerns the densities at which development has occurred over the past 25 years in the unincorporated areas of Waukesha County. More land has been and is being used to accommodate fewer persons on a per capita basis and the trend continues. This trend of low density development has had the effect of utilizing lands in a wasteful and extravagant manner if we assume the adopted Land Use Element of the Regional Plan and the goals it espouses is an optimization of land economy. As an indicator of lot density and its long term trend, the figure below shows for three periods (1954-1959, 1960-1969 and 1970-1979) the total number of residential subdivision lots created, the acreage devoted to those subdivision plats and the consequent figure representing the number of dwelling units per acre of development land. The number of acres consumed to provide development space for single family dwelling units has increased dramatically from the 50's to the 70's as shown on this table.

FIGURE I-2

DEVELOPMENT DENSITIES (1)

PERIOD	NUMBER OF LOTS	ACRES CONVERTED	DENSITY
1954 - 59	15,307	10,408	1.47
1960 - 69	9,956	7,727	1.28
1970 - 79	18,041	18,306	0.99

(1) These data apply only to lots created through Subdivision Plat procedures.

Source: Waukesha County Records

According to the year 2000 Regional Land Use Plan the 1970 urban population density was 2,900 persons/square mile and by 2000 is expected to be 2,400 persons/square mile anticipating further diffusion.

The adopted regional plan elements if we consider them to be optimum in terms of rational processes are by virtue of the nature of planning not achievable in an absolute sense. Compromises will be made, failures to adopt and implement are also distinct possibilities especially when the number of various local units of government is large. We have witnessed many development decisions at variance with adopted plans all of which proves the point that plans are dynamic living documents which change as the needs of people see fit. The developments of the past which have violated density and locational standards makes the present effort more difficult but at the same time we believe more necessary. The present effort is an attempt to reconcile previous conflicts and accommodate in a rational fashion future growth.

#### Chapter 29 - Laws of 1977

Chapter 29 of the Laws of 1977 resulted from a long hard struggle which followed an amendment to the Constitution of the State of Wisconsin. That amendment to the Constitution permitted the legislature to enact laws allowing the taxation of agricultural and undeveloped land on an other than uniform basis<sup>1</sup>. Much of the discussion at the time of the bill's consideration indicated that successful passage would provide farmers relief from the pressures to convert to other uses where the property tax burden was considered to be a critical factor. The law, modified in the session immediately following its enactment, guides the preparation of this planning effort though it is well to recognize the possibility of further modification over time.

The approach used by the legislature after lengthy consideration of alternatives was the circuit breaker approach which provides for a linkage to income tax relief rather than property tax as one might have expected in light of the referendum questions. The debate on the suitability of that approach continues in the Legislature with bills being offered in each subsequent session to alter the basic law as well as repeal it altogether.

- 1 The referendum question posed April, 1974 "Shall Section I of Article VIII of the Wisconsin Constitution be amended to permit the legislature to define agricultural land and undeveloped land and to allow that the taxation of such classes of land need not be uniform with one another nor with the taxation of other real property?", Passed by a vote of 50.4% to 49.6%.

Subchapter I of Chapter 29, entitled General Provisions, provides that "Maps shall be prepared first for those portions of the State where the need for agricultural preservation is of the highest priority. Priority shall be based upon the degree of threat of agricultural alteration, loss to other uses, agricultural quality and agricultural importance." Statewide comparable data indicating prices and amounts in acres of lands sold suggests that the threat is no greater anywhere in Wisconsin than right here in Waukesha County.

Subchapter II provides for Farmland Preservation agreements and specifies the rules and procedures to follow in obtaining an agreement.

Subchapter III addresses Initial Agreements which provide for the mechanism by which farmers participate in the program during the five year period prior to September 30, 1982 unless that period becomes foreshortened by the preparation and certification of an Agricultural Land Preservation Plan and an Exclusive Agricultural Zoning Ordinance.

Subchapter IV specifies the standards which must be met by County Agricultural Preservation Plans to enable farmland owners to participate in the program. It also deals with the preparation and content of such plans. The Plan which becomes an element of a County Development Plan as provided in Chapter 59.97 of the Wisconsin State Statutes must contain:

- a) Statements of Policy regarding preservation of agricultural lands, urban growth, the provision of public facilities and the protection of significant natural resources, open space, scenic, historic or architectural areas.
- b) Maps identifying agricultural areas to be preserved, areas of special environmental, natural resource or open space significance and, if any, transition areas. Transition areas shall be areas in predominantly agricultural use which the plan identifies for future development. Any agricultural preservation areas mapped must be a minimum of 100 acres. Any transition areas mapped must be a minimum of 35 acres. In mapping agricultural preservation areas, the maps identifying preliminary agricultural preservation areas prepared

under s. 91.05 shall be considered if the map is provided to the county at least 12 months prior to adoption of the Agricultural Preservation Plan.

The maps may include areas other than those mapped under s. 91.05. Areas mapped under s. 91.05 may be excluded from the county maps upon a finding that one or more of the following conditions exist:

- a) Existing or planned activities adjacent to the identified agricultural area are incompatible with agricultural use.
- b) The area is not economically viable for agricultural use.
- c) Substantial urban growth in the area or planned urban expansion has created a public need to convert agricultural land use to other uses.
- d) Maintenance of the area in agricultural use is not consistent with the goals and objectives of a county agricultural preservation plan.

Implementation of the plan through a program of specific public actions both to preserve agricultural lands and to guide urban growth is required by this subchapter.

Subchapter V, "Exclusive Agricultural Zoning" provides for the method of adoption, minimum standards for certification and specifies that exclusive agricultural zoning ordinances shall be consistent with County Agricultural Preservation plans established under subchapter IV.

#### Purpose and Scope of Planning Programs

The planning program as conceived by the Waukesha County Park and Planning Commission is intended to serve as a component of and be consistent with A County Development Plan.

The Waukesha County Board of Supervisors in its adoption of the Land Use Element of a Regional Land Use and a Regional Transportation Plan for Southeastern Wisconsin - 2,000 on August 21, 1979, took the positive step of authorizing the preparation of a prospectus for the development of a County Development Plan as recommended in the Regional Plan. The time frame under which that prospectus and the County Development Plan may follow is one year for the prospectus and the balance being determined by the prospectus steering committee and the County Board of Supervisors in its budget review and approval process. As of January, 1980, a committee has been appointed and is now working toward the preparation of a prospectus.

#### Program Participants Including Steering Committee Structure

The planning and mapping program will be conducted by the staff of the Waukesha County Park and Planning Commission. The steering committee for this work is the Waukesha County Park and Planning Commission with technical advice being solicited from the Soil Conservation Service Area Conservationist, Southeastern Wisconsin Regional Planning Commission, the State Soil Conservation Service Conservationist and other knowledgeable persons as necessary and as required during the course of the development of mapping to show areas to be considered for agricultural land preservation and ultimately in making recommendations with regard to the designation of agricultural preservation zones as well as agricultural transition zones.

#### Plan Development

Map and text preparation will be a staff function with citizen input obtained through public informational meetings and workshops. Thereafter a proposed plan consisting of several alternatives will be presented at public hearings with selection of a single alternative and recommendation transmitted to the Waukesha County Board of Supervisors for their consideration and possible approval.

#### State Standards

The Wisconsin Agricultural Land Preservation Board has adopted standards for both farmland mapping and planning which guided the preparation of plans by local units of government. This

study has been conducted in accord with those standards. The standards and the staff's point by point reaction to them is provided in Appendix A.

#### SUMMARY

Agricultural land preservation planning is a response to a need which has manifested itself through various events of the past. Countless hours of prior effort which attempted to address this issue comprehensively have not met with a high level of success. Since 1977, there has been an involvement at the State level which is having considerable impact state-wide. At the local level, no firm concensus has yet been reached but with the completion and dissemination of this plan that may change.

## CHAPTER II

### NATURAL RESOURCE BASE AND LAND USE

The natural resource base generally has been discussed, reported on and included in various adopted regional systems plans. This chapter will relate rather specifically to the natural resource base element most closely linked to agricultural land preservation, the soil for the production of food and fibre. Incidental to this will be a discussion of the uses of land which compete with agricultural production.

#### AGRICULTURAL SOILS

Within the scope of this project soils have been delineated in accordance with the mapping standards of the Agricultural Preservation Board. The staff of the Waukesha County Park and Planning Commission, utilizing criteria promulgated by the USDA-SCS<sup>1</sup> and adopted by the commission, has shown four categories of farmland rated soils in the initial set of resource maps. The categories are: National Prime Farmland, Farmland of Statewide Significance, Unique Soils and Farmland of Local Significance. The above categories are related to the more well known system of agricultural soils capability classes but do go beyond that classification system.

The agricultural interpretive soils maps have been prepared to support a multiple purpose, eg. public presentation and detailed examination of farm units being considered for agricultural land preservation. They along with many others prepared for this plan are listed in Appendix C and remain in commission files.

#### CAPABILITY GROUPS OF SOILS<sup>2</sup>

The Capability Groups of Soils as discussed in the Soil Survey of Milwaukee and Waukesha Counties are presented below. Those capability groups which are found in Waukesha County contain the characteristics which warrant the placement of specific soil

1. These criteria (LIM-WI-I) are reproduced in Appendix B.
2. Excerpted from "Soil Survey of Milwaukee and Waukesha Counties, Wisconsin" issued July, 1971.

types within the capability unit.

Capability classification is the grouping of soils to show, in a general way, their suitability for most kinds of farming. It is a practical classification based on limitations of the soils, the risk of damage when they are used, and the way they respond to treatment. The soils are classified according to degree and kinds of permanent limitation, but without consideration of major and generally expensive landforming that would change the slope, depth, or other characteristics of the soils; and without consideration of possible major reclamation.

In the capability system all soils are grouped at three levels, the capability class, subclass, and unit. These are discussed in the following paragraphs.

#### Capability Unit I-1 (Prime)<sup>1</sup>

This capability unit consists of deep, moderately well drained and well drained, nearly level soils of the Dodge, Grays, Juneau, Mayville, St. Charles, and Theresa series. These soils have moderate permeability, high available water capacity and high natural fertility. They are easily managed, conserved, and kept in good tilth.

Soils of this unit are well suited to the crops commonly grown in the survey area, and they can also be used for pasture, trees, or wildlife habitat. The main crops are field corn, oats, and alfalfa grown for hay, but some soybeans, canning corn, and peas are grown. An example of a cropping system that can be used is a row crop, a small grain, and 1 year of meadow. Row crops can be grown year after year if all crop residue is returned to the soils, if high fertility is maintained, and if tillage is kept to a minimum. Where less than 2 tons per acre of crops residue is available, a cover crop should be grown to supply a large amount of organic matter.

<sup>1</sup> The word in parenthesis following the capability unit is that which responds to the LIM-WI-I criteria utilized in mapping agricultural soils in this report.

#### Capability Unit IIe-1 (Prime)

Deep, moderately well drained and well drained, gently sloping soils of the Dodge, Grays, Griswold, Hochheim, Mayville, Miami, St. Charles, and Theresa series are in this capability unit. These soils have a surface layer of sandy loam to silt loam. They have moderate permeability, medium or high available water capacity, and moderate to high natural fertility. Moderate erosion is a hazard, but these soils are fairly easy to keep in good tilth. The main concerns of management are providing regular additions of organic matter, maintaining fertility and good soil structure, and controlling runoff.

Soils of this unit are well suited to corn, small grains, soybeans, and forage crops, and to canning peas and other special crops. They are also suitable for pasture, trees, and wildlife habitat. An example of a cropping system that can be used is a row crop, a small grain, and 3 years of hay.

#### Capability Unit IIe-2 (Prime)

This capability unit consists of well drained and moderately well drained, gently sloping soils of the Fox, Knowles, and Warsaw series. These soils have a surface layer of loam or silt loam, and they are underlain by bedrock or by sandy and gravelly outwash at some depth between 20 and 40 inches. Permeability is moderate, and the soils have medium available water capacity and moderate natural fertility. They are easy to cultivate but are slightly droughty and are subject to moderate erosion. Controlling erosion, providing regular additions of organic matter, and maintaining satisfactory available water capacity, fertility, and good tilth are the main concerns of management.

Soils of this unit are well suited to corn, small grains, soybeans, and forage crops. They are also well suited to canning peas and other special crops, and they can be used for pasture, trees, or wildlife habitat.

#### Capability Unit IIe-6 (Prime)

In this capability unit are deep, gently sloping soils of the Hebron, Kewaunee, Markham, Morely, Ozaukee, and Saylesville series. Most of these soils have a surface layer of silt loam.

They have a moderately slow to slowly permeable subsoil, are well drained or moderately well drained, and have high available water capacity. Some of the soils are eroded, and further erosion is a moderate hazard if cultivated crops are grown. Where erosion has removed part of the original surface layer and tillage extends into the clayey subsoil, these soils are difficult to work. Because water infiltrates slowly, much of the water from precipitation runs off, especially during periods of heavy rainfall. The main concerns of management are providing regular additions of organic matter, keeping the soils in good tilth, increasing the percolation rate, and controlling erosion.

Soils of this unit are well suited to corn, small grains, and forage crops. They are especially well suited to legumes. These soils can also be used for pasture, trees, and wildlife habitat.

Growing deep-rooted legumes increases the pore space in these soils. Channels formed when the legumes die and the roots decay increase the rate of water movement through the clayey subsoil.

#### Capability Unit IIw-1 (Prime)

This capability unit consists of deep, poorly drained, nearly level or gently sloping soils of the Askum, Brookston, Colwood, Drummer, Montgomery, Navan, and Pella series. These soils have a surface layer of silt loam or silty clay loam. They have a high water table and have moderate to slow permeability, high available water capacity, and moderate to high natural fertility. Erosion is a hazard in the gently sloping areas. Lowering the level of the water table, protecting these soils from overwash, and maintaining good tilth and adequate fertility are the major concerns of management. Tilth is the condition of a soil or seedbed in relation to the growth of plants, especially with regard to soil structure.

If these soils are adequately drained, they are suited to the crops commonly grown in the survey area. Truck crops, corn, small grains, and bromegrass and alfalfa for hay are the crops generally grown. Alfalfa is subject to frost heave, however, and small grains tend to lodge. In areas that do not have adequate drainage, alsike clover or Ladino clover can be substituted for alfalfa. Because of the excess moisture, trees

generally do not grow well, but these soils can be used for pasture or wildlife habitat.

In most places outlets are available so that tile drains can be installed. Where tile drains are used, good soil structure must be maintained so that excess moisture can move downward through the soil to the tile. If an outlet is not available, surface drains can be used.

#### Capability Unit IIw-2 (Prime)

This capability unit consists of deep, somewhat poorly drained, nearly level or gently sloping soils of the Aztalan, Blount, Elliot, Griswold, Kendall, Lamartine, Manawa, Martinton, Mequon, Mundelein, Pistakee and Virgil series. These soils have a surface layer of loam or silt loam. They have moderate to slow permeability, high available water capacity, and moderate to high natural fertility. Erosion is a slight hazard in the gently sloping area. These soils dry out slowly in spring and after long rainy spells, and they warm up slowly in spring. Disposing of excess water, providing regular additions of organic matter, and maintaining fertility and good tilth are the major concerns of management.

If these soils are properly drained, they are suited to the crops commonly grown in the survey area. Corn, small grains, and bromegrass and alfalfa for hay are the crops commonly grown, and soybeans, truck crops, and canning crops are grown to a lesser extent. In areas not adequately drained, alfalfa is subject to winterkill and to damage from frost heaving. In those areas, red clover, alsike clover, or Ladino clover can be substituted for alfalfa. Permanent pasture, woodland, and wildlife habitat are other suitable uses for these soils.

Surface drains can be used to remove the excess water, but outlets are generally available so that tile drains can also be used. Diversions can be used to reduce the length of the slopes and to protect these soils from overwash.

#### Capability Unit IIw-5 (Unique)

This capability unit consists of somewhat poorly drained, nearly level or gently sloping soil of the Fabius, Kane, Matherton,

Mussey, and Seveva series. Most of these soils have a surface layer of silt loam or loam, but one of the Matherton soils has a surface layer of sandy loam. All of the soils have a substratum of loose sand and gravel at a depth of 24 to 40 inches. Natural fertility and the available water capacity are medium, and permeability is moderate. These soils have a high or fluctuating water table. Providing regular additions of organic matter, maintaining good soil tilth and fertility, controlling erosion in the gently sloping areas, and draining the soils so that the water table will be lowered are the major concerns of management. Drainage is needed before cultivated crops can be successfully grown, and it can be provided by installing open ditches.

Where soils of this unit are properly drained, they are suited to most crops commonly grown in the survey area. These soils are also suitable for permanent pasture, trees, or use as wildlife habitat. Corn, small grains, and Ladino clover or red clover and brome grass are the crops commonly grown. The high water table makes these soils poorly suited to alfalfa. A cropping system consisting mostly of crops that do not require much cultivation will help to control erosion in the gently sloping areas.

Capability Unit IIw-13 (Unique) , ,

In this capability unit are nearly level, somewhat poorly drained, deep soils of the Lawson and Walkkill series. The Lawson soil is typically silt loam throughout, but it overlies a poorly drained soil in places. The Walkkill soil consists of silty material over a buried organic soil. Both of these soils have a high water table, are subject to overflow from adjacent streams, and receive extra water that runs off higher slopes. Permeability is moderate, and natural fertility and the available water capacity are high.

Excess water is the main limitation to use of these soils for crops. Drainage must be provided before cultivated crops can be successfully grown. Where outlets are available, tile drains can be used for draining the Walkkill soil. Tile drains are not suitable for removing excess water from the Lawson soil, but open ditches and surface drains can be used. The soils also need protection from flooding and overwash. Areas not protected from flooding can be used for pasture, as woodland, or as wildlife habitat.

Capability Unit IIs-1 (Prime)

This capability unit consists of well drained or moderately well drained, nearly level soils of the Fox, Knowles, and Warsaw series. These soils have a surface layer of loam or silt loam, and they are underlain by bedrock or by sandy and gravelly outwash at some depth between 20 and 40 inches. They are easy to cultivate but are slightly droughty during extended periods of dry weather. Permeability is moderate and the available water capacity and natural fertility are medium.

Soils of this unit are suited to the crops commonly grown in the survey area, and they can also be used for pasture, as woodland, or for development of wildlife habitat. Corn, small grains, and alfalfa and bromegrass for hay are the principal crops, but truck crops, canning peas, and soybeans are also grown.

Capability Unit IIs-7 (Prime)

This capability unit consists of moderately deep or deep, moderately well drained or well drained, nearly level soils of the Hebron and Saylesville series. These soils are on low stream benches or on flats covered by lacustrine material. They have a surface layer of loam or silt loam and a clayey subsoil or substratum. Permeability is slow, natural fertility is moderate or high, and the available water capacity is high. These soils dry out slowly in spring and after heavy rains. Their content of organic matter is rather low. Supplying regular additions of organic matter and maintaining good soil tilth are the major concerns of management.

Soils of this unit are suited to all the crops commonly grown in the survey area, but they are especially well suited to legumes. Pasture, woodland, and development for wildlife habitat are also suitable uses. Where these soils are cultivated, the principal crops are corn, small grains and forage crops. The risk of puddling is reduced if tillage is delayed until the soil is dry enough that it is firm. Deep-rooted legumes help to make the subsoil more permeable.

Capability Unit IIIe-1 (Statewide Significance)

In this capability unit are deep, well-drained, sloping, eroded,

Griswold, Hochheim, Miami, and Theresa soils that have a surface layer of sandy loam to silt loam. These soils are moderately fertile and are easy to cultivate. They are moderately permeable and have medium or high available water capacity. The content of organic matter is generally low. Further erosion is a hazard unless these soils are properly managed.

Cultivated areas of these soils are used mostly for corn, small grains, and legume hay, and the areas not cultivated are in pasture or woodlots. These soils can also be used as wildlife habitat.

#### Capability Unit IIIe-2 (Statewide Significance)

This capability unit consists of sloping, moderately eroded Fox and Warsaw soils on outwash plains and river terraces. The surface layer of these soils is silt loam to sandy loam, and their substratum is loose sand and gravel at some depth between 20 and 40 inches. These soils are moderately permeable, have medium available water capacity, and have moderate natural fertility. They are easy to cultivate but are slightly droughty. Providing regular additions of organic matter, maintaining good tilth and fertility, conserving moisture, and controlling erosion are the major concerns of management.

These soils are suited to corn, small grains, legume hay, and other crops commonly grown in the survey area. Small areas not cultivated can also be used for pasture, as woodland, or as wildlife habitat.

#### Capability Unit IIIe-3 (Statewide Significance)

Only one soil, Ritchey silt loam, 1 to 6 percent slopes, is in this capability unit. It is a well-drained soil of the uplands. Dolomite bedrock is at a depth of less than 20 inches. This soil has moderate permeability and rather low natural fertility. It is somewhat droughty because the available water capacity is low. The major concerns of management are controlling runoff and erosion.

The crops generally grown are corn, small grains, and forage crops. Areas in which bedrock crops out at the surface or is so close to the surface that it could interfere with tillage are

generally in permanent pasture or woodlots, or they are used as wildlife habitat.

Capability Unit IIIe-4 (Statewide Significance)

In this capability unit are well-drained, gently sloping, droughty soils of the Casco and Lorenzo series. These soils are on outwash plains and stream terraces. They have a surface layer of sandy loam or loam, and they are moderately deep over loose, rapidly permeable sand or gravel. The subsoil is moderately permeable. Natural fertility is generally low, and the available water capacity is low. These soils are slightly susceptible to erosion. Providing regular additions of organic matter, maintaining fertility, conserving moisture, and controlling erosion are the main concerns of management.

Soils of this unit are used mostly for growing corn, small grains, and forage crops. They are not well suited to these crops, however, unless precipitation is adequate and is evenly distributed throughout the growing season. Areas not cultivated are used for pasture or trees. They can also be used for the development of wildlife habitat.

Capability Unit IIIe-6 (Prime)

This capability unit consists of deep, well drained or moderately well drained, moderately eroded Hebron, Kewaunee, Morley, Ozaukee, and Saylesville soils on glaciated uplands and in the basin of former glacial lakes. These soils have a surface layer of silt loam or loam, and a clayey subsoil or substratum. Natural fertility is generally moderate, and the available water capacity is high. The soils have a low content of organic matter and a slowly permeable subsoil. They are difficult to manage and to keep in good tilth, and they are susceptible to further erosion unless good management is used. Providing regular additions of organic matter, improving tilth, increasing permeability, and controlling erosion are all major concerns of management.

Cultivated crops are grown on most areas of these soils. Corn, small grains, and grasses and legumes grown for hay are the main crops, but shallow-rooted truck crops and soybeans are also grown. These soils are especially well suited to alfalfa. Alfalfa improves the permeability of the subsoil because its

roots penetrate deeply and form channels through which water can flow. Small areas of these soils are in permanent pasture or woodlots, and these areas can be developed as habitat for wildlife.

Capability Unit IIIe-7 (Statewide Significance)

This capability unit consists of well-drained, sloping soils of the Boyer series. These soils have a loamy sand surface layer and a sandy loam subsoil over sandy underlying material. Natural fertility, organic-matter content, and available water capacity are low. The soils have moderately rapid permeability and are subject to blowing where the surface is bare and exposed to the wind. Water erosion also is a hazard because of slope and the erodible soils.

These soils are poorly suited to crops because of droughtiness. Corn, small grains, forage crops, and other crops can be grown but do not grow well in dry periods.

Some areas are in pasture or woodlots or can be developed as habitat for wildlife.

Capability Unit IIIw-3 (Statewide Significance)

In this capability unit are somewhat poorly drained and poorly drained, nearly level and gently sloping soils in depressions and drainageways. These are soils of the Pella series, moderately shallow variant, and of the Richey series, mottled subsoil variant. They have a surface layer of silt loam. The Pella soil is underlain by bedrock at some depth between 24 and 40 inches, and the Richey soil is underlain by bedrock at a depth of about 29 inches.

Soils of this unit have moderate or moderately slow permeability, moderate to high natural fertility, and medium available water capacity. They are susceptible to overwash, overflow, and ponding, and the gently sloping areas are slightly susceptible to erosion. Preventing overwash and lowering the water table are the main concerns of management.

Surface drainage is needed before row crops can be satisfactorily grown. Because bedrock is so near the surface, however, establishing drainage by installing open ditches is difficult and

installing tile drains is not feasible. Where drainage is adequate, the soils are suited to most crops commonly grown in the survey area. Small grains tend to lodge, and the soils are better suited to red clover, Ladino clover, and alsike clover than to alfalfa. Shallow-rooted truck crops and soybeans are grown in some places. Undrained areas are used as pasture, woodland, or wildlife habitat.

#### Capability Unit IIIw-5 (Statewide Significance)

Deep, somewhat poorly drained or poorly drained, nearly level soils of the Gilford and Granby series are in this capability unit. These soils are in drainageways, on low stream terraces, and on flats of outwash plains. They have a loamy surface layer and have moderately low natural fertility, moderately rapid permeability, and medium available water capacity. The water table is high, and flooding or ponding is a hazard. Lowering the water table, providing protection from flooding, maintaining fertility, and protecting these soils from blowing are the major concerns of management.

Most areas of these soils are undrained and are used as pasture, woodland, and wildlife habitat. Where the soils are drained, they are suited to corn, small grains, and forage crops, and they are also used for shallow-rooted truck crops to some extent. Open ditches are suitable for lowering the water table.

#### Capability Unit IIIw-8 (Statewide Significance)

Ogden muck, which is very poorly drained and is nearly level or gently sloping, is the only soil in this capability unit. This soil is in areas adjacent to lake basins, in potholes, on bottoms along streams, and in seep areas adjacent to outwash plains. It is underlain by clayey material at some depth within 42 inches of the surface. Natural fertility is low, the available water capacity is very high, and permeability is slow. This soil is deficient in phosphorus and potash. The gently sloping areas are slightly susceptible to erosion.

If this soil is to be used for cultivated crops, it must be drained by installing open ditches, tile drains, or a combination of open ditches and tile drains. Where the tile is well blinded, it can be laid in the clayey substratum. Subsidence, blowing,

and damage from fire are hazards after this soil is drained. Controlling drainage is desirable to prevent excessive subsidence of the organic material and to lessen the risk of damage from fire. The crops most commonly grown are corn, soybeans, bluegrass for sod, and onions, potatoes, carrots, and other truck crops. The undrained areas are used as native pasture, for woodlots, or as habitat for wildlife.

Capability Unit IIIw-9 (Statewide Significance)

This capability unit consists of very poorly drained, deep, nearly level or gently sloping Houghton soils, on bottoms along streams, in potholes and basins of old glacial lakes, and in seep areas adjacent to uplands. These soils are made up of muck and peaty muck. They have low natural fertility and very high available water capacity. Permeability is moderate, but internal drainage is slow. These soils are deficient in phosphorus and potash. Erosion is a slight hazard in the gently sloping areas.

These soils must be drained by means of open ditches, tile drains, or both if they are to be used for cultivated crops. After the soils are drained, they are subject to subsidence, blowing, and damage from fire. Controlling drainage is desirable to prevent excessive subsidence and to lessen the risk of damage from fire. The crops most commonly grown are corn, soybeans, bluegrass for sod (pl. VI), and mint, cabbage, potatoes, onions, carrots, and other truck crops. Undrained areas are in native pasture and woodlots, or they are used as wildlife habitat.

Capability Unit IIIw-12 (Statewide Significance)

Only Alluvial land, a deep, moderately well drained, loamy, nearly level land type on the flood plains of streams, is in this capability unit. This land type has moderate natural fertility and medium available water capacity. It is easy to cultivate but is subject to periodic flooding. Protection from streambank cutting is needed, and surface drainage is needed in places to remove the excess water from depressions.

Where the hazard of flooding is not severe during the growing season, row crops can be grown year after year. Where flooding is frequent, this land type is better suited to use as pasture,

as woodland, or for development of habitat for wildlife than to field crops.

Capability Unit IIIs-4 (Statewide Significance)

In this capability unit are well-drained, nearly level and gently sloping, droughty soils of the Boyer, Fox, Oshtemo, and Warsaw series. These soils are on outwash plains and stream terraces. They have a surface layer of sandy loam or loamy sand and a substratum of sand or of stratified sand and gravel. Permeability is moderate to moderately rapid, and the available water capacity and natural fertility are medium to low. The content of organic matter is low, and soil blowing is a hazard unless these soils are protected. Water erosion is a hazard in the gently sloping areas. Providing regular additions of organic matter and plant nutrients, conserving moisture, and controlling erosion are the main concerns of management.

Droughtiness makes these soils poorly suited to crops. Corn, small grains, forage crops, and other common crops can be grown, but they do not grow well in dry seasons. Small areas that are not used for cultivated crops are in pasture or woodlots, and these can be developed for wildlife habitat.

Capability Unit IVe-4 (Unique)

This capability unit consists of well-drained or excessively drained, sloping, eroded, droughty soils of the Casco, Lorenzo, and Rodman series. These soils are on outwash plains and glaciated uplands. They have a loam surface layer. All of the soils have a substratum of loose, sandy glacial drift, and some of them have a gravelly substratum. Most of these soils have a moderately permeable subsoil and a rapidly permeable substratum, but the Rodman soil has a subsoil and a substratum that are very rapidly permeable. Natural fertility is low or very low and the available water capacity is low. Further erosion is a moderate hazard. Controlling erosion, conserving moisture, providing regular additions of organic matter, and maintaining fertility are the main concerns of management.

These soils are used mostly for crops. The areas not cultivated are used as permanent pasture or woodlots, and they can be developed as habitat for wildlife. Where these soils are used for

permanent pasture, controlling grazing and renovating the pastures when the stand becomes thin will help to maintain a desirable cover of plants and will help to check erosion. Topdressing the pastures each year helps to maintain a good stand of long-lived plants.

#### Capability Unit VIe-4 (Unique)

This capability unit consists of well-drained and excessively drained, mostly moderately steep, droughty soils of the Casco, Hochheim, Lorenzo and Rodman series. These soils are loamy and are shallow to moderately deep over sandy glacial drift. They are on pitted outwash plains, terrace escarpments, and glaciated uplands. Most of the soils are already eroded, and further severe erosion is a hazard if cultivated crops are grown.

Soils of this unit are not suited to row crops, and for the most part, they have remained in woodlots. The areas are generally suitable for wildlife, and many of them are used as permanent pasture. In places small severely eroded areas of these soils are within fields made up mostly of soils better suited to tillage, and they are farmed with these other soils. In such severely eroded spots, large applications of organic matter, including barnyard manure, are needed if a satisfactory stand of forage plants is to be obtained.

#### YIELD PREDICTIONS

Another way of using the characteristics of specific soils to aid in the planning process is through yield predications of certain crops. The figure below lists corn, oats and alfalfa yields under two levels of management for many of the soils found in Waukesha County.

FIGURE II-1

PREDICTED AVERAGE ACRE YIELDS OF PRINCIPAL CROPS UNDER TWO LEVELS OF MANAGEMENT

[Predicted yields in columns A are those obtained under average management; predicted yields in columns B are those obtained under improved, or a high level of, management. Absence of a yield figure indicates that the soil is not suited to the crop, or that the crop is not ordinarily grown on the soil]

Soil	Corn				Oats		Alfalfa-brome hay 1/ (dry weight)	
	Grain		Silage		A	B <sup>2/</sup>	A	B
	A	B	A	B				
	Bu.	Bu.	Tons	Tons	Bu.	Bu.	Tons	Tons
Adrian muck-----	--	--	12.0	17.0	--	--	---	---
Alluvial land 3/-----	70	100	11.0	16.0	50	65	3.0	4.0
Ashkun silty clay loam, 0 to 3 percent slopes-----	70	100	12.0	17.0	50	65	---	4.0
Aztalan loam, 0 to 2 percent slopes-----	65	100	11.0	17.0	50	60	2.5	4.5
Aztalan loam, 2 to 6 percent slopes-----	65	100	11.0	17.0	50	60	2.5	4.5
Blount silt loam, 1 to 3 percent slopes-----	65	100	12.0	17.0	50	65	2.5	4.0
Boyer loamy sand, 1 to 6 percent slopes-----	45	65	8.0	11.0	35	50	1.5	2.5
Boyer loamy sand, 6 to 12 percent slopes, eroded-----	40	60	7.5	10.0	30	45	1.25	2.25
Boyer sandy loam, 1 to 6 percent slopes-----	55	70	9.0	12.0	40	55	1.5	2.5
Brookston silt loam, 0 to 3 percent slopes-----	75	115	13.0	18.0	50	65	---	4.0
Casco sandy loam, 2 to 6 percent slopes-----	50	65	8.0	11.0	30	45	1.5	2.5
Casco sandy loam, 6 to 12 percent slopes, eroded-----	45	60	7.0	10.0	30	40	1.25	2.25
Casco sandy loam, 12 to 20 percent slopes, eroded-----	--	--	---	---	25	35	1.0	2.0
Casco loam, 2 to 6 percent slopes-----	50	70	8.0	12.0	40	55	1.75	2.75
Casco loam, 6 to 12 percent slopes, eroded-----	45	65	7.0	11.0	35	50	1.5	2.5
Casco loam, 12 to 20 percent slopes, eroded-----	--	---	---	---	30	45	1.25	2.25
Casco solls, 6 to 12 percent slopes, severely eroded-----	--	---	---	---	30	45	1.25	2.25
Casco-Rodman complex, 6 to 12 percent slopes, eroded-----	35	50	6.0	10.0	35	50	1.5	2.5
Casco-Rodman complex, 12 to 20 percent slopes-----	--	---	---	---	30	45	1.25	2.25
Casco-Rodman complex; 20 to 30 percent slopes-----	--	---	---	---	--	--	1.0	2.0
Chelsea fine sand, 1 to 6 percent slopes-----	30	40	4.5	6.5	25	35	1.0	2.0
Chelsea fine sand, 6 to 20 percent slopes-----	15	25	4.0	5.0	20	30	1.0	2.0
Colwood silt loam-----	65	95	12.0	16.0	45	60	---	4.0
Dodge silt loam, 0 to 2 percent slopes-----	80	110	13.0	17.0	60	75	3.0	4.5
Dodge silt loam, 2 to 6 percent slopes-----	80	110	13.0	17.0	60	75	3.0	4.5
Drummer silt loam, gravelly substratum-----	70	110	12.0	18.0	45	65	---	4.0
Elliott silt loam, 1 to 3 percent slopes-----	65	100	12.0	17.0	50	65	2.5	4.0
Fabius loam, 1 to 3 percent slopes-----	55	80	9.0	14.0	40	55	2.0	3.0
Fox sandy loam, 0 to 2 percent slopes-----	50	70	8.0	12.0	40	55	1.75	2.5
Fox sandy loam, 2 to 6 percent slopes-----	48	68	7.5	11.0	35	50	1.75	2.25
Fox sandy loam, 6 to 12 percent slopes, eroded-----	40	60	7.0	9.5	30	40	1.25	1.75
Fox sandy loam, loamy substratum, 2 to 6 percent slopes-----	50	70	8.0	12.0	40	55	2.0	2.5
Fox loam, 0 to 2 percent slopes-----	50	80	9.0	13.0	45	60	2.5	3.25
Fox loam, 2 to 6 percent slopes-----	50	80	9.0	13.0	45	60	2.5	3.25
Fox loam, 6 to 12 percent slopes, eroded-----	45	70	8.0	11.0	35	50	2.0	2.75
Fox silt loam, 0 to 2 percent slopes-----	60	85	10.0	14.0	50	65	2.5	3.5

See footnotes at end of table.

PREDICTED AVERAGE ACRE YIELDS OF PRINCIPAL CROPS UNDER TWO LEVELS OF MANAGEMENT--Continued

Soil	Corn				Oats		Alfalfa-brome hay 1/ (dry weight)	
	Grain		Silage		A	B <sup>2/</sup>	A	B
	A	B	A	B				
	Bu.	Bu.	Tons	Tons	Bu.	Bu.	Tons	Tons
Fox silt loam, 2 to 6 percent slopes-----	58	83	9.5	13.0	48	63	2.25	3.25
Fox silt loam, 6 to 12 percent slopes, eroded-----	45	75	8.0	11.0	40	55	2.0	2.75
Fox silt loam, loamy substratum, 2 to 6 percent slopes-----	55	80	9.0	12.0	45	60	2.25	3.0
Gilford loam-----	65	90	11.0	15.0	40	65	----	3.0
Granby fine sandy loam-----	80	60	11.0	13.0	45	60	----	3.0
Grays silt loam, 0 to 2 percent slopes----	70	95	12.0	16.0	50	70	3.0	4.5
Grays silt loam, 2 to 6 percent slopes----	70	95	12.0	16.0	50	70	3.0	4.5
Griswold silt loam, 2 to 6 percent slopes----	70	90	12.0	15.0	50	60	2.5	3.5
Griswold silt loam, 6 to 12 percent slopes, eroded-----	60	80	11.0	14.0	43	53	2.0	3.0
Griswold silt loam, mottled subsoil var- iant, 2 to 6 percent slopes-----	75	110	12.0	17.0	55	65	2.5	4.0
Hebron loam, 0 to 2 percent slopes-----	80	110	12.0	17.0	55	70	3.0	4.5
Hebron loam, 2 to 6 percent slopes-----	75	105	11.0	16.5	50	65	2.75	4.25
Hebron loam, 6 to 12 percent slopes, eroded-----	65	95	10.0	15.5	45	60	2.5	3.75
Hochheim loam, 2 to 6 percent slopes-----	75	100	12.5	17.0	55	70	3.0	4.5
Hochheim loam, 2 to 6 percent slopes, eroded-----	70	95	12.0	16.0	55	70	2.75	4.25
Hochheim loam, 6 to 12 percent slopes, eroded-----	65	90	11.0	15.0	50	65	2.5	4.0
Hochheim loam, 12 to 20 percent slopes, eroded-----	50	80	10.0	13.5	40	55	2.25	3.5
Hochheim loam, 20 to 30 percent slopes, eroded-----	--	---	----	----	--	--	1.75	2.75
Hochheim soils, 6 to 12 percent slopes, severely eroded-----	50	70	8.0	11.0	35	50	2.0	3.0
Hochheim soils, 12 to 20 percent slopes, severely eroded-----	--	---	----	----	30	45	2.0	3.0
Hochheim soils, 20 to 30 percent slopes, severely eroded-----	--	---	----	----	--	--	2.0	3.0
Houghton muck, 0 to 2 percent slopes-----	--	---	15.0	19.0	--	--	----	----
Houghton muck, 2 to 6 percent slopes-----	--	---	15.0	19.0	--	--	----	----
Junoau silt loam, 1 to 3 percent slopes----	75	105	12.0	17.0	55	70	3.5	4.5
Kane silt loam-----	80	100	13.0	17.0	45	65	2.5	3.5
Kendall silt loam, 1 to 3 percent slopes--	80	115	13.0	18.0	55	65	2.5	4.5
Kewaunee silt loam, 2 to 6 percent slopes----	60	100	10.0	16.0	55	85	2.5	4.0
Kewaunee silt loam, 6 to 12 percent slopes, eroded-----	55	95	9.5	15.5	50	80	2.25	4.0
Knowles silt loam, 0 to 2 percent slopes--	60	85	10.0	14.0	50	70	2.5	3.5
Knowles silt loam, 2 to 6 percent slopes--	60	85	10.0	14.0	50	70	2.5	3.5
Lamartine silt loam, 1 to 4 percent slopes-----	75	115	12.0	18.0	55	65	2.5	4.0
Lawson silt loam <sup>3/</sup> -----	70	110	12.0	18.0	45	65	2.0	4.0
Lorenzo loam, 2 to 6 percent slopes, eroded-----	45	70	7.0	11.0	40	55	1.75	2.75
Lorenzo loam, 6 to 12 percent slopes, eroded-----	40	65	6.0	10.0	35	50	1.5	2.5
Lorenzo loam, 12 to 20 percent slopes, eroded-----	--	---	----	----	30	40	1.25	2.25

See footnotes at end of table.

PREDICTED AVERAGE ACRE YIELDS OF PRINCIPAL CROPS UNDER TWO LEVELS OF MANAGEMENT--Continued

Soil	Corn				Oats		Alfalfa-brome hay 1/ (dry weight)	
	Grain		Silage		A	B <sup>2/</sup>	A	B
	A	B	A	B				
	Bu.	Bu.	Tons	Tons	Bu.	Bu.	Tons	Tons
Manawa silt loam, 1 to 3 percent slopes---	60	90	10.0	15.0	50	75	2.5	4.0
Markham silt loam, 2 to 6 percent slopes---	65	100	12.0	17.0	50	70	3.0	4.5
Martinton silt loam, 1 to 3 percent slopes-----	70	105	12.0	17.0	50	65	3.0	4.5
Matherton sandy loam, 1 to 3 percent slopes-----	60	85	10.0	14.0	40	55	2.0	3.0
Matherton silt loam, 1 to 3 percent slopes-----	65	90	11.0	15.0	45	60	2.5	3.5
Mayville silt loam, 0 to 2 percent slopes---	80	105	13.0	17.0	60	75	3.0	4.5
Mayville silt loam, 2 to 6 percent slopes---	80	105	13.0	17.0	60	75	3.0	4.5
Mequon silt loam, 1 to 3 percent slopes---	65	100	12.0	17.0	50	65	2.5	4.0
Miami sandy loam, sandy loam substratum, 2 to 6 percent slopes---	60	80	10.5	13.5	48	60	2.0	3.0
Miami sandy loam, sandy loam substratum, 6 to 12 percent slopes, eroded-----	55	75	9.0	12.0	40	50	2.0	2.5
Miami loam, sandy loam substratum, 2 to 6 percent slopes-----	70	90	12.0	15.0	55	70	2.5	3.5
Miami loam, sandy loam substratum, 6 to 12 percent slopes, eroded-----	60	80	10.0	13.0	45	60	2.0	3.0
Miami loam, sandy loam substratum, 12 to 20 percent slopes, eroded-----	55	75	9.0	12.0	40	55	1.75	2.75
Miami loam, sandy loam substratum, 20 to 30 percent slopes-----	--	--	--	--	--	--	1.25	2.0
Montgomery silty clay loam-----	65	100	11.0	17.0	40	60	----	4.0
Morley silt loam, 2 to 6 percent slopes---	65	100	12.0	17.0	50	70	3.0	4.5
Morley silt loam, 2 to 6 percent slopes, eroded-----	62	95	11.5	16.5	45	65	2.75	4.25
Morley silt loam, 6 to 12 percent slopes, eroded-----	55	85	10.0	15.0	37	57	2.25	3.75
Morley silt loam, 12 to 20 percent slopes, eroded-----	--	--	--	--	35	50	2.0	3.5
Mundelein silt loam, 1 to 3 percent slopes-----	75	100	12.0	17.0	45	65	3.0	4.0
Mussey loam-----	55	80	9.0	13.0	40	55	----	2.5
Navan silt loam-----	65	115	12.0	18.0	45	65	----	4.0
Ogden muck-----	--	--	15.0	19.0	--	--	----	----
Oshtemo loamy sand, 1 to 6 percent slopes---	45	65	8.0	11.0	35	50	1.5	2.5
Oshtemo sandy loam, 1 to 6 percent slopes---	45	65	8.0	11.0	35	50	1.5	2.5
Ozaukee silt loam, 2 to 6 percent slopes---	65	100	12.0	17.0	50	70	3.0	4.5
Ozaukee silt loam, 2 to 6 percent slopes, eroded-----	62	95	11.5	16.5	45	65	2.75	4.25
Ozaukee silt loam, 6 to 12 percent slopes, eroded-----	55	85	10.5	15.0	40	60	2.25	3.75
Ozaukee silt loam, 12 to 20 percent slopes, eroded-----	--	--	--	--	35	50	2.0	3.5
Palms muck-----	--	--	15.0	19.0	--	--	----	----
Pella silt loam-----	75	115	12.0	18.0	55	65	----	----
Pella silt loam, moderately shallow variant 4/-----	65	105	11.0	17.0	55	65	----	4.0
Pistakee silt loam, 1 to 3 percent slopes 3/-----	70	105	12.0	16.0	50	75	3.0	1.0
Ritchey silt loam, 1 to 6 percent slopes---	50	70	8.0	12.0	40	55	1.5	2.5

See footnotes at end of table.

PREDICTED AVERAGE ACRE YIELDS OF PRINCIPAL CROPS UNDER TWO LEVELS OF MANAGEMENT--Continued

Soil	Corn				Oats		Alfalfa-brome hay <sup>1/</sup> (dry weight)	
	Grain		Silage		A	B <sup>2/</sup>	A	B
	A	B	A	B				
	Bu.	Bu.	Tons	Tons	Bu.	Bu.	Tons	Tons
Ritchey silt loam, 6 to 12 percent slopes, eroded-----	45	65	7.5	11.5	35	50	1.25	2.25
Ritchey silt loam, 12 to 30 percent slopes-----	--	---	----	----	--	--	1.0	2.0
Ritchey silt loam, mottled subsoil var- iant, 1 to 3 percent slopes <sup>4/</sup> -----	50	80	8.0	13.0	45	70	2.0	3.5
Rollin muck, deep-----	--	---	12.0	17.0	--	--	----	----
St. Charles sandy loam, gravelly substra- tum, 1 to 3 percent slopes-----	75	110	11.0	17.0	55	70	3.0	4.0
St. Charles silt loam, 0 to 2 percent slopes-----	80	115	14.0	18.0	65	75	3.0	4.5
St. Charles silt loam, 2 to 6 percent slopes-----	80	115	14.0	18.0	65	75	3.0	4.5
St. Charles silt loam, gravelly substra- tum, 0 to 2 percent slopes-----	80	115	12.0	18.0	60	75	3.0	4.5
St. Charles silt loam, gravelly substra- tum, 2 to 6 percent slopes-----	80	110	12.0	18.0	60	75	3.0	4.5
Sawmill silt loam, calcareous variant <sup>3/</sup> --	--	110	----	18.0	--	--	----	----
Saylesville silt loam, 0 to 2 percent slopes-----	65	85	12.0	14.0	50	70	3.0	4.5
Saylesville silt loam, 2 to 6 percent slopes-----	65	85	12.0	14.0	50	70	3.0	4.5
Saylesville silt loam, 2 to 6 percent slopes, eroded-----	60	80	11.0	13.0	45	65	2.75	4.25
Saylesville silt loam, 6 to 12 percent slopes, eroded-----	55	75	10.0	12.0	40	60	2.5	4.0
Sebewa silt loam-----	65	90	11.0	15.0	45	65	----	4.0
Theresa silt loam, 0 to 2 percent slopes--	70	105	12.0	16.5	50	70	2.75	4.5
Theresa silt loam, 2 to 6 percent slopes--	70	100	12.0	16.0	50	65	2.5	4.5
Theresa silt loam, 2 to 6 percent slopes, eroded-----	65	95	11.5	15.5	45	63	2.25	4.25
Theresa silt loam, 6 to 12 percent slopes, eroded-----	60	90	10.5	14.5	40	60	2.0	4.0
Virgil silt loam, gravelly substratum, 0 to 3 percent slopes-----	80	115	12.0	18.0	55	70	3.0	4.5
Wallkill silt loam <sup>3/</sup> -----	80	105	13.0	17.0	40	60	----	----
Warsaw sandy loam, 2 to 6 percent slopes--	55	80	9.0	13.0	40	55	2.0	3.0
Warsaw loam, 0 to 2 percent slopes-----	65	90	11.0	15.0	50	65	2.5	3.5
Warsaw loam, 2 to 6 percent slopes-----	60	85	10.0	14.0	45	60	2.25	3.25
Warsaw loam, 6 to 12 percent slopes, eroded-----	55	80	9.0	13.0	40	55	2.0	3.0
Warsaw silt loam, 0 to 2 percent slopes--	70	95	11.0	15.0	55	70	2.0	3.0
Wasepi sandy loam, 1 to 3 percent slopes--	60	80	10.0	13.0	40	60	2.0	3.0

<sup>1/</sup> Yields are for hay cut during the first or second years after the stand is adequately established.

<sup>2/</sup> Yields are for oats seeded with a grass-legume mixture.

<sup>3/</sup> Yields are for areas of this soil that are protected from flooding.

<sup>4/</sup> Drainage suitable for a high level of management cannot be installed in some places, because of bedrock.

Source: Soil Survey of Milwaukee and Waukesha Counties Wisconsin

## WETLAND SOILS

Wetland soils have been inventoried in an informal study done by the USDA-SCS Waukesha office in July, 1973. A full set of the resulting maps at the 1" = 1,000' scale has been compiled so that these soils can be considered in deliberations with regard to agricultural land preservation. FIGURE II-2 shows the acreage of the various soil types associated with the wetlands of Waukesha County.

Generally, the wetland soils align themselves along the environmental corridors and may include floodplains, as well as broad low areas characterized by poor surface drainage such as that associated with Kettle Moraine topography.

The State Department of Natural Resources is presently engaged in a legislatively mandated Wisconsin Wetlands Inventory as provided by Chapter 23.32, and is developing the procedures and defining the areas to be included in that inventory. In this region SEWRPC is delineating those wetlands in a project scheduled for completion in December 1980<sup>1</sup>. The resultant inventory should coincide closely with the present inventory.

Given the distribution of wetland soils as exhibited on the set of wetland soils maps, it is apparent that many farmed areas contain wetland soils. Similarly, urban development has located adjacent to and in some cases on wetland soils. It is useful to have this set of maps now so that the consideration given to agricultural land preservation as well as developing growth management strategies takes into account this important aspect of the natural resource base. The natural functions served by many wetlands are ones vital to water quality, ground water supply and wildlife habitat management.

The USDA-SCS policy with regard to providing technical assistance prohibits aid which results in draining or other land alteration on any wetlands<sup>2</sup>. This underlying constraint is relevant to any recommendations which may come out of this effort since it isn't likely that such lands will be planned for cultivation, tiling,

1. Source: SEWRPC minutes of Quarterly meeting, March 6, 1980.
2. Conservation Planning Memorandum 15, Kenneth E. Grant, Administrator SCS, May 5, 1975. Appendix 'D'.

or draining, but rather would be planned for soil conservation practices in order to be consistent with the above mentioned policy and the memorandum of understanding between the USDA and Waukesha County.

FIGURE II-2  
WAUKESHA COUNTY WETLANDS INVENTORY

1. Moderately well to somewhat poorly drained alluvial soils

Lo	Lawson silt loam	116
PrA	Pistakee silt loam	<u>1,611</u>
TOTAL		1,727 Acres

2. Somewhat poorly drained mineral soils

AzA	Aztalan loam, 0-2%	987
AzB	Aztalan loam, 2-6%	671
BlA	Blount silt loam	3,395
EsA	Elliott silt loam	775
FaA	Fabius loam, 1-3%	317
GwB	Griswold silt loam, mottled subsoil variant, 2-6%	563
KeA	Kane silt loam	593
KlA	Kendall silt loam	1,250
LmB	Lamartine silt loam, 1-4%	8,355
MgA	Martinton silt loam	2,307
MhA	Matherton silt loam	1,135
MmA	Matherton silt loam	5,695
MtA	Mequon silt loam	9,388
MzFA	Mundelein silt loam	1,154
RIA	Ritchey silt loam, mottled subsoil variant	995
VsA	Virgil silt loam, gravelly substratum	483
Wa	Wallkill silt loam	815
WmA	Wasepi silt loam	<u>705</u>
TOTAL		39,583 Acres

3. Poorly drained alluvial soils

Sg	Sawmill silt loam, calcareous variant	556
Ww	Wet alluvial land	<u>1,405</u>
TOTAL		1,961 Acres

4. Poorly drained mineral soils

AsA	Ashkun silty clay loam	5,266
BsA	Brookston silt loam	5,734
Cw	Colwood silt loam	1,323
Dt	Drummer silt loam, gravelly substratum	1,203
Gd	Gilford loam	575

WAUKESHA COUNTY WETLANDS INVENTORY (Continued)

Gf	Granby fine sandy loam	277
Mzb	Montgomery silty clay loam	2,596
Mzk	Mussey loam	772
Na	Navan silt loam	1,973
Ph	Pella silt loam	8,213
Pm	Pella silt loam, moderate shallow variant	611
Sm	Sebewa silt loam	<u>7,180</u>

TOTAL 35,723 Acres

5. Poorly drained organic soils

Ac	Adrian muck	3,680
HtA	Houghton muck, 0-2%	23,330
HtB	Houghton muck, 2-6%	538
Mzg	Muskego muck	159
Oc	Ogden muck	4,502
Pa	Palms muck	3,887
Ru	Rollin muck, deep	348
Rv	Rollin muck, shallow	<u>306</u>

TOTAL 36,750 Acres

6. Marsh land

Mf	Marsh	1,592
----	-------	-------

7. Shallow water

GRAND TOTAL 117,336 Acres

Source: SCS/SWCD Waukesha

## ENVIRONMENTAL CORRIDORS

One of the most important tasks in any planning effort is the identification and delineation of those areas in which concentrations of scenic, recreational, and historic resources occur and which, therefore, should be preserved and protected in order to maintain the overall quality of the environment. Such areas normally include one or more of the following seven elements of the natural resource base which are essential to the maintenance of both the ecological balance and natural beauty of an area:

1. Lakes, rivers and streams and the associated undeveloped shorelands and floodlands,
2. Wetlands,
3. Woodlands,
4. Wildlife habitat areas,
5. Rugged terrain and high relief topography,
6. Significant geological formations and physiographic features,
7. Wet, poorly drained and organic soils.

The foregoing seven elements are integral parts of the natural resource base. Four additional elements are not part of the natural resource base per se, but are closely related to or centered on that basis and so are important considerations in identifying and delineating areas with scenic, recreational, and educational value. These additional elements are:

1. Existing outdoor recreation sites,
2. Potential outdoor recreation and related open space sites,
3. Historic and other cultural sites and structures, and
4. Significant scenic areas and vistas.

The delineation of these 11 natural resource and natural resource related elements on a map results in an essentially linear pattern of relatively narrow elongated areas which have been termed "environmental corridors". Primary environmental corridors are defined as those areas which encompass three or more of

the aforementioned 11 environmental elements<sup>1</sup>, while secondary environmental corridors are contiguous areas encompassing one or two of the 11 elements. This definition holds throughout the adopted regional Land Use Plan and the regional Park and Open Space Plan.

Within the scope of the present study, the primary environmental corridors have been delineated on 1" = 400' aerial photographs for the purpose of using that designation as one of the various tools included in deliberation over lands to be preserved.

### WATER RESOURCES

The water resource both surface and subsurface is an extremely important and interrelated element of the natural resource base. Protection of that element is a goal of the agricultural land preservation plan. In accord with the protection and enhancement of that element of the natural resource base, the recommendations of the adopted 'Water Quality Management Plan', Southeastern Wisconsin Regional Planning Commission Planning Report #30 are included here by reference.

In Waukesha County there are 33 major lakes (lakes 50 acres or more in area) and 84 minor lakes (less than 50 acres in area) which together cover 23.69 square miles or 4.08% of the County. The total shoreline associated with these lakes is 219.77 miles. Major streams in Waukesha County have a combined length of 333.30 miles.

The Waukesha County Board of Supervisors has adopted the Area-wide Water Quality Management Plan on October 23, 1979. This plan provides for the achievement of water pollution abatement and water quality improvement throughout the region. If implemented it will achieve the national goal of 'fishable and swimmable' waters to the maximum extent practicable.

<sup>1</sup>In the SEWRPC initial comprehensive regional land use and transportation planning program, which was completed in 1966, a comprehensive inventory of remnant prairies in the Southeastern Wisconsin Region was not available for use in the identification and delineation of primary environmental corridor lands. However, remnant prairies are an important element of the existing natural resource base.

## EXISTING LAND USE

The latest base year for which we have detailed land use data is 1975 in that the Southeastern Wisconsin Regional Planning Commission, in its ongoing land use and transportation planning program, conducts a continuous land use study in five year increments and the 1975 data for Waukesha County is the latest to be completed. In the preparation of maps to be used in the consideration of lands to be preserved, the 1975 aerial photographs at the 1" = 400 scale will be used, thus enabling observers to distinguish the 1975 uses. Through good record keeping and the release of the 1980 aerial photographs from the Southeastern Wisconsin Regional Planning Commission, we know that significant acreage has been converted to urban and/or suburban uses since 1970. In overlaying all newly approved subdivisions on the 1" = 400 scale aerial photographs, we now can see the current extent of subdivision development and agricultural land conversion. That is not to say, however, that each instance of urban land conversion represents a loss of good farmlands or good farms. Some conversions have taken place on land parcels too small to provide economic and efficient management units and in other cases on lands adjacent to existing developed communities in a manner consistent with good planning practice. One of the significant things it does suggest though is that in the eyes of some developers, local governments and planning commissions prime soils and good farmlands are expendable in that there is an abundance of land in these categories to go around for the variety of uses society may desire. The record suggests that a less than optimum system is functioning in Waukesha County when a comparison is made between the regional plan as adopted and the actual pattern of land use which we see developing. Such a comparison has been made graphically in the process of this plan development.

A tabular summary of the amount of land which has undergone conversion to subdivision uses is presented later in this chapter. The data is arranged on a township basis and shows the amounts of land converted during each year of the 1970's in each of the townships in Waukesha County. Additionally, a map which portrays a visual representation of this data is continuously plotted to monitor the spatial distribution of subdivision platting activity. This map remains in commission files and has not been reproduced for publication at this time.

In Figure II-3, twelve categories of land use are presented which depict the acreage and percentage in each category of land use for the years 1963, 1967 and 1970 in the county as a whole. The largest single category of land use on a county basis is that of agriculture with 58.19% in 1963, 57.06% in 1967 and 54.21% in 1970. The amount of lands converted to urban and suburban residential uses since 1970 is 18,352.4 acres in subdivision plats and represents about 3.9% increase in lands devoted to residential uses countywide. In Appendix H land use data is presented on a township basis.

The latest statistical data obtainable relative to land use is that of the local assessors. For each community of Waukesha County, base year 1977, the number of farms and acreage in farm use is presented on the following page. This data collected by the Wisconsin Agriculture Reporting Service is disseminated through published reports. It should not be viewed as a conclusive and completely accurate set of figures since assessment practices vary so widely within the county. It is, however, an indicator of the way local lands are classified by local assessors and a likely sign of the quantity of lands which will be considered for agricultural preservation.

FIGURE II-3  
LAND USE SUMMARY

Land Use	1963		1967		1970		Change 1963 - 70
	Acres	% of Total	Acres	% of Total	Acres	% of Total	
*Residential	33,471	9.0%	35,389	9.5%	43,278	11.7%	+ 9,807 acre
Retail	965	.3%	1,105	.3%	1,341	.4%	+ 376 "
Wholesale	384	.1%	540	.1%	755	.2%	+ 371 "
Manufacturing	574	.2%	667	.2%	770	.2%	+ 196 "
Extractive	2,427	.7%	2,799	.8%	2,757	.7%	+ 330 "
*Transportation	18,683	4.9%	19,792	5.3%	21,292	5.7%	+ 2,609 "
Inst. & Govt.	2,261	.6%	2,683	.72%	3,122	.8%	+ 861 "
Recreational	5,088	1.4%	5,317	1.4%	6,630	1.8%	+ 1,542 "
*Agricultural	216,306	58.2%	212,068	57.1%	201,438	54.2%	- 14,868 "
Water	16,023	4.3%	15,937	4.3%	16,218	4.4%	+ 195 "
Wetlands	33,570	9.0%	33,351	9.0%	33,458	9.0%	+ 112 "
Unused Lands	6,143	1.7%	6,698	1.8%	7,713	2.1%	+ 1,570 "
Landfills	401	.1%	412	.1%	406	.1%	+ 5 "
*Woodlands	35,349	9.5%	34,887	9.4%	32,467	8.7%	- 2,882 "
COUNTY TOTAL	371,645	100.0%	371,645	100.0%	371,645	100.0%	

Summary of the composition of land uses throughout Waukesha County at three points in time, 1963, 1967, 1970

Source: SEWRPC

Below in FIGURE II-4 is a summary of agricultural land use for the year 1975 indicating that a substantial amount of land in Waukesha County continues to be devoted to agricultural pursuits. The total of 173,226 acres is down from the 1970 total by 28,212 acres or 14%.

FIGURE II-4

AGRICULTURAL LAND USE 1975 <sup>1</sup>

WAUKESHA

USE	ACRES
Row Crops	76,718
Grain Crops	7,228
Vegetable Crops	5,878
Hay Crops	32,762
Pasture and other Ag	45,749
Orchards/Nurseries	1,299
Sod Farms	985
Berry Fields	6
Apiaries	1
Farm Buildings <sup>2</sup>	2,601
Total	173,226

<sup>1</sup> A more detailed account of all 1975 land uses is presented in Appendix H.

<sup>2</sup> Farm Buildings includes all outbuildings.

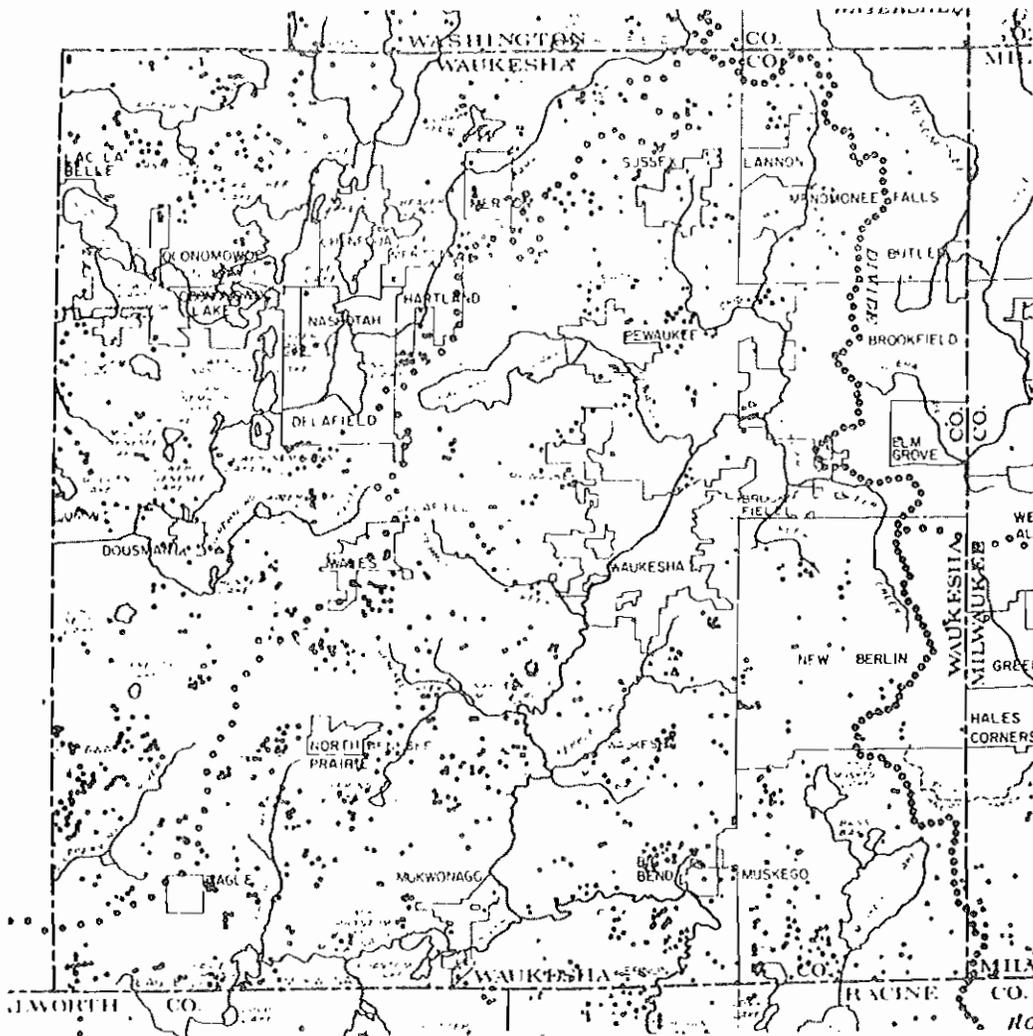
Source: SEWRPC

EXISTING AGRICULTURAL PRACTICES

Two important inventories are displayed on the maps which follow: One shows the distribution of conservation practices throughout Waukesha County and the other shows the distribution of livestock operations in 1975. In both cases, a relationship is found between the spatial distribution of activity and a speculative potential transition from rural to urban land uses. See the captions under each map.

MAP A

DISTRIBUTION OF KNOWN CONSERVATION PRACTICES IN  
WAUKESHA COUNTY 1975



Source: SEWRPC

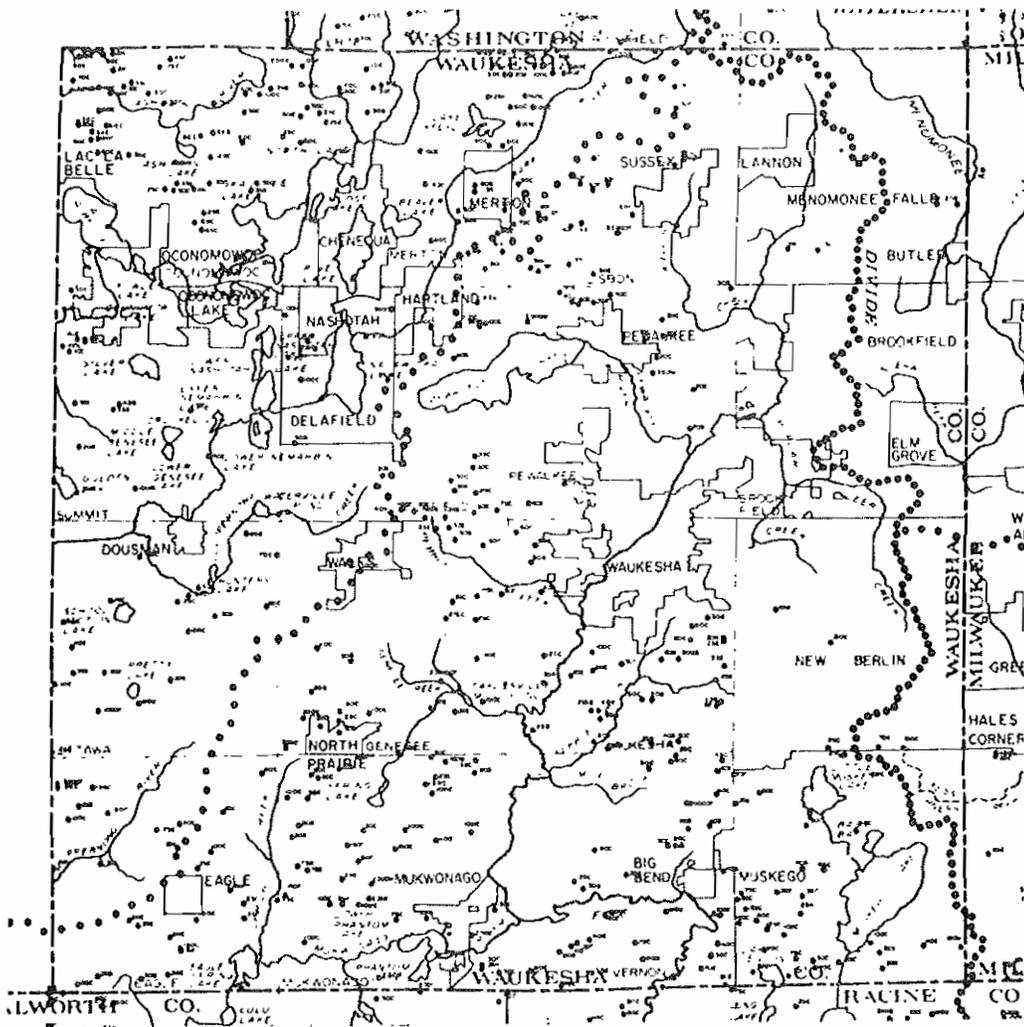
The spatial distribution of the practices above indicates that land management is affected by the potential for transition from rural to urban land uses, with relatively few land management practices installed in the agricultural lands near existing urban areas.

LEGEND

- |   |   |   |   |
|---|---|---|---|
| ⊙ | Vegetative cover practices (strip-cropping, interim cover, tree planting, wind erosion control, wildlife habitat and permanent vegetative cover). | △ | Flow Control Practices (diversion).         |
| ⊠ | Water retention Practices (terracing, landshaping, farm ponds)  | ⊙ | Crop Production Practices (liming, tiling). |
|   |   | ▽ | Animal waste facility.                      |
|   |   | ★ | Cropland Adjustment Program.                |

MAP B

DISTRIBUTION OF LIVESTOCK OPERATIONS IN  
WAUKESHA COUNTY 1975



Source: SEWRPC

The spatial distribution of these operations reflect the extent to which speculation in land for urban uses has proceeded in Waukesha County, with relatively fewer operations (capital investment) being located in areas locally envisioned as available for conversion to urban use. This pattern of reduced livestock concentrations is generally matched by the relatively greater concentrations of cash crops found in such areas of potential urbanization.

LEGEND

- Livestock herd
- Number of animals in herd
- Animal type
  - C - Dairy Cattle
  - B - Beef Cattle
  - E - Horse
  - F - Fowl
  - M - Mink
  - H - Swine
  - W - Sheep
  - K - Goat
  - Y - Young animal

## GROWTH TRENDS

The following three figures depict some important trends relating to land development particularly through the subdivision platting procedure in the various communities of Waukesha County. Figure II-5 indicates the number of residential building sites that underwent review, approval and were recorded over the last four-five year periods. The unincorporated areas of Waukesha County where few services are provided, permitted about one third of all the lots which came into existence over the 20 year period shown in the chart. Most of these lots at least initially have developed without benefit of municipal water or sewer. About half the number of lots developed in unincorporated areas developed in the villages since 1960. Seven villages had under 100 lots recorded. The situation is mixed with regard to sewer service in the villages, some with, some without, and others which lie in areas designated for service by the year 2000. The cities have tended to accommodate population and allow the creation of lots more freely than either the towns or villages. Brookfield, New Berlin and Waukesha have led the way in so far as residential lots are concerned. All of the Waukesha development and most of the more recent Brookfield and New Berlin development has the benefit of municipal sewers.

The density of development crudely represented by building lots per gross acre of development clearly demonstrate that cities and villages accommodate development in more compact less rigid manner than is the custom in most unincorporated towns.

Figure II-6 refers to the total gross acreage converted to residential subdivision purposes during the decade of the 1970's. The data are arranged on the basis of townships and are ranked in order of the township total for the period. We note that wide variations are exhibited from year to year in some cases. For this reason the more long term decade was used. Three townships had over 2,000 acres of land subdivided while another six had over 1,000 acres developed.

Figure II-7 provides an overview of both residential and industrial land subdividing from 1954 through 1979. The data presented for industrial platted lands should not be taken to mean that industrial development has occurred only on platted lands for it has not. These figures represent for the most part "industrial

**FIGURE II-5**  
Residential Subdivision Lots, 1960 - 1979

	MUNICIPALITY	1960-64	1965-69	1970-74	1975-79	TOTAL 20 YEARS
<b>TOWNS</b>	BROOKFIELD	346	82	0	154	582
	DELAFIELD	34	38	394	179	645
	EAGLE	0	4	15	223	242
	GENESEE	92	45	265	315	717
	LISBON	109	674	363	248	1394
	MERTON	135	329	125	139	728
	MUKWONAGO	0	48	374	750	1172
	OCONOMOWOC	103	146	194	155	598
	OTTAWA	0	107	77	63	247
	PEWAUKEE	32	115	290	574	1011
	SUMMIT	0	5	141	64	210
	VERNON	63	172	551	469	1260
	WAUKESHA	137	77	630	106	950
	<b>TOTAL (TOWNS)</b>	<b>1056</b>	<b>1842</b>	<b>3419</b>	<b>3439</b>	<b>9756</b>
<b>VILLAGES</b>	BIG BEND	0	52	0	6	58
	BUTLER	0	0	0	68	68
	CHENEQUA	0	0	0	0	0
	DOUSHAN	0	0	133	0	133
	EAGLE	0	0	0	154	154
	ELM GROVE	127	0	68	90	285
	HARTLAND	15	84	112	509	720
	LAC LA BELLE	0	76	0	0	76
	LANNON	0	0	0	0	0
	MENOMONEE FALLS	731	33	67	221	1052
	MERTON	0	109	42	78	229
	MUKWONAGO	0	0	426	180	606
	NASHOTAH	0	0	20	21	41
	NORTH PRAIRIE	0	0	11	223	234
	OCONOMOWOC LAKE	0	0	0	7	7
	PEWAUKEE	111	0	129	132	372
	SUSSEX	0	0	108	122	230
WALES	0	181	13	288	482	
<b>TOTAL (VILLAGES)</b>	<b>984</b>	<b>535</b>	<b>1129</b>	<b>2099</b>	<b>4747</b>	
<b>CITIES</b>	BROOKFIELD	880	838	310	1109	3137
	DELAFIELD	29	10	56	108	203
	MUSKEGO	114	6	435	645	1200
	NEW BERLIN	438	512	1892	205	3047
	OCONOMOWOC	130	257	108	233	728
	WAUKESHA	581	1478	1067	1752	4878
<b>TOTAL (CITIES)</b>	<b>2172</b>	<b>3101</b>	<b>3868</b>	<b>4052</b>	<b>13193</b>	
<b>TOTAL (WAUKESHA CO.)</b>	<b>4212</b>	<b>5478</b>	<b>8416</b>	<b>9590</b>	<b>27696</b>	

Source: Waukesha County Park & Planning Commission

FIGURE II-6

ACREAGE CONVERTED TO RESIDENTIAL USE 1970-1979  
(In order of rank)  
IN RECORDED SUBDIVISION PLATS

TOWNSHIP	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	TOTAL - TEN YEAR PERIOD
GENESEE	0	0	166.4	123.9	190.5	242.4	77.2	658.3	404.1	215.9	2078.7
WAUKESHA	262.7	172	278.1	34.4	459.1	154	164.9	342.1	129	76	2072.3
MUKWONAGO	82	77.1	316.8	277	42.5	84.8	30.8	657.4	337.9	144.5	2050.8
VERNON	0	0	205.9	333.5	314.2	98.7	156.9	185.6	225.9	165.9	1686.6
DELAFIELD	56	303.7	281.3	20.5	259.2	119.1	159	386.8	81.9	2.4	1669.9
BROOKFIELD	62.8	75	88.5	10.2	19.4	179.6	388.9	237.2	331.3	18	1410.9
PEWAUKEE	190.5	74	145.2	275.7	3.5	27.9	52.6	115.1	124.1	226.4	1235
NEW BERLIN	478.5	182.2	135.2	77.3	109.1	0	0	30	0	81.9	1094.2
LISBON	103	365.2	0	9.3	148.5	82.4	0	140.5	16.2	201.9	1067
MUSKEGO	34.2	45.9	159.3	12.3	147.1	40.8	56.3	107.4	52.3	194.3	850.9
MERTON	38.8	71.1	42	65	41.9	0	142.5	159.6	104	24.1	689
EAGLE	0	0	0	0	53	6.4	77.2	104.6	399.7	10	650.9
OTTAWA	59.1	77.8	42	41.6	108.2	0	0	79.8	109.7	0	518.2
SUMMIT	0	109.1	3.3	22.1	114.3	0	57.8	25.1	136.7	38.6	507
LOGANOMOC	28.1	60.5	77.6	0	59.2	61.1	31.5	83.6	64.6	0	466.2
MEMMONEE	0	0	0	30.8	17.5	72.5	92	19.4	72.6	0	304.8
TOTAL	1395.7	1613.6	1941.6	1334.6	2087.2	1169.7	1487.6	3332.5	2599.2	1399.9	18352.4

SOURCE: Waukesha County Register of Deeds

FIGURE II-7  
RECORDED SUBDIVISION ACTIVITY 1954-1979

YEAR	RESIDENTIAL				INDUSTRIAL			
	NUMBER OF PLATS RECORDED	NUMBER OF LOTS	ACRES PLATTED	STREET LENGTH (MILES)	NUMBER OF PLATS RECORDED	NUMBER OF LOTS	ACRES PLATTED	STREET LENGTH (FEET)
1954	49	1576	1066.4	23.27	1	4	87.5	3850
1955	81	4021	2617.5	58.48	0	0	0	0
1956	104	4072	2918.9	65.46	1	29	37.9	3600
1957	32	1035	777.9	17.11	0	0	0	0
1958	44	1860	1341.3	27.56	2	51	71.3	6600
1959	58	2743	1686.2	39.95	0	0	0	0
(1954-59) TOTAL	368	15307	10408.2	231.83	4	84	195.7	14050' 2,566 mi.
1960	33	1430	937.2	21.12	0	0	0	0
1961	12	728	466.6	7.36	3	33	55.8	6900
1962	17	384	349.6	7.49	0	0	0	0
1963	16	784	554.1	12.01	2	24	30.0	2800
1964	21	905	592.5	12.46	2	17	25.9	1375
1965	26	1370	886.4	19.50	2	36	119.5	6100
1966	22	955	669.4	8.89	3	51	181.4	7150
1967	28	999	1039.6	18.60	3	44	302.4	14130
1968	39	1471	1300.6	25.20	0	0	0	0
1969	27	930	931.0	16.53	2	51	140.0	7380
(1960-69) TOTAL	241	9956	7727.0	149.16	17	256	855.0	46335' 8.78 mi.
1970	33	2193	1395.7	31.15	1	20	53.0	1400
1971	37	1386	1641.9	22.40	2	58	36.5	3420
1972	48	2114	1940.6	27.36	3	72	112.7	4050
1973	31	1391	1290.1	21.20	1	15	16.3	850
1974	47	1359	2087.7	25.50	1	36	74.2	3200
1975	35	1129	1169.7	16.80	0	0	0	0
1976	47	1838	1487.6	27.00	2	41	106.6	6095
1977	79	2963	3332.5	47.76	3	23	36.6	1754
1978	65	2087	2561.1	34.90	1	21	38.1	2600
1979	41	1581	1399.9	21.10	1	27	36.3	3100
(1970-79) TOTAL	463	18041	18306.8	275.17	15	323	510.3	26469' 5.01 mi.
(1954-79) TOTAL	1072	43304	36442.0	656.16	36	653	1561.0	86854' 16.25 mi.

Source: Waukesha County Park & Planning Commission and Waukesha County Register of Deeds

parks". Other industrial uses have developed on parcels described in metes and bounds or on certified survey parcels.

Population trends as portrayed on Figure II- 9 show substantial increase in total County population, 21.2% from 1970 to 1980. An additional 48,988 people resided in Waukesha County in 1979 as compared to 1970. An interesting aside at this point is the fact that for this period the regional population increase was almost nil. The seven counties which comprise this region experienced a net population increase of only 8,836. More importantly the shifts which took place within the region account for the growth experienced by Waukesha County. There may be a very important message here in that if the region has stabilized and energy costs and interest charges on money keep rising we may see a return to the city and a trend toward more compact, less land extensive development due simply to market forces. In that eventuality very little additional agricultural land will be needed for residential purposes considering the passed over sites within the year 2000 urban service boundary which because of their proximity to the broad range of amenities and public services will likely contribute to their conversion.

FIGURE II-8  
1970-80 REGIONAL POPULATION TRENDS

	1970	1980	CHANGE
Milwaukee	1,054,249	964,988	-89,261
Ozaukee	54,461	66,981	12,520
Washington	63,839	84,848	21,009
Waukesha	231,335	280,326	48,991
Total Milw. SMSA	1,403,884	1,397,143	-6,741
Kenosha	117,917	123,137	5,220
Racine	170,838	173,132	2,294
Walworth	63,444	71,507	8,063
Regional Total	1,756,083	1,764,919	8,836

Source: U.S. Census

RECENT TRENDS IN AGRICULTURAL LAND SALES

The following four charts have been prepared using data gathered by the Wisconsin Agriculture Reporting Service. They indicate the selling prices obtained for agricultural lands 1976 through

FIGURE II-9  
POPULATION TRENDS - WAUKESHA COUNTY

MUNICIPALITY	1950	1960	1970	1980	1970-80 CHANGE %
BROOKFIELD	7,425	1,990	3,924	4,364	11.2
DELAFIELD	3,740	2,822	3,750	4,597	22.6
EAGLE	947	1,103	1,250	1,758	40.6
GENESEE	1,686	2,183	3,172	5,126	61.6
LISBON	1,532	2,885	4,709	8,352	77.4
MERTON	2,214	3,077	4,424	6,025	36.2
MUKWONAGO	1,269	1,579	1,930	4,979	158.0
OCONOMOWOC	3,288	4,465	6,010	7,340	22.1
OTTAWA	764	1,092	1,698	2,795	64.6
PEWAUKEE	5,493	5,797	7,551	8,922	18.2
SUMMIT	2,571	3,472	3,809	4,173	9.6
VERNON	1,464	2,037	2,857	6,372	123.0
WAUKESHA	2,108	3,540	4,411	6,714	52.2
TOTAL (TOWNS)	34,501	36,042	49,871	71,517	43.4%
BIG BEND	480	797	1,148	1,345	17.2
BUTLER	1,047	2,274	2,261	2,059	-8.9
CHENEQUA	270	445	642	532	-17.1
DOUSMAN	328	410	451	1,153	155.7
EAGLE	460	620	745	1,008	35.3
ELM GROVE	—*	4,994	7,201	6,735	-6.5
HARTLAND	1,190	2,088	2,763	5,559	101.5
LAC LA BELLE	174	276	227	289	27.3
LANNON	438	1,084	1,056	987	-6.5
MENOMONEE FALLS	6,262**	18,276	31,697	27,845	-12.2
MERTON	343	407	646	1,045	61.8
MUKWONAGO	1,207	1,877	2,367	4,014	69.6
NASHOTAH	—*	321	410	513	25.1
NORTH PRAIRIE	424	489	669	938	40.2
OCONOMOWOC LAKE	—*	414	599	524	-12.5
PEWAUKEE	1,792	2,484	3,271	4,637	41.8
SUSSEX	679	1,087	2,758	3,482	26.3
WALES	237	356	691	1,992	188.3
TOTAL (VILLAGES)	15,331	38,699	59,602	64,657	8.5%
BROOKFIELD	—*	19,812	32,140	34,035	5.9
DELAFIELD	—*	2,334	3,182	4,083	28.3
MUSKEGO	4,157	8,888	11,573	15,277	32.0
NEW BERLIN	5,334	15,788	26,910	30,529	13.4
OCONOMOWOC	5,345	6,682	8,741	9,909	13.4
WAUKESHA	21,233	30,004	39,695	50,319	26.8
TOTAL (CITIES)	36,069	83,508	121,862	144,152	18.3%
TOTAL (WAUKESHA CO.)	85,901	158,249	231,335	280,326	21.2%

\*Incorporated after 1950

\*\*Includes Town of Menomonee

Source: U.S. Census

FIGURE II-10

# AVERAGE PRICE PER ACRE OF AGRICULTURAL LAND 1976-1978

WAUKESHA COUNTY    
  SOUTHEAST DISTRICT    
  STATE

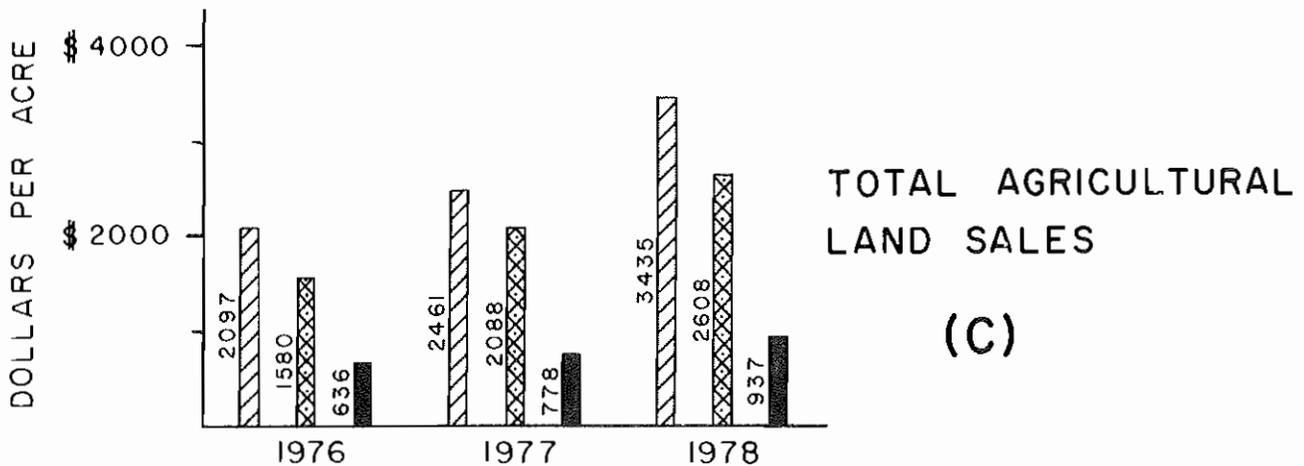
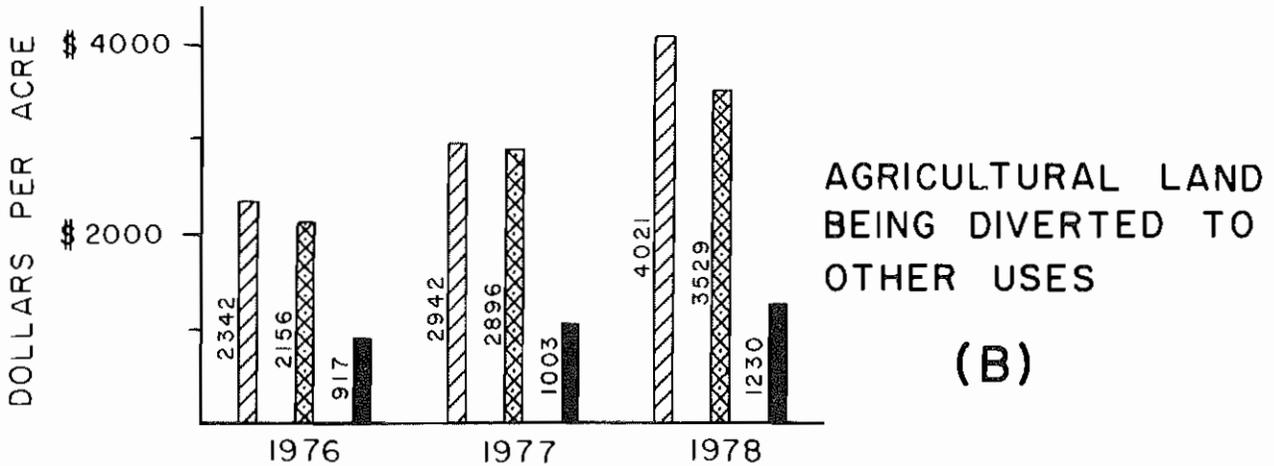
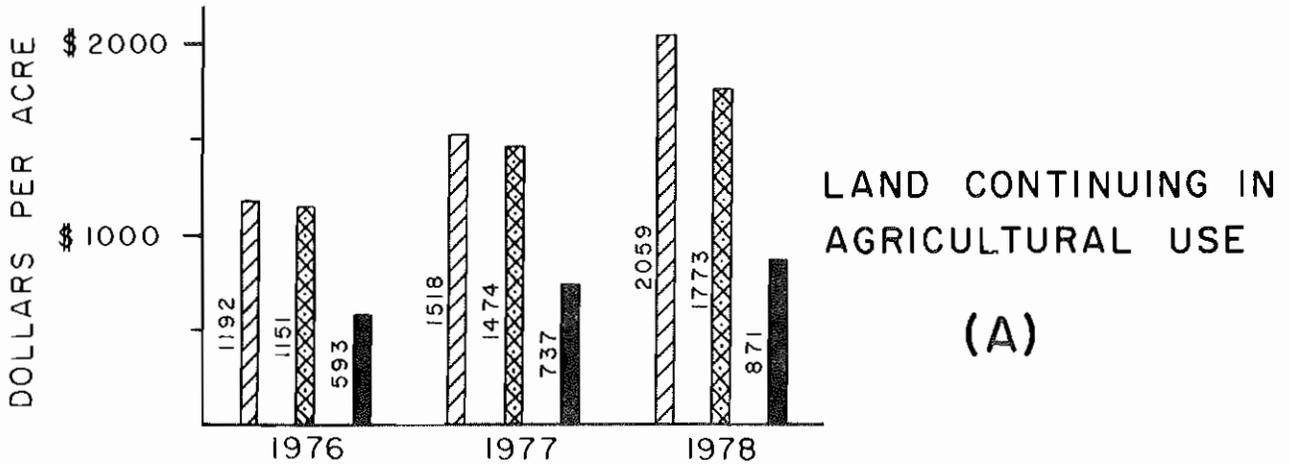
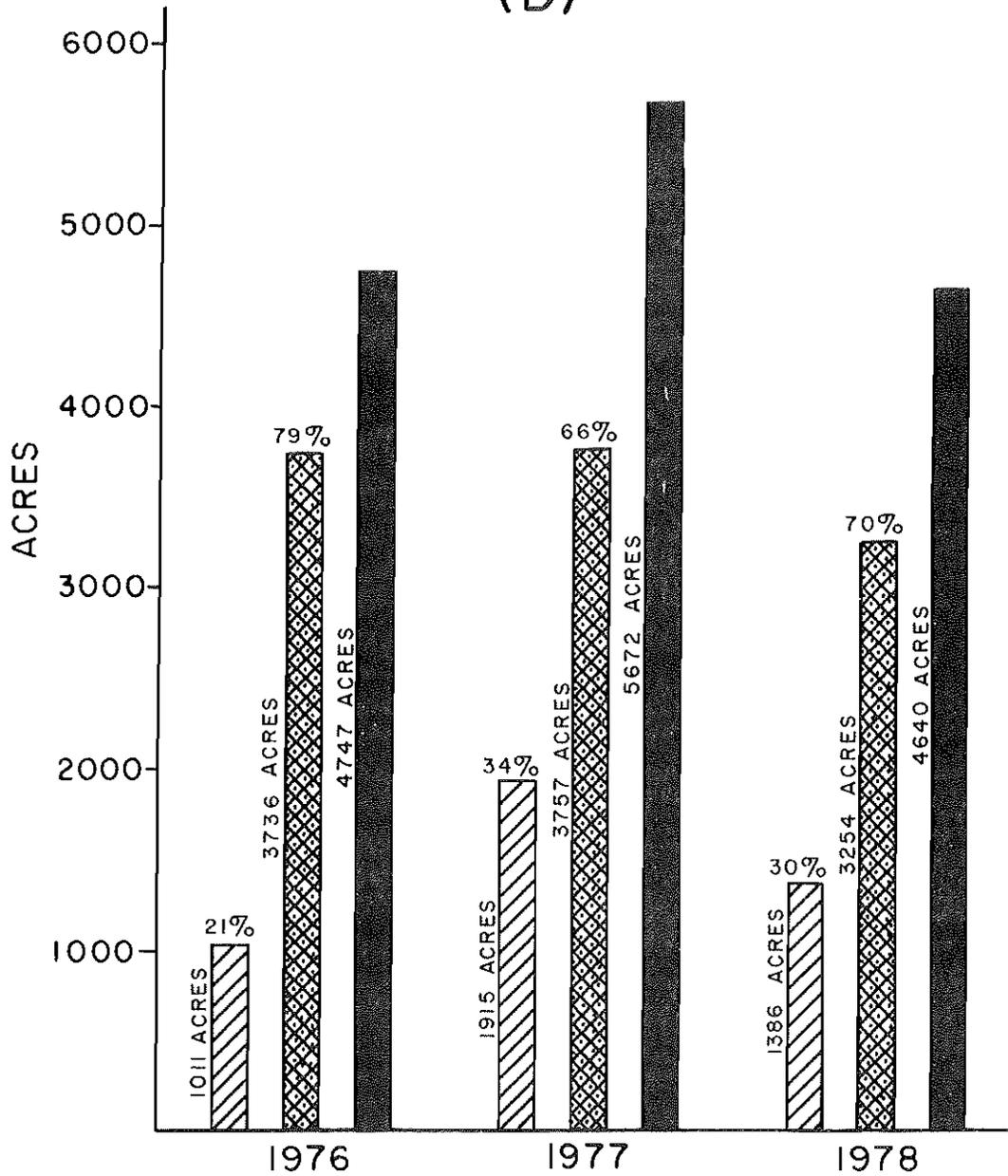


FIGURE II-11

# WAUKESHA COUNTY AGRICULTURAL LAND SALES 1976-1978

(D)



-  LAND CONTINUING IN AGRICULTURAL USE
-  AGRICULTURAL LAND BEING DIVERTED TO OTHER USES
-  TOTAL AGRICULTURAL LAND SALES

SOURCE: WISCONSIN AGRICULTURE REPORTING SERVICE

1978 for Waukesha County, the Southeastern District of the State of Wisconsin and the State of Wisconsin as a whole. The source for this data is Waukesha County Register of Deeds and Register of Deeds throughout the State by way of Land Transfer records which indicate such items as transfer fee paid on sales and tax classification status. The charts disclose that the prices paid per acre for agricultural land in Waukesha County is greater relative to the price paid in the Southeast District and the State. A distinction is made between lands continuing in agricultural use and those being diverted to other uses. In Waukesha County, we see that the price paid for lands being diverted to other uses over the period shown is about twice the selling price per acre of those lands continuing in agricultural use. We also see that the State average paid per acre of land tends to be far below (See Charts A&B) the average prices paid per acre in either Waukesha County or the Southeast District.

In Waukesha County the quantity of agricultural acreage sold has been close to the 5,000 acre mark on average in the period 1976 through 1978. The relative portion continuing in agricultural use has ranged from 21% in 1976 to a high of 34% in 1977, and indicates generally that for every one hundred acres of agricultural land sold during the period, roughly 28% remained in agricultural use and over 70% was diverted to other uses.

The Equalized value of Agriculturally Classified Real Estate is presented in Figure II-12. For each city, village and town the amount of equalized real estate value is shown. The agriculturally classified real estate is further distinguished with land shown separately from improvements and from this data inferences can be drawn which suggest that agricultural land use is still a significant aspect of the local economy. One significant drawback in the data presented is the variability found in techniques and thoroughness of assessors between each community. The data shown has been reviewed by the supervisor of assessments, however in an attempt to bring the figures to a base which allows for meaningful comparisons to be made.

Some of the salient features of this data follow: The cities of Waukesha and Oconomowoc are anomalies in terms of the ratio found between improvements and land. Waukesha has no improvements shown and Oconomowoc has 1.54 times as much in improvement as in land. The cities of Muskego and New Berlin both of which are similar to the civil towns of Waukesha County in size but with substantial urban development simultaneously exhibiting over 15 and 20 million dollars respectively in agricultural land improvements.

1978 for Waukesha County, the Southeastern District of the State of Wisconsin and the State of Wisconsin as a whole. The source for this data is Waukesha County Register of Deeds and Register of Deeds throughout the State by way of Land Transfer records which indicate such items as transfer fee paid on sales and tax classification status. The charts disclose that the prices paid per acre for agricultural land in Waukesha County is greater relative to the price paid in the Southeast District and the State. A distinction is made between lands continuing in agricultural use and those being diverted to other uses. In Waukesha County, we see that the price paid for lands being diverted to other uses over the period shown is about twice the selling price per acre of those lands continuing in agricultural use. We also see that the State average paid per acre of land tends to be far below (See Charts A&B) the average prices paid per acre in either Waukesha County or the Southeast District.

In Waukesha County the quantity of agricultural acreage sold has been close to the 5,000 acre mark on average in the period 1976 through 1978. The relative portion continuing in agricultural use has ranged from 21% in 1976 to a high of 34% in 1977, and indicates generally that for every one hundred acres of agricultural land sold during the period, roughly 28% remained in agricultural use and over 70% was diverted to other uses.

The Equalized value of Agriculturally Classified Real Estate is presented in Figure II-12. For each city, village and town the amount of equalized real estate value is shown. The agriculturally classified real estate is further distinguished with land shown separately from improvements and from this data inferences can be drawn which suggest that agricultural land use is still a significant aspect of the local economy. One significant drawback in the data presented is the variability found in techniques and thoroughness of assessors between each community. The data shown has been reviewed by the supervisor of assessments, however in an attempt to bring the figures to a base which allows for meaningful comparisons to be made.

Some of the salient features of this data follow: The cities of Waukesha and Oconomowoc are anomalies in terms of the ratio found between improvements and land. Waukesha has no improvements shown and Oconomowoc has 1.54 times as much in improvement as in land. The cities of Muskego and New Berlin both of which are similar to the civil towns of Waukesha County in size but with substantial urban development simultaneously exhibiting over 15 and 20 million dollars respectively in agricultural land improvements.

Figure II-12

VILLAGES	1977 EQUALIZED VALUE REAL ESTATE					
	AC LAND	AC IMP	IMP LAND	TOTAL	TOTAL FARM ASSESSMENT AS % OF ALL VALUE	TOTAL EQUALIZED REAL ESTATE
	\$	\$		\$		\$
Big Bend	137,000	16,000	(.12)	153,000	.01	16,627,700
Hartland	464,000	0	( - )	464,000	-	58,359,000
Dousmon	117,000	50,000	(.43)	167,000	.01	11,848,300
Eagle	306,000	6,000	(.02)	312,000	.03	9,931,000
Chenequa	915,000	519,000	(.57)	1,434,000	.05	28,881,000
Lannon	503,000	129,000	(.26)	632,000	.04	14,339,600
Menomonee Falls	11,650,000	3,839,000	(.33)	15,489,000	.03	478,920,800
Herton	1,084,000	292,000	(.27)	1,376,000	.10	13,502,100
Hukwonago	210,000	112,000	(.53)	322,000	.01	42,861,600
Nashotah	766,000	184,000	(.24)	950,000	.11	9,023,900
North Prairie	639,000	56,000	(.09)	695,000	.07	9,397,100
Oconomowoc Lake	236,000	156,000	(.66)	392,000	.02	25,411,700
Pewaukee	305,000	22,000	(.07)	327,000	.01	57,161,700
Sussex	970,000	69,000	(.07)	1,039,000	.02	46,244,000
Wales	727,000	67,000	(.09)	794,000	.03	23,890,000
<u>CITIES</u>						
Brookfield	4,601,000	859,000	(.19)	5,460,000	.03	773,526,600
Delafield	2,599,000	478,000	(.18)	3,077,000	.04	72,151,700
Huskego	11,818,000	3,699,000	(.31)	15,517,000	.07	215,040,100
New Berlin	16,088,000	4,649,000	(.29)	20,737,000	.04	527,233,600
Oconomowoc	209,000	323,000	(1.54)	532,000	.04	143,798,800
Waukesha	152,000	-	-	152,000	.00	646,680,400
<u>TOWN</u>						
Brookfield	2,130,000	666,000	(.31)	2,796,000	3.35	83,380,000
Delafield	8,364,000	2,827,000	(.33)	11,191,000	14.03	79,720,500
Eagle	10,546,000	4,193,000	(.40)	14,739,000	43.13	34,167,000
Genesee	12,100,000	5,217,000	(.43)	17,317,000	18.47	93,743,300
Lisbon	15,951,000	5,547,000	(.35)	21,498,000	17.73	121,188,300
Herton	10,135,000	3,744,000	(.37)	13,880,000	11.82	117,394,100
Hukwonago	12,810,000	4,504,000	(.35)	17,314,000	25.48	67,939,000
Oconomowoc	13,064,000	5,049,000	(.39)	18,113,000	14.00	129,339,900
Octavo	8,949,000	3,977,000	(.44)	12,926,000	23.12	55,904,000
Pewaukee	11,905,000	4,336,000	(.36)	16,241,000	11.17	145,302,000
Summit	10,862,000	4,030,000	(.37)	14,892,000	19.22	77,476,600
Vernon	10,299,000	4,333,000	(.42)	14,632,000	16.75	87,319,600
Waukesha	12,672,000	4,195,000	(.33)	16,867,000	14.08	119,778,700
County Total	194,284,000	68,143,000	(2.96)	262,427,000	5.57	4,705,547,400

The villages of Waukesha County exhibit less than 1 million dollars of equalized combined values each except for Menomonee Falls, Sussex, Chenequa and Merton. Menomonee Falls is certainly a leader by any standard surpassing 7 of the remaining 13 towns.

#### SUMMARY

This chapter has presented in one place a compilation of data and analysis which is intended to provide the substantial base of information necessary to support the plan preparation. The interrelationships between the various described elements in this chapter are numerous and complex. Through the data presented we are able to perceive a clearer picture of the status of farming as an enterprise in Waukesha County and the effects wrought by the demands of increased population and subsequent land conversion.

Through the lack of a land ethic which respects natural qualities of the environment we have witnessed substantial losses, i.e., soils eroded, air and water quality diminished, consumptive use of land, wasteful use of energy resources and unnecessarily uneconomic developments.

## CHAPTER III

### AGRICULTURAL LAND PRESERVATION GOALS AND POLICIES

Planning is a rational process of formulating goals and through the preparation and implementation of plans for achieving those goals. Goal, as used in this planning study, is synonymous with the term objective in that it is an end point toward which plans and policies are directed. The formulation of goals, therefore, is a necessary and proper task to perform prior to the development of plans. Under the Waukesha County Program of Agricultural Land Preservation, the Waukesha County Park and Planning Commission has been charged with the responsibility of both formulating goals and directing the preparation of the plan.

In developing the goals of this planning effort and the policies which are intended to be utilized in implementing those goals, the Commission has addressed itself to three very different but equally important areas of land use which must be provided for. These three areas are:

1. The preservation of productive agricultural lands
2. The protection of environmentally sensitive lands and open spaces
3. The allocation of lands to accommodate urban growth

A plan which strikes a balance between these three major land uses has the best opportunity for success. It must be shown that environmentally sensitive lands, because they are sensitive and fragile ought to be beyond the supply of lands available for development purposes. Further, the supply side of the development equation should relate closely to the forecast level of demand as expressed in population forecasts. It is certain that not all available permissibly zoned land in Waukesha County will be consumed by urban growth at current land conversion rates over the next 20-50 years. Considering the amount of land not presently committed to urban use, the Commission was left with wide choices in regard to implementation of a plan which would appropriately allocate the land resources to their most beneficial use on an overall County basis and herein lies the most critical issue of the entire planning process i.e. striking a reasonable balance between competing forces for the use of the land.

#### Goals for Agricultural Land Preservation

The Waukesha County Park and Planning Commission, after due consideration, has determined that the goals for agricultural lands should include the preservation of the most productive farmlands of Waukesha County which lie beyond forecast development needs. These lands nurture wildlife habitats, help to maintain the ecological balance of the community, supply locally produced agricultural products not only to the surrounding communities but to national markets and support accessory agricultural businesses. Hand in hand with the above goal is the attainment of wise use land use practices which recognize the various needs of society and satisfy all of those various needs to the greatest degree practicable. A supportive goal is the implementation of the adopted elements of the Regional Plan, especially the land use element of that plan and the refinement of the Regional Plan to qualify it as a County Development Plan.

## Policies for Agricultural Land Preservation

The Waukesha County Park and Planning Commission has selected the following policies as those which it elected to follow in developing the Agricultural Land Preservation Plan for Waukesha County. First among those policies is the identification and mapping of agricultural lands which exhibit high potential for sustained long-term agricultural productivity, using modern management techniques and practices. The Commission will cooperate with other agencies and governmental units at all levels to qualify eligible farmers who wish to participate in the State of Wisconsin Agricultural Tax Credit Program and will work toward reconciling conflicts where they might exist in the placement of public facilities and improvements so as not to undermine the intent of the Agricultural Land Preservation Plan. The Commission is also committed to ameliorating the effects of previous sprawl development by working against further sprawl throughout Waukesha County and in this manner intends to restrict new urban development to areas which are consistent with the planned extension of community services, such as sewer and water. Finally, the Commission believes that some rural non-farm development may be consistent with the greater good of preserving productive agricultural farm lands. Therefore, it is the policy of the Commission that rural non-farm developments be permitted only where the determination has been made that productive agricultural lands will not be converted.

## Goals for Open Space and Environmentally Sensitive Lands

The Commission recognizes two major goals for open space and environmentally sensitive lands. The first goal is the protection of the surface and ground water resources through the abatement of of pollution from all contributing sources. The second goal is the preservation of the high value elements of the natural resource base identified and mapped on the adopted Regional Park and Open Space Plan adopted by the Waukesha County Board in 1978. Subsequent refinement of the areas identified in that plan are now being prepared by the Regional Planning Commission in connection with the detailing of the sewer service area element of the Regional Water Quality Management Plan. A further goal is the implementation of the Sand and Gravel Utilization Plan recommendations for Waukesha County which identified the high value sand and gravel resource by relating a series of factors both inhibiting and supporting the exploitation of that mineral resource.

## Policies for Open Space and Environmentally Sensitive Lands

The policies selected by the Waukesha County Park and Planning Commission for the implementation of the above goals include the critical review of all development proposals with the intent of eliminating or reducing undesirable impacts on the environment in order to maintain the quality of natural functioning systems. The Commission intends to firmly support the implementation of the Regional Water Quality Systems Plan through decision making which is consistent with the recommendations of that plan. The subdivision review process which the Commission is intimately involved with is an area wherein the effect of this plan has the potential to be substantial. The Commission in reviewing subdivision plats will attempt to maintain such features of the natural environment as woodlands, wetlands floodplains, streams, lakes, steep slopes and prairies in as natural a state as possible. In the area of land altering activities, the Commission is committed to lessening the effects of sedimentation and erosion and to that end, the Commission and the Waukesha County Soil and Water Conservation District Board will coordinate its activities with the activities of developers and other local units of government to insure that no unnecessary erosion or sedimentation will be permitted in connection with development

activities. The aforementioned policies have all been related to regulations which the Commission would impose on land owners or developers. There is another important potential tool to be employed and that is the possibility for acquisition by the Waukesha County Park and Planning Commission or other local units of government of open space either in fee or some other estate in accordance with adopted plans. With mineral extraction activities, the Commission will require detailed restoration plans to be prepared, reviewed and followed and will require annual monitoring of active sites spelling out remedial steps as necessary for those that do not appear to be in compliance to the restoration plans.

### Goals for Growth

The Waukesha County Park and Planning Commission understands that the causes for urban sprawl are diverse and complex. Some of these causes relate to the extent of permissively zoned lands which exist throughout Waukesha County, the market prices obtained for farmlands which convert to urban uses versus farmlands which remain in farm use and the reluctance, thus far, of most communities in Waukesha County to work together in implementing the adopted elements of the Regional Plan to a greater degree. The problem, as the Commission views it, is imparting a rational system on an already irrational pattern of behavior. The goals for growth are:

1. To provide a supply of suitable land for development adequate to meet anticipated needs for the next twenty years while avoiding the premature conversion of good farmlands.
2. To promote an efficient pattern of development which maximizes the use of costly community facilities such as roads, schools, sewage treatment plants and water distribution systems.
3. To promote the conservation and wise use of increasingly scarce energy resources.

### Policies for Growth

The Waukesha County Park and Planning Commission herein has adopted the following policies for growth. The amount of land to be made available for development under the terms of this plan will be linked to accommodating the planned population increase over the plan period. Within the sewer service boundary of the adopted Regional Water Quality Management Plan, development will be encouraged at urban densities. In rural areas (beyond the urban service boundary) non-farm rural residential development will be permitted only on lands not considered worklands in the sense that they cannot reasonably be returned to farming use or are otherwise unsuitable for farming and only where they lie adjacent to existing residential or other development. Other isolated parcels below the 35 acre minimum size required for consideration in the State of Wisconsin Agricultural Tax Credit Program may be permitted to develop non-farm residential uses only where no compatibility problem is likely to result. Industrial development with its employment generating effect will be encouraged close to existing centers of population in configurations which will make efficient economic use of the land resource and community services and facilities. Within the urban service boundary the staging of large scale development will be coordinated with the phased provision of sewer and water. For the purposes of this plan, large scale is meant to apply to sites 10 acres or more in overall size.

### Plan Modification and Review

Plans are inherently subject to change and modification. The Commission recognizes this and also that changing circumstances will require a regular review of this plan. It is, therefore, the policy of the Waukesha County Park and Planning Commission to gather pertinent data on current trends and to make such modifications and following review in a timely fashion but no less often than every five years.

### SUMMARY

Goals and policies are necessary elements within any rational planning program. Without them, progress is difficult or impossible to measure and any assessment of plan attainment is meaningless. The goals and policies of this plan have been thoughtfully considered by the Waukesha County Park and Planning Commission with an emphasis on their applicability to all of the many local constituent units of government in Waukesha County.

## CHAPTER IV

### POPULATION AND LAND UTILIZATION FORECASTS ANTICIPATED GROWTH AND CHANGE

Change due to population increase and the resultant land development seems to have been the inevitable constant for most of Waukesha County in the immediate past. In older developed urban areas, growth, decay and renewal is the typical life cycle. As a relatively undeveloped but developing county, (about 25% of the total area of Waukesha County is urbanized)<sup>1</sup> Waukesha County is faced with an almost certain continuing need to accommodate growth in the face of rising energy prices, building costs and associated difficulties. Due to the variables involved and the dynamics of our situation, forecasts made at the outset of any planning program become increasingly less accurate as time passes, especially if there are significant divergencies from the plan. Since the data upon which all plans are based is subject to change, re-examination at future intermediate points in time becomes an important task to be performed. With that in mind and using as a starting point the data contained in the Year 2000 Regional Land Use and Transportation Plan (as well as data from other elements of the comprehensive plan relevant to Waukesha County) we provide in this chapter the Southeastern Wisconsin Regional Planning Commission population and land use forecasts and the Waukesha County adjusted forecasts, noting that they are subject to future modification as conditions warrant.

Waukesha County in addition to being subdivided into political jurisdictions, has been subdivided into "planning analysis areas". These areas have been used to report the forecast population and land use demand requirements manifest in the adopted Regional Plan and in the adjusted forecasts because they are believed to be more useful than existing municipal boundaries which are subject to frequent change. Map C shows the planning analysis areas in Waukesha County.

An analysis of the actual population and land use changes through 1980 versus the earlier forecasts which were prepared to support the adopted year 2000 plan elements shows significant contradictions between the two. These contradictory findings relate largely to the amounts of land converting to urban use in excess of those set forth in the adopted plans. In addition, the rate of population increase as well as internal distribution in Waukesha County has made it necessary to prepare an adjusted forecast for both population and land use. This has been done in Figure IV-1.

#### ADJUSTED FORECASTS: POPULATION AND LAND USE

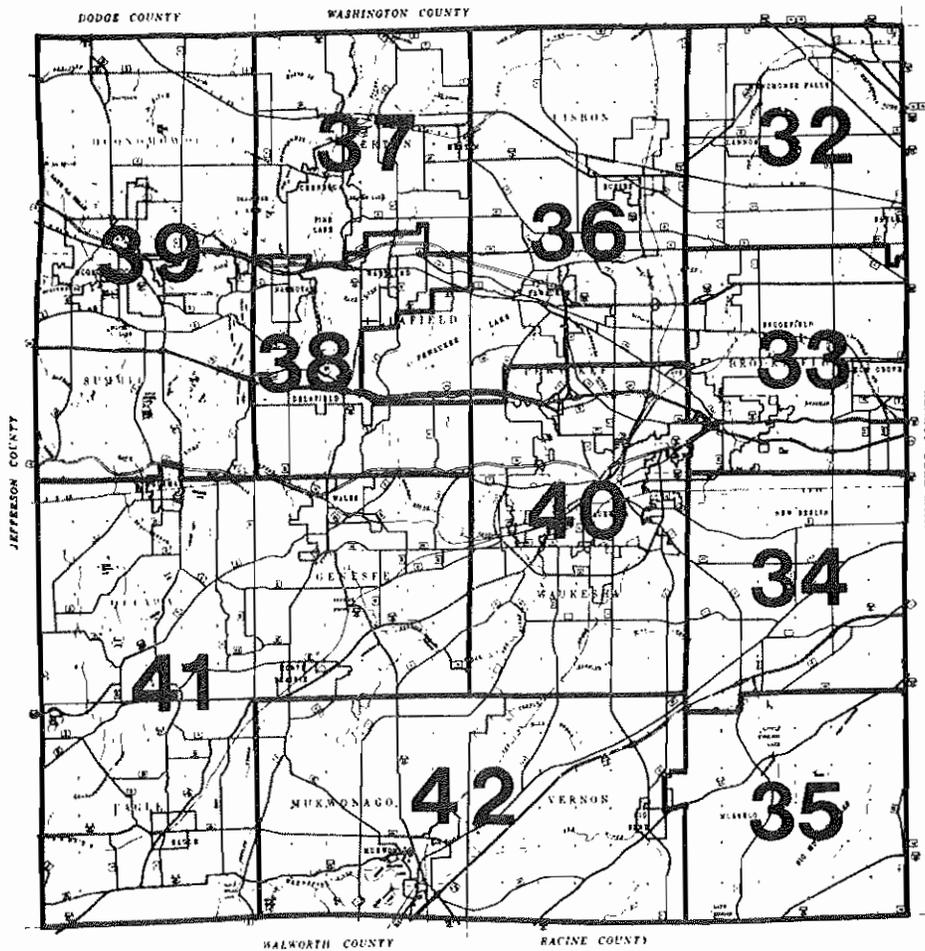
Figure IV-1 depicts the adjusted forecasts for population and land use. The communities which comprise each planning analysis area are found under the heading "Planning Analysis Areas" with the number for each planning analysis area found in the following column. The three following columns refer exclusively to population with the first showing the planned population increment according to the Year 2000 Plan for each planning analysis area; the second column reflecting the actual change in population over the period 1970-1980 and the third column reflecting the adjusted planned population increment for the period 1980-2000 which has been influenced largely by various existing or anticipated factors.

<sup>1</sup> Source: Southeastern Wisconsin Regional Planning Commission

In the column which reflects the actual change in population 1970-1980, the official U. S. Census of population was used. The adjusted planned population increment suggests a strong adherence to the underlying adopted Regional Plan elements through the Year 2000.

The next three columns deal with the quantity of lands actually converted or needed to meet anticipated needs with the first column in this section dealing with the planned urban land use increment according to the Regional Plan for the period 1970-2000. The next column shows the actual acreage of agricultural and/or other rural lands which have converted through the subdivision platting process to urban lands in the period 1970-1979. Note that in three instances we see the urban land use increment allocated for the thirty year period, 1970-2000 being exceeded in just the first ten years of that period. Planning analysis area 38, 41 and 42 have all exceeded the increment provided under the Regional Plan and have given cause for the adjustments made. The last column reflects the adjusted urban land use need in each planning analysis area based on the adjusted planned population increment 1980-2000.

The next column relates to the assumed household size and the number of families which will be added to each planning analysis area by the Year 2000. The final column shows the overall average lot size needed in order to accommodate the forecast population increment in the period 1980-2000.



PLANNING ANALYSIS AREAS	#	PLANNED POP. INCREMENT REGIONAL PLAN 1970-2000	1970-1980 POP. CHANGE	ADJUSTED PLANNED POP. INCREMENT 1980-2000	PLANNED URBAN LAND USE IN-CREMENT ACRES- REGIONAL PLAN	ACTUAL 1970-1979 ACRES CONVERTED	ADJUSTED LAND USE NEED-ACRES 1980-2000	ADD'L ASSUMED HOUSE-PERSONS HOLDS PER HH.	OVERALL AVG. LOT SIZE
Dutler V. - Lannon V. Meno-Falls V.	32	30,600	-4,123	30,000 (+)	2,965	305	2,700	8,296/3.6	1/3 acre
Brookfield City Brookfield Town Elm Grove V. New Berlin City	33	14,000	1,869	9,000 (+)	2,076	1,429	1,500	2,489/3.6	1/2
Muskego City	34	29,400	3,619	24,000 (+)	3,097	1,094	2,000	6,557/3.7	1/2
Lisbon T. Sussex V. Pewaukee V. Dela- field T pt. Pewaukee T pt.	35	9,900	3,704	6,000 (+)	911	851	800	1,639/3.7	1/2
Merton T. Merton V. Chenequa V.	36	21,200	6,701	15,000	2,559	1,953	3,500	4,464/3.4	3/4
Delafield C. Dela- field T pt. Hartland V. Nashotah V.	37	4,600	1,890	2,500	841	647	1,000	744/3.4	1 1/3
Oconomowoc C. Ocono- mowoc T. Lac La Belle V. Oconomowoc Lake V. Summit T.	38	11,100	4,364	6,000	1,498	1,605 (x)	1,700	1,786/3.4	1
Maukasha C. Maukasha T. Pewaukee T.pt.	39	12,500	2,849	6,000	1,425	874	1,600	1,786/3.4	1
Ottawa T. Dousman V. Eagle T. Eagle V. Genesee T. North Prairie V. Wales V. Mukwonago T. Mukwonago V. Vernon T. Big Bend V.	40	33,600	13,613	20,000 (+)	4,232	2,565	3,000	5,952/3.4	1/2
	41	11,200	6,094	6,000	2,068	3,248 (x)	2,000	1,786/3.4	1
	42	11,200	8,408	5,000	2,259	3,736 (x)	1,700	1,488/3.4	1
Sources: U.S. Census DOA SEWRPC Waukesha County		189,300	48,988	129,500 (+) substantial multifamily housing possible in these PAA'S	23,931	18,352 (x) In these areas the amount of lands con- verted 1970-79 has exceeded the allocated amount through the year 2000	21,500		

FIGURE IV-1

ADJUSTED FORECASTS - POPULATION AND LAND USE

## Factors Relevant To the Anticipated Growth Within Each Of The Planning Analysis Areas

- #32 This area is comprised of the Villages of Butler, Lannon and Menomonee Falls. The population increase since 1970 was far below what might have been expected considering the projection of the Regional Plan. With fewer births and a maturing of the population, it has been necessary to close a number of schools within this area. The lack of available sewer services and unsuitable soils for private onsite sewage disposal systems has resulted in loss of population and has contributed to the development in the areas immediately west which occurred substantially without the benefit of municipal services. As the Metropolitan Milwaukee Sanitary District begins servicing this area, it is reasonable, we feel, to anticipate that much infilling will occur on passed over sites. At the western edge of this sector, sewer services are forecast to become available through the Village of Sussex and the Upper Fox trunk sewer to the Brookfield Areawide Treatment Plant.
- #33 This area comprised of Brookfield City, the Town of Brookfield and Elm Grove Village is the second most populous area of the County. It is expected to continue to develop at densities similar to the present as sewer service becomes available. The recent slow rate of population increase is due, we believe, to a combination of events including the in-migration of new smaller sized households, the maturing of the population and sewer moratoria inhibiting new development. This Planning Analysis Area contains relatively little farmland and of that, little is considered Prime. Only a slight amount of those lands to which no sewer service will be extended lie outside the Fox River floodplain and its associated environmental corridor.
- #34 This area consists of the City of New Berlin. The rate of growth in terms of population increase has been less than anticipated in the past 10 years due in large extent to the sewer moratoria imposed in the Metropolitan Milwaukee Sewage District and the extent of unsuitable soils for private onsite sewage disposal systems. With the potential availability of sewer service extensions in the next 20 years, the demand for building sites within this area should be great considering the proximity to existing employment centers located within this area and nearby and the lands available for the development of additional employment opportunities.
- #35 This area is comprised of the City of Muskego and has experienced a greater population increase in the 1970's than would have been anticipated considering the forecast of the Regional Plan. This increase, we believe, can be attributed to the availability of sewer services from the City's own treatment facilities and the permissive attitude within this area for the construction of multi-family housing. The current rate of growth is expected to continue during the decade of the 80's and to slow thereafter as sewer treatment facility capacity is reached since there is little suitable land which could be developed with onsite waste disposal facilities.
- #36 This area consists of the Town of Lisbon, Village of Sussex, Village of Pewaukee and parts of the Towns of Delafield and Pewaukee. The rate of population growth within this Planning Analysis Area has been about what one would have expected over the last decade. A disconcerting feature characteristic of the growth within this area is that over 1,900 acres of land has been converted to residential subdivisions in the first third of the planning period whereas the total increment allocated for the thirty year period 1970-2000 was 2,500 acres. Needless to say, the densities are low and the pattern of development is inefficient. This area is expected to be a major area of growth during the planning period with commercial and industrial development as well as residential.

- #37 This Planning Analysis Area includes the Town of Merton, the Village of Merton and the Village of Chenequa. The growth within the previous nine year period represented by an increase in population of 1600 is about one third of the total increment provided for this area in the Regional Plan, thus meeting expectations. The land converted to urban uses is excessive in terms of the quantity provided for in the Regional Plan. Large portions of this area, especially around the lakes, are intended to be served with sewer by the Year 2000. This will provide for an increase in the amount of new development even though the service is primarily directed toward serving existing development around the lakes.
- #38 This Planning Analysis Area consists of Delafield City, part of Delafield Town, Hartland and Nashotah Villages. The population within this Planning Analysis Area has exceeded the rate we might have expected in the previous ten year period though not by a large margin. The number of acres converted to urban uses during the 1970's has exceeded the planned increment provided in the Regional Plan for the period 1970-2000. With the development of the Dela-Hart Municipal treatment plant which provides services to a number of communities, including the Village of Hartland, the City of Delafield and the Village of Nashotah, we expect this area to be a substantial growth center in western Waukesha County with that growth being directed toward areas served with municipal services.
- #39 This Planning Analysis Area comprises the Townships of Oconomowoc and Summit and the incorporated municipalities that lie within each. It has grown within the last 10 years at a rate which is below that suggested by the Regional Plan and in amounts which are below that necessary to meet the planned urban land use increment. Sewer services are available through the City of Oconomowoc and if present City interest in growth management continues, we feel that the development in and around the City will be in an orderly manner directed toward the services that the City is able to provide.
- #40 This Planning Analysis Area is comprised of the City of Waukesha, a portion of the Town of Pewaukee, and the Town of Waukesha. The increase in population within this Planning Analysis Area of 13,613 was the largest increase in Waukesha County in the period 1970-1980. Nearly one-half of the planned population increment of 33,000 to the Year 2000 has already been reached. Our forecast is for at least an additional 20,000 increase in population through the Year 2000 with the major increase occurring within the sewer service boundary of the City of Waukesha. A second major area of growth will lie within the sanitary district of Pewaukee Town utilizing the Brookfield Areawide Treatment Plant. Lesser amounts of land may develop on rural sites within the Town of Waukesha and remain unserved by a central sewage system. Recent platting activity indicates a high demand for suburban sites without central sewer and reflects easy accessibility to employment opportunities, in combination with lower site costs.
- #41 This Planning Analysis Area is the largest geographic Planning Analysis Area found within Waukesha County consisting of three townships - Ottawa, Eagle and Genesee and the incorporated municipalities that lie within each. The population increase within this Planning Analysis Area since 1970 has exceeded by 47% that allocated through the Year 2000 and land conversion through subdivision platting has exceeded the amount of urban land allocated by 150%. The densities at which property is developing in this Planning Analysis Area are a classic example of the sprawl situation.

#42 The population increase in this Planning Analysis Area consisting of Mukwonago and Vernon Towns and Big Bend and Mukwonago Villages has been 134% above the amount forecast through the Year 2000 on the Regional Plan and the actual number of acres converted to residential subdivision use has exceeded by 165% the amount allocated to the planned urban land use increment. In this Planning Analysis Area, we have witnessed the problem of extension of school facilities and other community development problems which will be felt for years to come. The Village of Mukwonago with a sewage treatment plant is the only area within this Planning Analysis Area in which municipal services are planned.

#### SUMMARY

The population and land use forecasts prepared and adopted under the year 2000 Regional Land Use and Regional Transportation Plan have been studied, considered and adjusted. A variety of factors have influenced this need to adjust the earlier figures. They include changing trends in life style, household formation, birth rates and greatly increased costs for housing as a percentage of total disposal household income.

## CHAPTER V

### PLAN PREPARATION

Earlier chapters spoke to the issue of urban sprawl and described Waukesha County as a complex of numerous constituent units of local government in which substantial prime farmlands had been lost through premature conversion to urban uses. Some of that development occurred in a rational progression outward from existing centralized urban places. A far greater amount in terms of land area has been converted in a manner illogical and contrary to the concept of wise stewardship of the land resource. The public interest is best served through a process of rational planning in order to accommodate all or as many of the societal needs as is practical and feasible to do while protecting sensitive natural environments and reducing public expenditures.

This chapter presents the Recommended Agricultural Land Preservation Plan for Waukesha County and is intended to satisfy as nearly as possible the goals presented in Chapter III of this report which dealt with agricultural land preservation goals and policies. The essential elements of this plan include the retention of the most productive farmlands of Waukesha County, the provisions of land to accommodate growth and the protection of environmentally sensitive areas and open spaces. Soil characteristics for agricultural purposes as well as development purposes have played a large part in the preparation of this plan. Many of the underlying concepts contained in various adopted elements of the Regional Plan, already serving as guides to decision makers, are incorporated into this plan. Specifically, those that deal with the sewer service boundaries of the adopted Regional Water Quality Management Plan, the refined environmental as referenced in the adopted Regional Park and Open Space Plan as well as the adopted Year 2000 Land Use Plan have been extensively utilized.

The following sections of this chapter describe the component parts of the Agricultural Land Preservation Plan for Waukesha County. They are: the Recommended Agricultural Land Preservation Areas, the Recommended Growth Areas and the Recommended Environmentally Sensitive Areas. For each section, the method of plan development is discussed, the recommended plan description is presented and implementation policies that apply are spelled out. The Agricultural Land Preservation Plan is graphically portrayed in a series of township maps and is accompanied by data sheets which contain relevant planning information for each town and planning analysis area.

#### Recommended Agricultural Land Preservation Areas Plan Methodology

The Agricultural Land Preservation goals outlined in Chapter III called for the preservation of the most productive farmlands in Waukesha County which lie beyond forecast development needs. In identifying the most productive farmlands, consideration of the minimum State standards for mapping such farmlands and the utilization of the U.S.D.A./Soil Conservation Service agricultural soil suitability criteria was employed. Farmlands with soils considered National Prime and of Statewide Significance were deemed of major importance in the consideration of lands to preserve. Farmlands of local significance and/or unique soils which are characterized by greater limitations for agricultural use were deemed of lesser importance in the consideration of lands to preserve. The size of individual farm units and the size of the larger mass of agriculturally used lands as well as the soil characteristics were the major criteria

upon which the recommended Agricultural Land Preservation areas are based. Specifically, farm units which could meet the following criteria are recommended for preservation:

1. Individual farm unit parcels of 35 acres or more in area
2. 50% of the farm unit covered by soils which have been rated National Prime or of Statewide Significance or a combination of the two
3. The individual farm unit must lie within a larger aggregation of at least 100 acres in area. Areas of transition lands which are recommended for interim preservation must be at least 35 acres in area.
4. Lands recommended for the preservation category must lie beyond the anticipated needs of the community for lands to accommodate growth.

The steps taken to achieve the recommended agricultural land preservation plan took the following two phase course. Initially, a set of township maps (Map 1) identifying lands in agricultural use, environmental corridors and other sensitive environmental lands, fragmented and urban developed lands, the Year 2000 sewer service areas, lands presently (1980) under contract with the State of Wisconsin for participation in the Agricultural Tax Credit Program, and a set of soils maps interpreted for agricultural suitability was prepared. The resulting maps were then presented to all constituent units of government in which there were found any lands meeting the criteria for agricultural lands to be preserved. The Waukesha County Park and Planning Commission acting as the policy making body and planning authority for the unincorporated areas of Waukesha County reviewed the maps and the input of the local units of government. Thereupon, a second phase was initiated utilizing a screening out process to further refine from among the total amount of lands to consider for agricultural preservation those which the Commission elected to include in the agricultural lands to preserve category and in the transition category. The Commission's thinking and resultant direction at this point was profoundly influenced by the scant voluntary participation it had observed and the input derived from the public at the many workshop sessions which the staff conducted. That input, which centered around the dissatisfaction which many farmers saw in the level of incentive provided under the State Tax Credit Program, altered the anticipated course which the plan preparation work was originally to have taken. Whether the criticism that the tax credits were not high enough is a valid one in this urban situation, we cannot conclusively say. It would have been highly desirable to conclusively determine the effects on the personal financial estates of all those persons who could potentially qualify for the tax credit program but it was simply not possible under the scope of this plan. The opinions voiced by large numbers of farmers that they would suffer loss in land values was linked in part to the diminished economic viability of continued farm operations and, at least from their point of view, what they saw as an intervening opportunity to sell lands for development. Economic viability is a very difficult concept to deal with in a rapidly converting urban oriented county. The staff has learned from many influential agriculturally oriented people that conditions in Waukesha County tend to make the economic viability of continuing farm operation increasingly non-attainable. In the face of this attitude, it is ironic that so great an amount of farmland continues to be farmed. As this plan shows, there is more than sufficient land to accommodate the needs of the future in terms of urban uses and also to continue agricultural pursuits on the lands best suited for agricultural endeavors.

It was anticipated in the latter process that a substantial amount of land which could not be placed in agricultural preservation zones would result. This was found to be the case. Some of these lands could serve to accommodate demand for rural home sites at density factors ranging from 3 acres per dwelling unit and up as well as continuing in small scale agricultural uses either as they stand or by consolidating into larger operations with adjacent farms. These lands, in effect, could serve as a reserve of lands to use for low density development while keeping larger agricultural tracts intact. The desirability of these lands serving as a low density supply of land for development would not be optimum in terms of the provision of services to the entire community or from a theoretical planning standpoint but it might serve as a possible compensating factor to those who argue for continuing the status quo of extensive overzoning which is manifest throughout Waukesha County. It is significant that practically all of the land which met the criteria for agricultural preservation in the first phase has been recommended for agricultural land preservation in the second phase.

The Plan calls for the remaining fragmented unimproved lands exclusive of sensitive environmental areas to function as the reserve of lands into which future urban expansion may locate consistent with the goals for growth presented in Chapter III. In some instances a reaggregation of adjacent farm operations is recommended. In these cases, it is where existing fragmented lands continue to be farmed. The transition category generally has been mapped in areas lying within the designated sewer service boundaries which meet the lands to be preserved criteria for agricultural land preservation but which currently lie beyond immediate needs for urban expansion. The timing of development within these areas will, we feel, be dependent upon market forces and capital improvement planning and budgeting procedures of the specific sanitary district and/or communities in which these lands lie.

#### Plan Description

Map 2 of the two that have been prepared for publication purposes for each township shows the agricultural land preservation areas recommended under the Waukesha County Agricultural Land Preservation Plan. These lands are those which meet the adopted agricultural land preservation criteria. In addition, certain parcels lands which are less than 35 acres each and are in agricultural use have been recommended for agricultural preservation in the expectation that they may consolidate with nearby active farm operations. The recommended agricultural land preservation area encompasses a total land area of 108,806 acres or 170 square miles. This accounts for 30 percent of the total land area of Waukesha County (see Figure V-1). Of the sixteen civil towns in Waukesha County, 15 contain lands recommended for preservation under this plan. The other, Brookfield, contains active operations which should be encouraged to continue but which in the long run will be lost to development.

Under this plan, the conversion of prime agricultural land would be allowed only to meet demonstrated needs for development and after a finding as provided by law. Those prime agricultural lands shown as "transitional lands" lie for the most part within areas to be served with municipal services by the Year 2000. In effect, the infilling of these transition areas would be desirable and where these farmlands are converted, a beneficial trade-off necessary to meet the objectives of this plan would be accomplished. These transitional lands would accommodate growth and relieve the pressure on more rural sites. As indicated in Figure V-1, 16,626 acres or 4.5 percent of the total land area of Waukesha County are so designated as transition lands.

## Plan Implementation Policy

The following policy is necessary to the proper implementation of the agricultural land preservation element of this plan:

Lands designated for Agricultural Preservation by this plan should not be permitted to convert to urban uses or other uses inconsistent with agricultural endeavors unless a finding is made to the effect that:

- A. As originally mapped, the designated preservation area was inaccurate or that conditions upon which the recommendations were made have changed to a substantial degree warranting permission to convert.
- B. That the land or lands so mapped are economically/nonviable for agricultural pursuits considering contemporary farming methods and marketing practices.
- C. Other elements of the County Development Plan which from time to time may come to be modified, make the recommendations contained herein inconsistent.
- D. Municipal sewer and water service becomes scheduled for construction in areas beyond that shown in this plan.

## Recommended Natural Resource Preservation Areas Plan Methodology

The goals for open space and environmentally sensitive lands as set forth in Chapter III of this plan call for the preservation of the high value elements of the natural resource base as identified and mapped on the adopted Regional Park and Open Space Plan for Waukesha County or any subsequent refinement thereof. The maps utilized in the identification of these areas in this report are sufficiently detailed and at a large enough scale that they do represent such a refinement in many respects. Those goals also call for the abatement of all pollution sources which may contribute to the degradation of the air, soil and surface and ground water resources of Waukesha County. The methodology used in identifying environmentally sensitive areas was that similar to the identification of the primary and secondary environmental corridors as shown in the Regional Plans and involved identifying eleven elements of the Primary Environmental Corridor on aerial photographs. The eleven elements listed in Chapter II and used in the identification of the environmentally sensitive lands are as follows:

1. Lakes, rivers and streams and the associated undeveloped shorelands and floodlands.
2. Wetlands
3. Woodlands
4. Wildlife habitat areas
5. Rugged terrain and high relief topography
6. Significant geological formations and physiographic features
7. Wet, poorly drained and organic soils
8. Existing outdoor recreation sites
9. Potential outdoor recreation and related open space sites
10. Historic and other cultural sites and structures
11. Significant scenic areas and vistas

These mapped features taken together in their various combinations form, for the most part, connected linear patterns. The environmental corridors identified herein should generally be considered inalterable in that their preservation in an

open natural state will serve to implement this plan and will reinforce the high level of natural environmental quality remaining in Waukesha County. As mapped, on Map 2, certain environmentally sensitive lands lie within agricultural preservation areas. Where this is the case, it is the intent of this plan that the sensitive areas be respected. In addition to the connected linear patterns which have resulted, there are isolated natural features that have been included within the natural resource preservation areas where they exhibited features worthy of preservation or contain combinations of the elements cited above. Examples of such isolated features include pockets of land exhibiting the above elements such as upland woodlots or lowland kettle lakes. These isolated environmentally sensitive areas are recommended to remain intact under this plan.

### Plan Description

As shown on Map 1 for each township the environmental corridors in Waukesha County are located chiefly along the main trunks of tributary streams of the rivers of the County. Roughly 75,356 acres or 21 percent of the total area of Waukesha County lie within identified environmental corridor areas or are considered environmentally sensitive lands. (see Figure V-1). Pressures are present for the conversion of environmental sensitive lands in all parts of the County and an increased awareness of the values which they possess is necessary to insure that they are properly protected.

### Plan Implementation Policies

In order to retain the qualities of the identified environmental corridors and sensitive areas, the following public policies are adopted:

1. The identified environmental corridors of this plan should be preserved without alteration to as high a degree as possible.
2. Large lot country estate(5 acres) styles of development in upland areas which are otherwise suitable for development are considered compatible with the intent of this plan.

### Recommended Urban Development Areas

#### Plan Methodology

The adjusted forecasts for population and land usage as presented in Figure IV-2 indicates an expected population increase of about 129,500 between 1980 and the Year 2000. This increase added to the current 1980 population level of 279,014 will bring the Year 2000 population to about 408,514 persons, approximately 11,500 less than that forecast in the adopted Year 2000 Regional Land Use Plan. This plan assumes greater future success in the implementation of the Regional Plan recommendations due primarily to rising energy costs which will necessitate more compact development, slower rates of population increase and scarce capital to finance urban sprawl. Therefore, in some of the planning analysis areas of the County, the population density will increase where the availability of municipal service extensions (sewer and water) are programmed. The development areas suggested by this plan are intended to guide two important aspects of land use planning, that is, location of development and amount of land resource necessary to accommodate expected population increases within a specified plan period. Implementation of the urban development element of this plan will result in a satisfaction of the goals of this plan and more importantly, remove pressure for the conversion of large areas of farmlands which lie beyond the forecast needs during the remainder of this century.

## MAP DESCRIPTIONS AND CRITERIA

The maps which follow embody the Agricultural Land Preservation Plan for Waukesha County in a graphic fashion. For each of the sixteen townships of Waukesha County, two maps have been prepared for publication purposes. Map 1 relates to the process followed including the many factors considered in coming to a plan recommendation. Map 2 represents the final recommendation or plan. Many other maps have been prepared over the course of this planning project and will remain in Commission files for future reference.

Map 1 - The features displayed on Map 1 include the following:

1. POTENTIAL SEWER SERVICE AREA - Year 2000: The area encompassed by this boundary delineation reflects the adopted recommendations of the Southeastern Wisconsin Regional Planning Commission's Water Quality Management Plan with respect to areas which should be serviced with municipal sewer services by the Year 2000. In some cases, the original delineation has been refined subsequent to its initial adoption through further negotiation with the various communities involved, the Wisconsin Department of Natural Resources and Southeastern Wisconsin Regional Planning Commission.
2. ENVIRONMENTAL CORRIDOR: The environmental corridor and other environmentally sensitive lands have been determined by visual examination of large scale aerial photographs interpreting the elements cited earlier in this chapter. In addition soils maps, topographic maps and other recognized sources of mapped data have been used when appropriate. Typically included within this designation are low wet areas associated with floodplains but many of the other elements are observed in various combinations as well. For mapping purposes, the full extent of the environmental corridor is shown on Map 1. In many cases, the linear nature of these corridors traverses active farm operations.
3. DEVELOPED AND/OR FRAGMENTED LANDS - Parcels Less Than 35 Acres: This category includes all parcels which are less than 35 acres in area and have a non-agricultural principal use. It is necessary to distinguish these due to the statutory constraints regarding minimum size for participation in the State of Wisconsin Tax Credit Program.
4. LANDS IN AGRICULTURAL USE - Parcels Less Than 35 Acres: This category includes lands which because they continue in agricultural use and are not irretrievably committed to development have received consideration for inclusion into the preservation or transition areas. Although these lands individually fall below the threshold for participation in the agricultural land preservation program, the intent of this classification is to further examine these areas and consider their reaggregation into larger adjacent farmlands where warranted.
5. LANDS IN AGRICULTURAL USE - Parcels 35 Acres Or Greater: Included in this category are all lands to consider for agricultural preservation or transition by virtue of their size (35 acres or greater) and the present use (agricultural). In effect this is the universe of lands to which the criteria for recommending preservation or transition will be applied. That criteria is spelled out in the Plan Methodology section of the chapter relating to Recommended Agricultural Land Preservation Areas.

6. FARMS WITH AGRICULTURAL LAND PRESERVATION CONTRACTS: This category illustrates the distribution, extent and number of farms where owners have elected to place their operations under contract with the State of Wisconsin Tax Credit Program as of December, 1981.
7. OTHER LANDS: This category includes all other land uses not included in any of the preceding categories i.e. gravel pits, quarries, golf courses, other public and private recreation areas and idle lands over 35 acres in size.

Map 2 represents the recommended agricultural land preservation plan as it applies to each township in Waukesha County. As such, this series of maps along with the supporting data contained in the text of this plan constitutes a satisfaction of adopted goals and policies of Chapter III. The following is a description of features shown on Map 2.

1. AREAS RECOMMENDED FOR AGRICULTURAL LAND PRESERVATION - Parcel Size 35 Acres Or Greater: These lands are recommended for agricultural land preservation on the basis of their ability to meet or exceed the criteria established for such lands. Each individual farm unit consists of a parcel or parcels 35 acres or more in area. 50% of the farm unit is covered by soils which have been rated National Prime or of Statewide Significance or a combination of the two. The individual farm unit lies within an aggregation of similarly situated farm units comprising at least 100 acres in size and these lands lie beyond the anticipated needs of the community for lands in which to grow through the Year 2000. Also included within this category are some areas of environmental corridor lands which lie within portions of active farm operations. Inclusion of these lands was deemed desirable and necessary in order to preserve and maintain the integrity of these active operations without having them divided by the environmental corridors. It is the intent, however, that these environmental corridors not be modified or altered but that they continue to remain in undisturbed or relatively undisturbed states.
2. AREAS RECOMMENDED FOR AGRICULTURAL LAND PRESERVATION - Parcel Size Less Than 35 Acres: This area depicts agriculturally used parcels smaller than 35 acres which are recommended for agricultural preservation. These lands in and of themselves will not qualify for participation in the State of Wisconsin Tax Credit Program. They possess the potential for reaggregation to efficient and economical farm operations and for that reason it is deemed under this plan to be desirable to place them into the preservation category.
3. AREAS RECOMMENDED FOR AGRICULTURAL PRESERVATION - TRANSITIONAL: Transitional farmlands are recommended for preservation but with the recognition that they lie in close proximity to existing centers of development and/or within areas to which community services are planned over the planning period of the next 20 years (the Year 2000). At some time within the planning period, therefore, it may be necessary to convert these lands to urban or suburban uses to accommodate future population demands. It is consistent for this to occur in accordance with the growth element of this plan.
4. LAND TO ACCOMMODATE FUTURE GROWTH: Under this plan, these areas which have been designated to accommodate future growth are available immediately, if necessary, to accommodate the present demand for building sites within the various communities of Waukesha County. These lands where possible are located in areas adjacent to existing centers of development to facilitate the efficient use of community facilities, such as roads, schools, police and fire protection and water distribution systems. In most cases, these areas lie within the sewer service area of the Year 2000 Water Quality Management Plan. Also

included within this designation are lands which are in the process of being platted, or have been so recently platted that they are not yet completely built upon and contain substantial remaining sites for development.

5. ENVIRONMENTAL CORRIDOR: The areas shown as environmental corridors on Map 2 are those environmentally sensitive lands which exhibit at least three of the eleven elements of environmental corridors which were discussed earlier in Chapter V. Small areas of environmental corridors which lie within and are portions of active farm operations are not shown in Map 2. This, it is felt, does not pose any particular problem in that these lands under the U.S.G.S. / Soil Conservation Service cooperator agreements and resulting farm plans will not be converted from their natural state to incompatible uses.
6. OTHER LANDS: This category includes all existing developed lands and all lands not included in the environmental corridors or lands needed to accommodate the forecast level of population increase or lands recommended for agricultural land preservation either permanent or transitional. It serves as a holding type of category which in the future may be considered for accommodating growth.

#### TOWN AGRICULTURAL LAND PRESERVATION PLAN MAPS

The following pages contain the Agricultural Land Preservation Plan Maps at a scale of 1" = 1 mile. These maps have been reduced from the scale at which they were prepared originally in order to permit their publication in this report. Maps at the original scale of 1" = 2,000' are available from the Waukesha County Park and Planning Commission Office.

The data sheets on the next two pages present the recommended land uses under the Agricultural Land Preservation Plan first on the basis of planning analysis areas and secondly on the township basis.

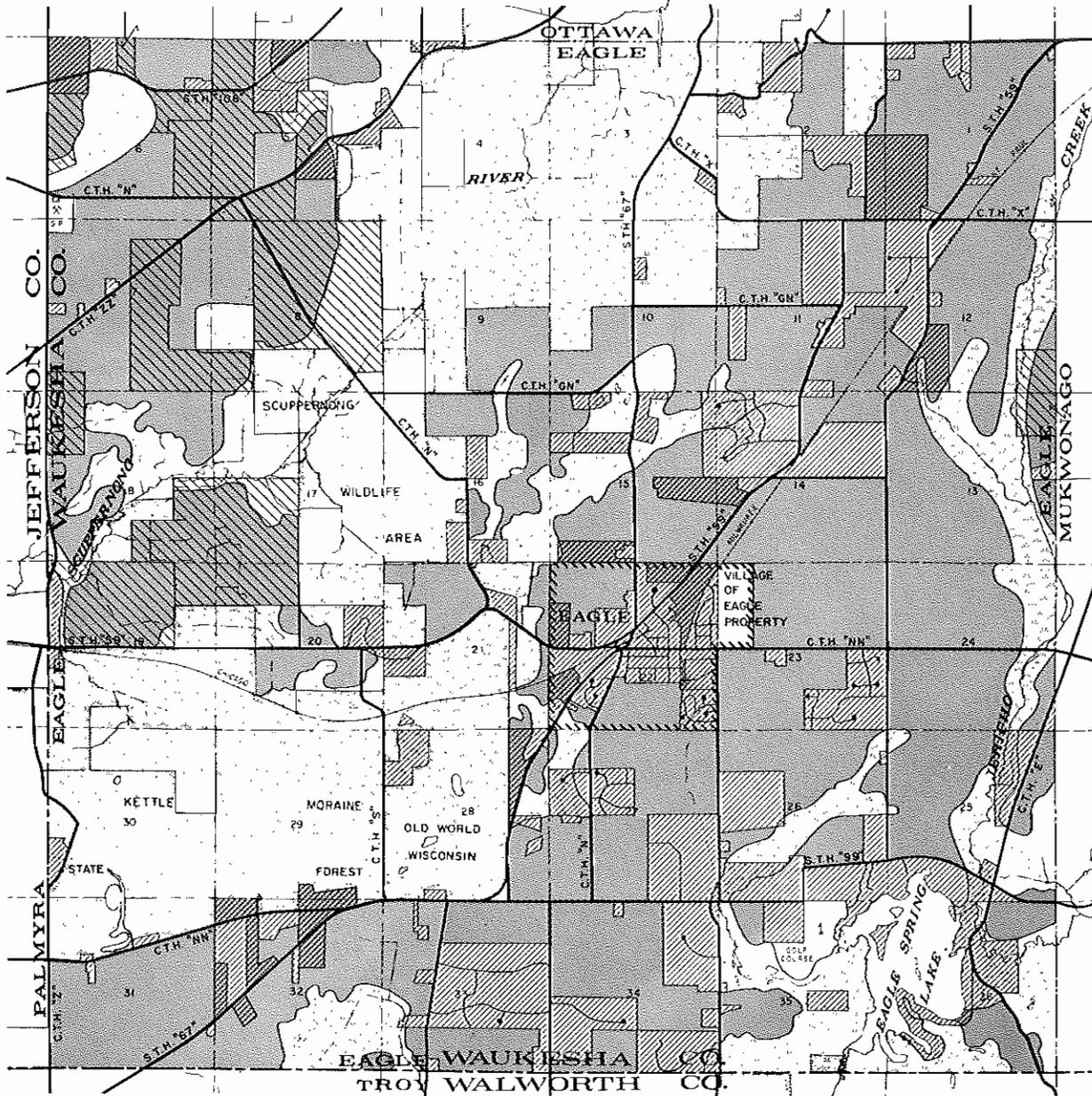
PLANNING ANALYSIS AREAS #	AG. PRESERVATION PARCELS GREATER THAN 35 ACRES	AG. PRESERVATION PARCELS LESS THAN 35 ACRES	AG. PRESERVATION TRANSITIONAL LANDS	LAND TO ACCOMMODATE FUTURE GROWTH	ENVIRONMENTAL CORRIDOR
Butler V. Lannon V. Menomonee Falls V. 32	2,994	441	1,674	2,738	4,281
Brookfield City Brookfield Town Elm Grove V. 33	0	0	1,218	1,471	3,785
New Berlin City 34	3,891	524	2,600	2,050	1,564
Muskego City 35	5,795	502	2,839	830	2,860
Lisbon T. Sussex V. Pewaukee V. Dela- field T. pt. Pewaukee T. pt. 36	12,668	987	1,173	3,541	5,872
Merton T. Merton V. Chenequa V. 37	8,472	478	1,191	963	2,745
Delafield C. Dela- field T pt. Hartland V. Nashedah V. 38	4,958	142	822	1,673	4,172
Oconomowoc C. Ocono- mowoc T. Lac La Belle V. Oconomowoc Lake V. Summit T. 39	17,997	644	2,293	1,607	9,570
Waukesha C. Waukesha T. Pewaukee T. pt. 40	6,808	299	1,154	3,049	6,299
Ottawa T. Dousman V. Eagle T. Eagle V. Genesee T. North Prairie V. Wales V. 41	26,447	842	719	2,021	23,269
Mukwonago T. Mukwonago V. Vernon T. Big Bend V. 42	18,776	678	943	1,727	10,939
TOTAL ACRES WAUKESHA COUNTY	108,806	5,537	16,626	21,670	75,356

RECOMMENDED LAND USES UNDER THE AGRICULTURAL LAND PRESERVATION PLAN-IN ACRES  
FIGURE V-1a

TOWNSHIP	TOWNSHIP RANGE	AG. PRESERVATION PARCELS GREATER THAN 35 ACRES	AG. PRESERVATION PARCELS LESS THAN 35 ACRES	AG. PRESERVATION TRANSITIONAL LANDS	LAND TO ACCOMMODATE FUTURE GROWTH	ENVIRONMENTAL CORRIDOR
Eagle	T5N R17E	9,870	444	237	288	8,306
Ottawa	T6N R17E	6,924	199	306	532	11,012
Summit	T7N R17E	7,683	303	1,206	912	5,946
Oconomowoc	T8N R17E	10,314	341	1,087	695	3,624
Mukwonago	T5N R18E	10,187	297	225	1,051	5,863
Genesee	T6N R18E	9,653	199	176	1,201	3,951
Delafield	T7N R18E	5,632	142	862	2,125	4,589
Merton	T8N R18E	8,472	478	1,191	1,065	2,772
Vernon	T5N R19E	8,589	381	718	676	5,076
Waukesha	T6N R19E	5,897	240	483	1,462	5,086
Pewaukee	T7N R19E	2,638	189	1,365	3,074	3,418
Lisbon	T8N R19E	10,267	857	439	1,500	3,223
Muskego	T5N R20E	5,795	502	2,839	830	2,860
New Berlin	T6N R20E	3,891	524	2,600	2,050	1,564
Brookfield	T7N R20E	0	0	1,218	1,471	3,785
Menomonee	T8N R20E	2,994	441	1,674	2,738	4,281
TOTAL ACRES WAUKESHA COUNTY		108,806	5,537	16,626	21,670	75,356

RECOMMENDED LAND USES UNDER THE AGRICULTURAL LAND PRESERVATION PLAN-IN ACRES  
FIGURE V-1b

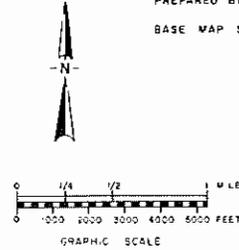
# EAGLE TOWNSHIP WAUKESHA COUNTY, WISCONSIN



## LEGEND

- XXXX INCORPORATED CITY OR VILLAGE
- MAJOR PUBLIC LAND HOLDING
- ▭ POTENTIAL SEWER SERVICE AREA - YEAR 2000
- ▭ ENVIRONMENTAL CORRIDOR
- ▨ DEVELOPED AND/OR FRAGMENTED LANDS - PARCELS LESS THAN 35 ACRES
- ▨ LAND IN AGRICULTURAL USE - PARCELS LESS THAN 35 ACRES
- ▨ LAND IN AGRICULTURAL USE - PARCELS 35 ACRES OR GREATER
- ▨ FARMS WITH AGRICULTURAL LAND PRESERVATION CONTRACTS
- ▭ OTHER LANDS

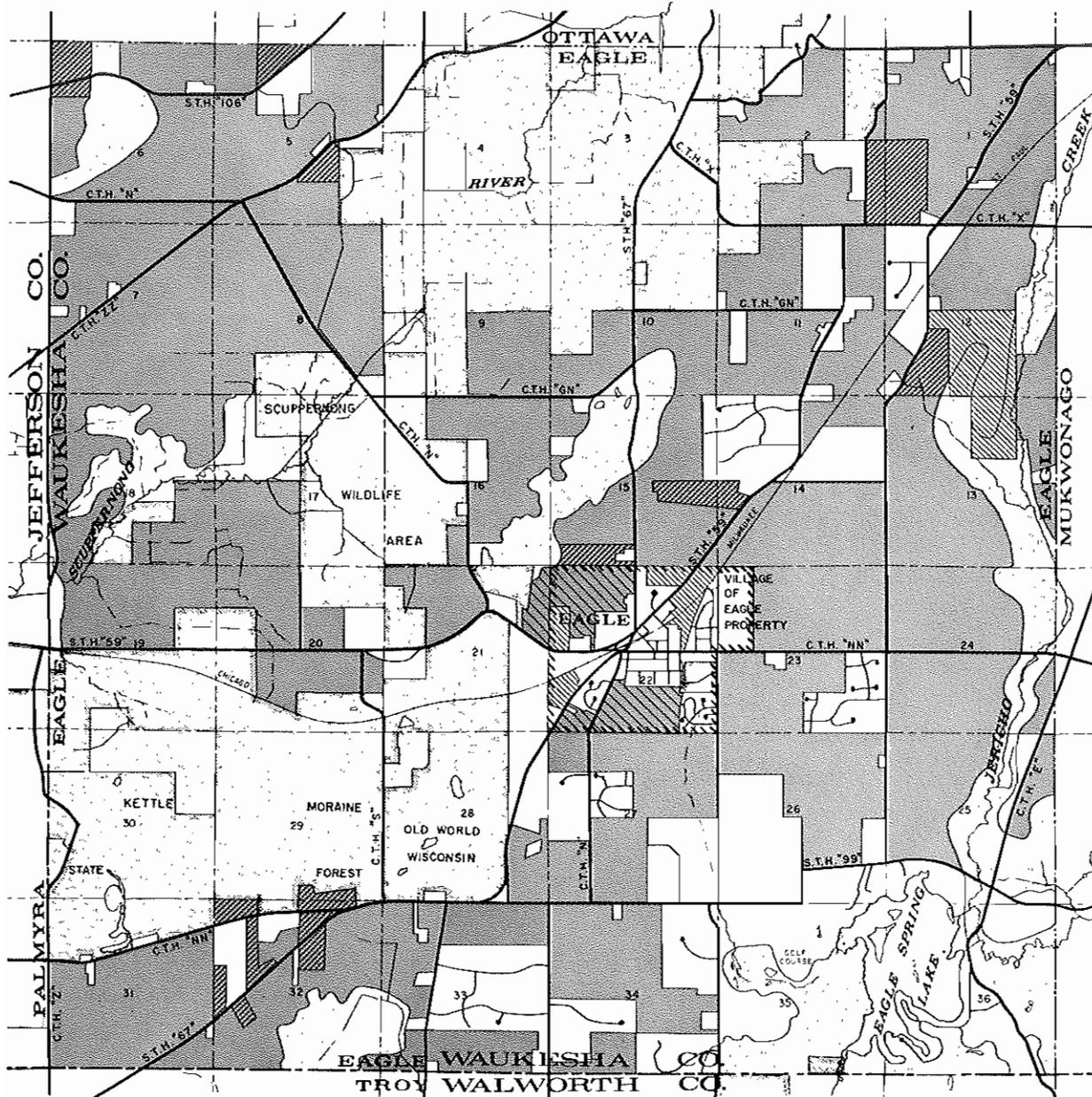
PREPARED BY: WAUKESHA COUNTY PARK AND PLANNING COMMISSION 1980  
BASE MAP SOURCE: SEWRPC



MAP I  
T5N R17E

# WAUKESHA COUNTY AGRICULTURAL LAND PRESERVATION PLAN

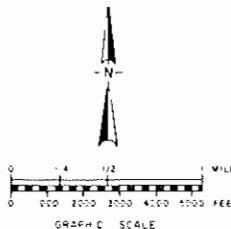
# EAGLE TOWNSHIP WAUKESHA COUNTY, WISCONSIN



### LEGEND

- ▤ INCORPORATED CITY OR VILLAGE
- MAJOR PUBLIC LAND HOLDING
- ▨ RECOMMENDED FOR AGRICULTURAL PRESERVATION  
PARCEL SIZE 35 ACRES OR GREATER
- ▩ RECOMMENDED FOR AGRICULTURAL PRESERVATION  
PARCEL SIZE LESS THAN 35 ACRES
- ▧ RECOMMENDED FOR AGRICULTURAL PRESERVATION  
TRANSITIONAL LANDS
- ▦ LAND TO ACCOMMODATE FUTURE GROWTH
- ▥ ENVIRONMENTAL CORRIDOR
- ▤ OTHER LANDS

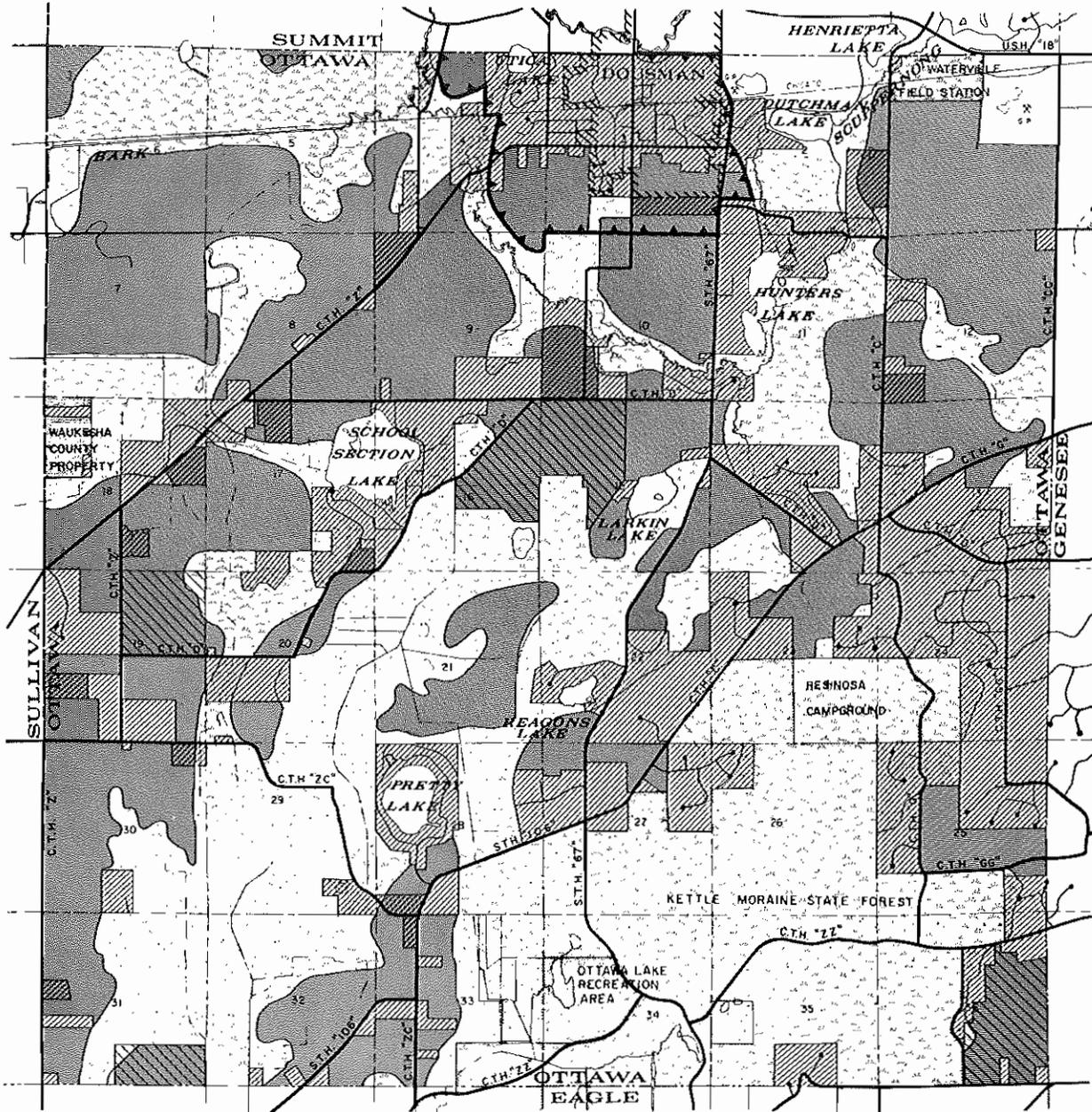
PREPARED BY WAUKESHA COUNTY PARK AND  
PLANNING COMMISSION 1980  
BASE MAP SOURCE SEWRPC



**MAP 2**  
T5N R17E

## WAUKESHA COUNTY AGRICULTURAL LAND PRESERVATION PLAN

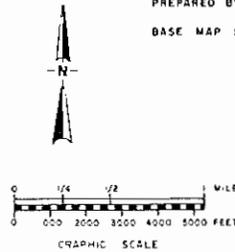
# OTTAWA TOWNSHIP WAUKESHA COUNTY, WISCONSIN



### LEGEND

- ▤ INCORPORATED CITY OR VILLAGE
- MAJOR PUBLIC LAND HOLDING
- ▣ POTENTIAL SEWER SERVICE AREA - YEAR 2000
- ▤ ENVIRONMENTAL CORRIDOR
- ▨ DEVELOPED AND/OR FRAGMENTED LANDS - PARCELS LESS THAN 35 ACRES
- ▧ LAND IN AGRICULTURAL USE - PARCELS LESS THAN 35 ACRES
- ▩ LAND IN AGRICULTURAL USE - PARCELS 35 ACRES OR GREATER
- FARMS WITH AGRICULTURAL LAND PRESERVATION CONTRACTS
- OTHER LANDS

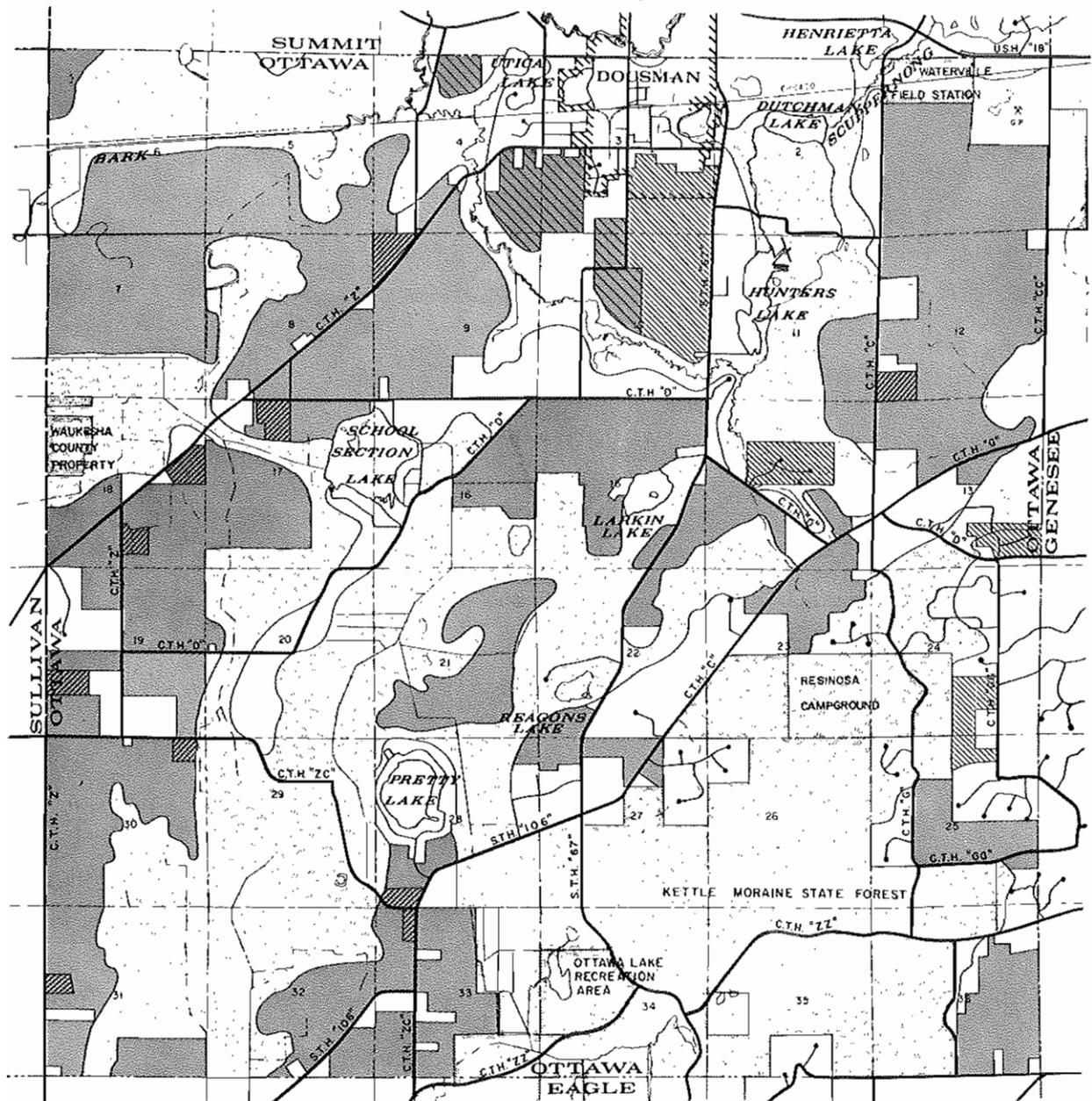
PREPARED BY: WAUKESHA COUNTY PARK AND  
PLANNING COMMISSION 1980  
BASE MAP SOURCE: SEWRPC



**MAP 1  
T6N R17E**

## WAUKESHA COUNTY AGRICULTURAL LAND PRESERVATION PLAN

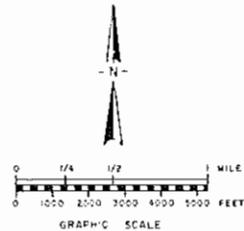
# OTTAWA TOWNSHIP WAUKESHA COUNTY, WISCONSIN



### LEGEND

- ▤ INCORPORATED CITY OR VILLAGE
- MAJOR PUBLIC LAND HOLDING
- ▨ RECOMMENDED FOR AGRICULTURAL PRESERVATION  
PARCEL SIZE 35 ACRES OR GREATER
- ▩ RECOMMENDED FOR AGRICULTURAL PRESERVATION  
PARCEL SIZE LESS THAN 35 ACRES
- ▧ RECOMMENDED FOR AGRICULTURAL PRESERVATION  
TRANSITIONAL LANDS
- ▦ LAND TO ACCOMMODATE FUTURE GROWTH
- ▥ ENVIRONMENTAL CORRIDOR
- OTHER LANDS

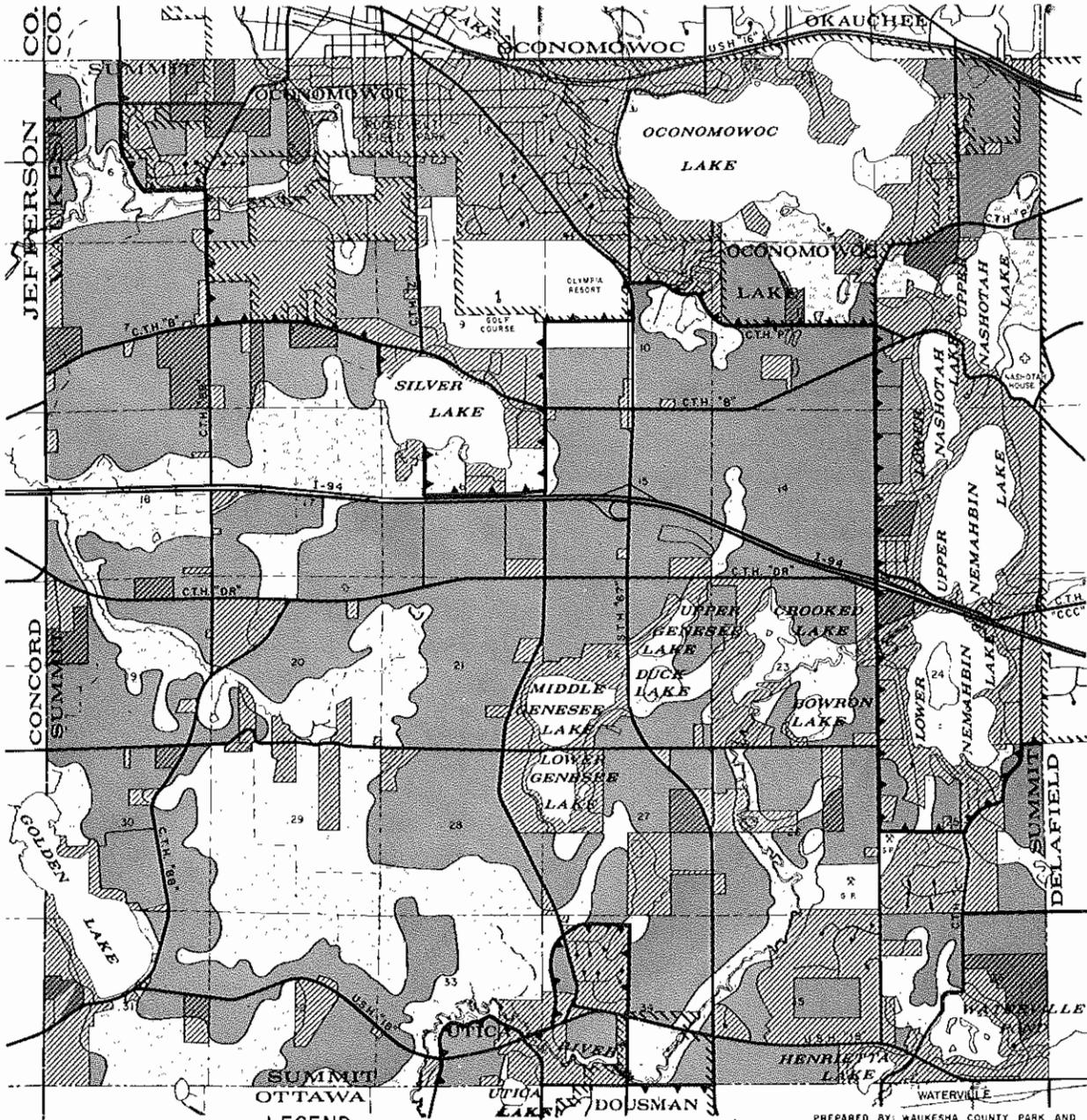
PREPARED BY WAUKESHA COUNTY PARK AND  
PLANNING COMMISSION 1980  
BASE MAP SOURCE SEWRPC



**MAP 2**  
**T6N R17E**

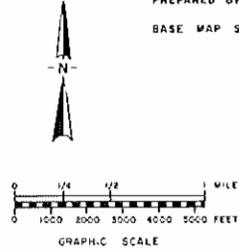
## WAUKESHA COUNTY AGRICULTURAL LAND PRESERVATION PLAN

# SUMMIT TOWNSHIP WAUKESHA COUNTY, WISCONSIN



- LEGEND**
- ▬ INCORPORATED CITY OR VILLAGE
  - - - MAJOR PUBLIC LAND HOLOING
  - ▬ POTENTIAL SEWER SERVICE AREA - YEAR 2000
  - ~ ENVIRONMENTAL CORRIOR
  - ▨ DEVELOPED AND/OR FRAGMENTED LANDS - PARCELS LESS THAN 35 ACRES
  - ▩ LAND IN AGRICULTURAL USE - PARCELS LESS THAN 35 ACRES
  - LAND IN AGRICULTURAL USE - PARCELS 35 ACRES OR GREATER
  - ▧ FARMS WITH AGRICULTURAL LAND PRESERVATION CONTRACTS
  - OTHER LANDS

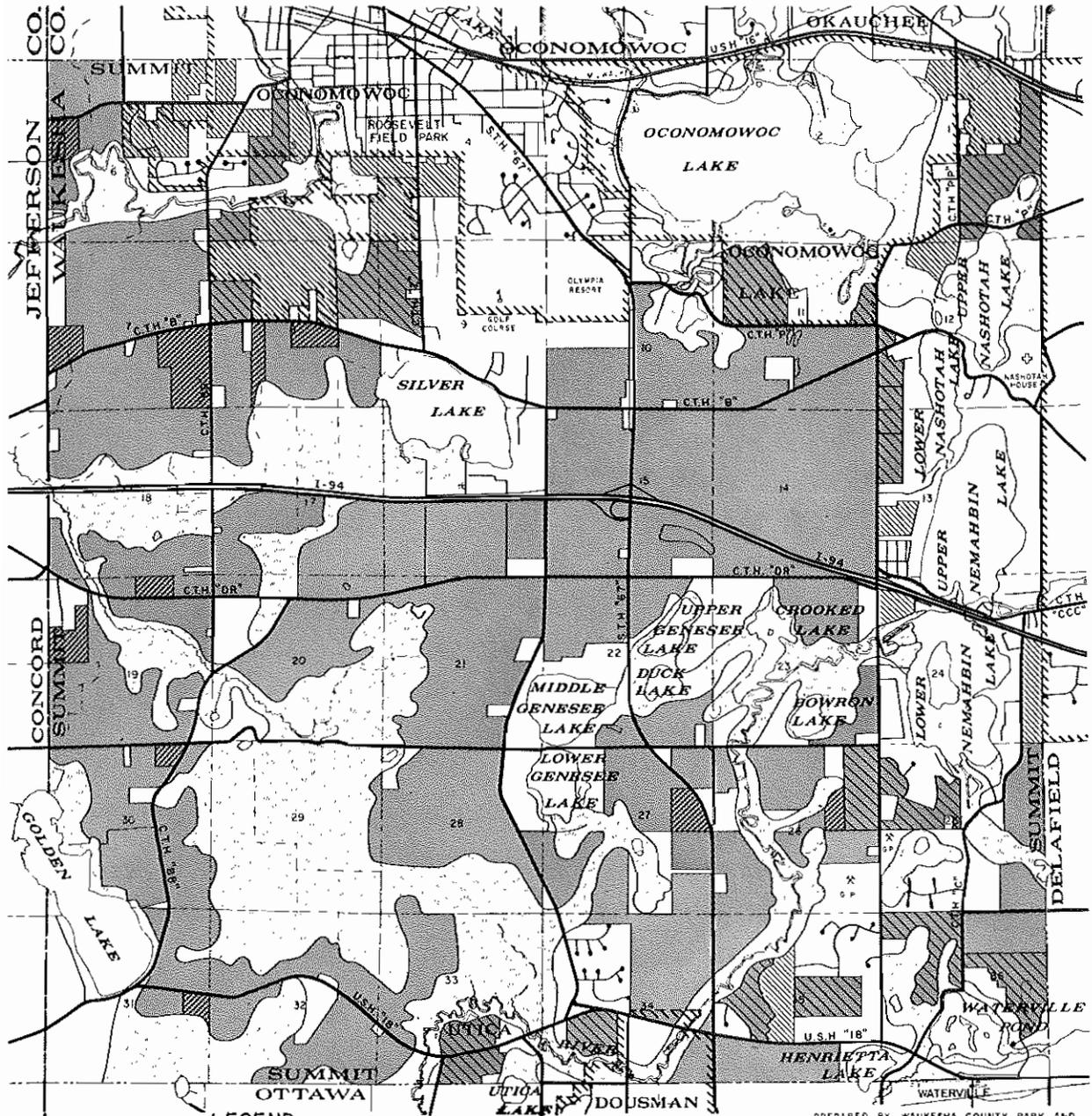
PREPARED BY: WAUKESHA COUNTY PARK AND PLANNING COMMISSION 1980  
BASE MAP SOURCE: SEWAPC



**MAP I**  
**T7N R17E**

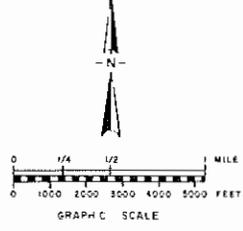
## WAUKESHA COUNTY AGRICULTURAL LAND PRESERVATION PLAN

# SUMMIT TOWNSHIP WAUKESHA COUNTY, WISCONSIN



- LEGEND**
- ▤ INCORPORATED CITY OR VILLAGE
  - MAJOR PUBLIC LAND HOLDING
  - RECOMMENDED FOR AGRICULTURAL PRESERVATION  
PARCEL SIZE 35 ACRES OR GREATER
  - ▨ RECOMMENDED FOR AGRICULTURAL PRESERVATION  
PARCEL SIZE LESS THAN 35 ACRES
  - ▧ RECOMMENDED FOR AGRICULTURAL PRESERVATION  
TRANSITIONAL LANDS
  - ▩ LAND TO ACCOMMODATE FUTURE GROWTH
  - ENVIRONMENTAL CORRIDOR
  - OTHER LANDS

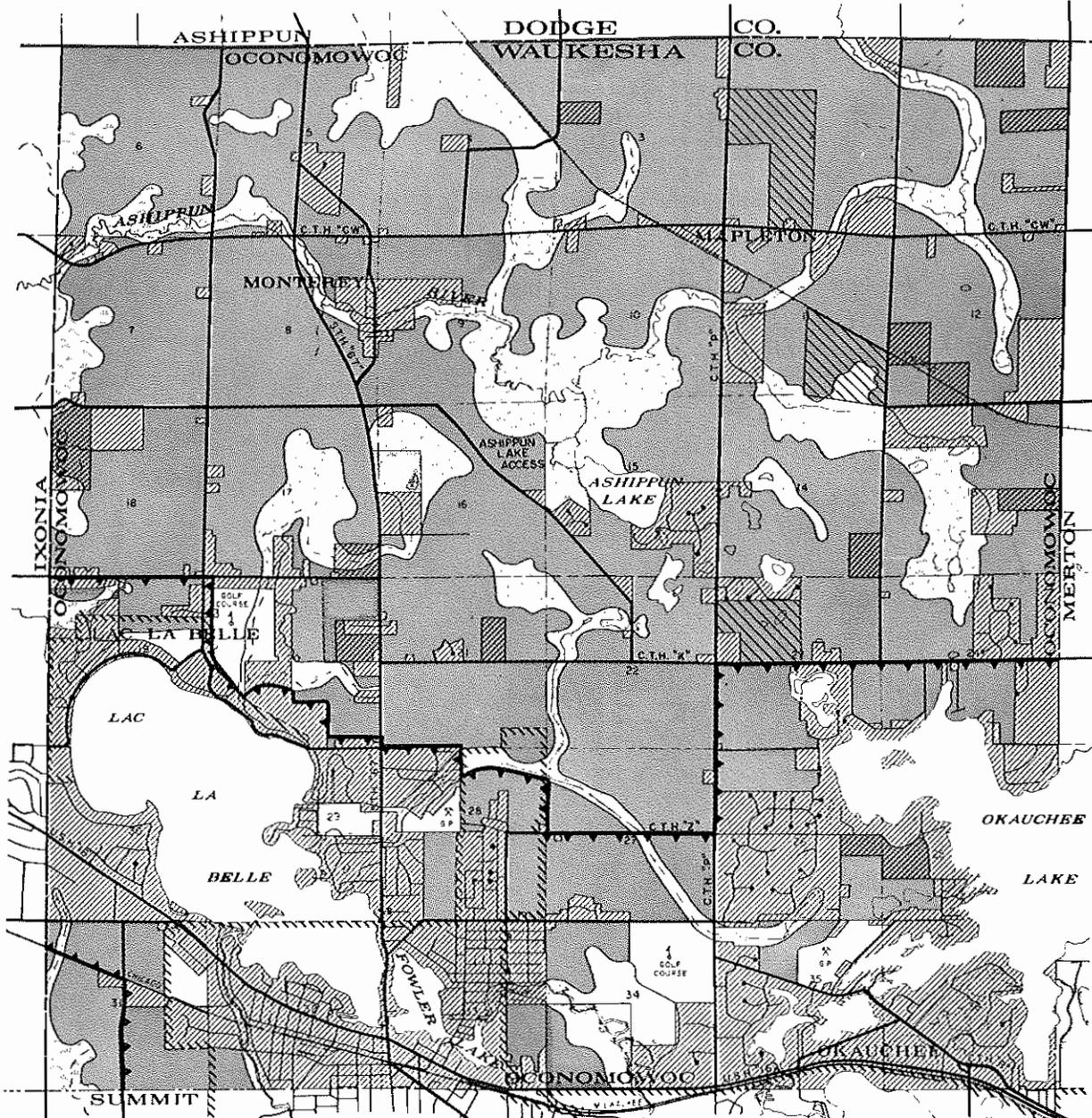
PREPARED BY WAUKESHA COUNTY PARK AND  
PLANNING COMMISSION 1980  
BASE MAP SOURCE SEWRPC



**MAP 2**  
**T7N R17E**

## WAUKESHA COUNTY AGRICULTURAL LAND PRESERVATION PLAN

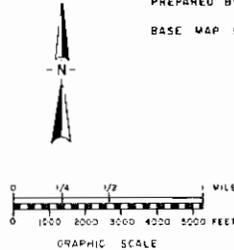
# OCONOMOWOC TOWNSHIP WAUKESHA COUNTY, WISCONSIN



## LEGEND

- ▤ INCORPORATED CITY OR VILLAGE
- MAJOR PUBLIC LAND HOLDING
- ▨ POTENTIAL SEWER SERVICE AREA - YEAR 2000
- ▧ ENVIRONMENTAL CORRIDOR
- ▩ DEVELOPED AND/OR FRAGMENTED LANDS - PARCELS LESS THAN 35 ACRES
- LAND IN AGRICULTURAL USE - PARCELS LESS THAN 35 ACRES
- LAND IN AGRICULTURAL USE - PARCELS 35 ACRES OR GREATER
- ▬ FARMS WITH AGRICULTURAL LAND PRESERVATION CONTRACTS
- OTHER LANDS

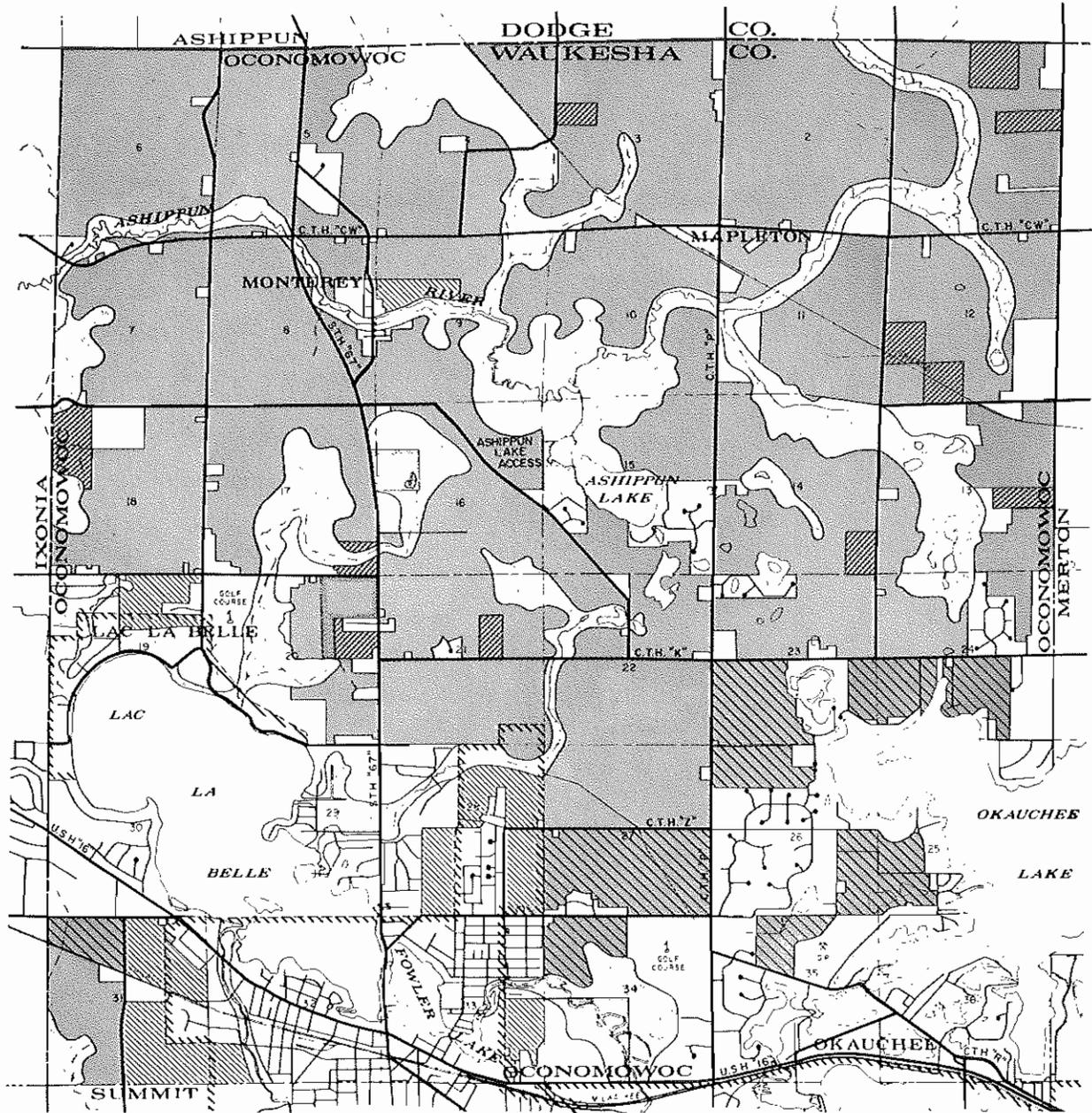
PREPARED BY WAUKESHA COUNTY PARK AND PLANNING COMMISSION 1980  
BASE MAP SOURCE SEWRPC



MAP I  
T8N R17E

# WAUKESHA COUNTY AGRICULTURAL LAND PRESERVATION PLAN

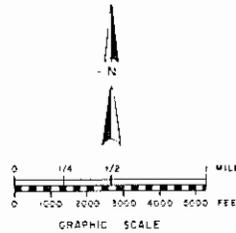
# OCONOMOWOC TOWNSHIP WAUKESHA COUNTY, WISCONSIN



## LEGEND

- INCORPORATED CITY OR VILLAGE
- \_\_\_\_\_ MAJOR PUBLIC LAND HOLDING
- ▒ RECOMMENDED FOR AGRICULTURAL PRESERVATION  
PARCEL SIZE 35 ACRES OR GREATER
- ▓ RECOMMENDED FOR AGRICULTURAL PRESERVATION  
PARCEL SIZE LESS THAN 35 ACRES
- ▒ RECOMMENDED FOR AGRICULTURAL PRESERVATION  
TRANSITIONAL LANDS
- ▒ LAND TO ACCOMMODATE FUTURE GROWTH
- ▒ ENVIRONMENTAL CORRIDOR
- OTHER LANDS

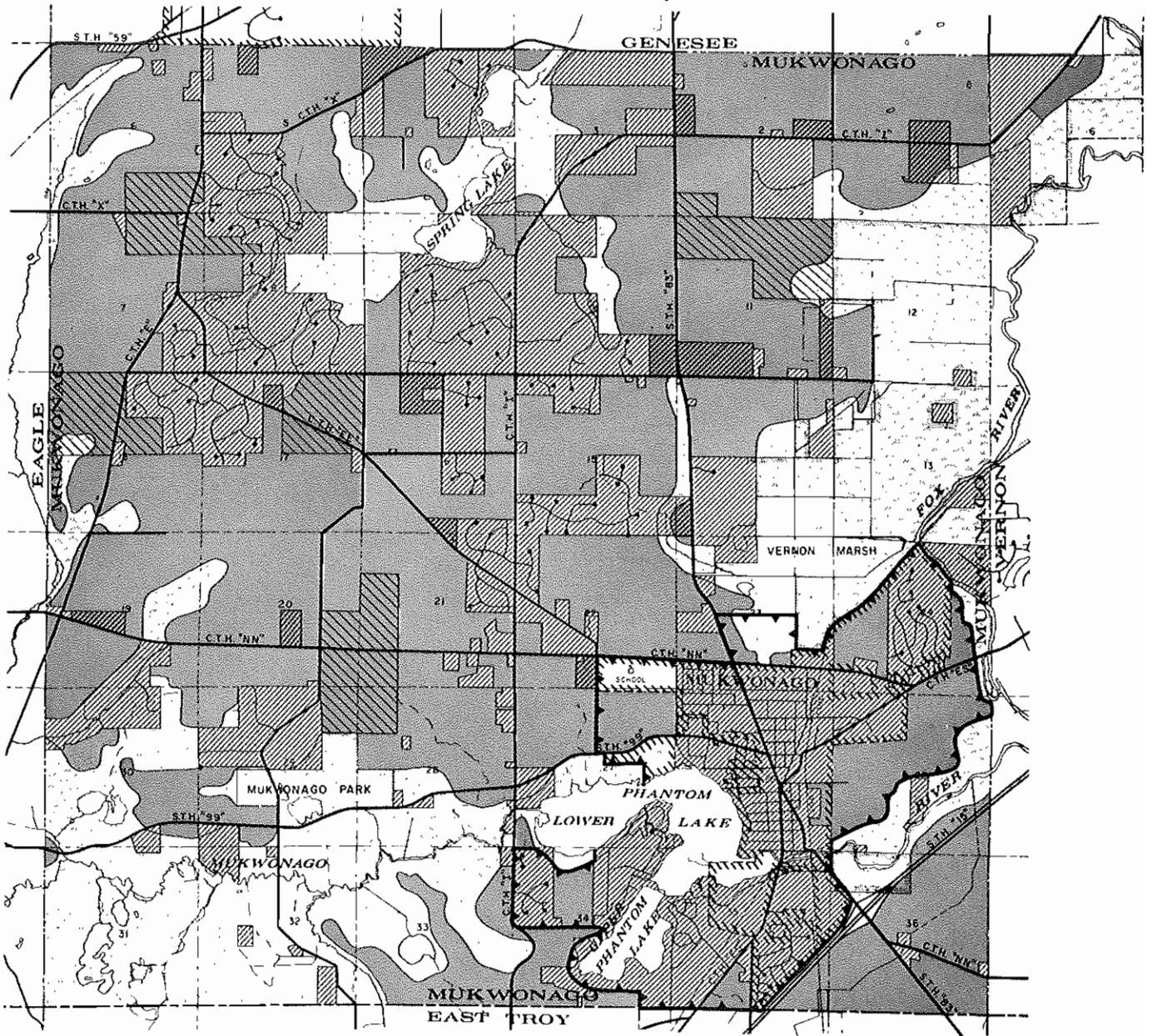
PREPARED BY WAUKESHA COUNTY PARK AND  
PLANNING COMMISSION 1980  
BASE MAP SOURCE SEWRPC



MAP 2  
T8N R17E

# WAUKESHA COUNTY AGRICULTURAL LAND PRESERVATION PLAN

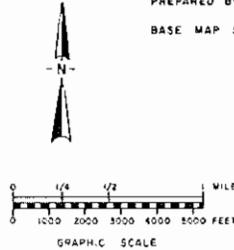
# MUKWONAGO TOWNSHIP WAUKESHA COUNTY, WISCONSIN



### LEGEND

- ▤ INCORPORATED CITY OR VILLAGE
- MAJOR PUBLIC LAND HOLDING
- ▣ POTENTIAL SEWER SERVICE AREA - YEAR 2000
- ▤ ENVIRONMENTAL CORRIDOR
- ▨ DEVELOPED AND/OR FRAGMENTED LANDS - PARCELS LESS THAN 35 ACRES
- ▧ LAND IN AGRICULTURAL USE - PARCELS LESS THAN 35 ACRES
- ▦ LAND IN AGRICULTURAL USE - PARCELS 35 ACRES OR GREATER
- ▥ FARMS WITH AGRICULTURAL LAND PRESERVATION CONTRACTS
- OTHER LANDS

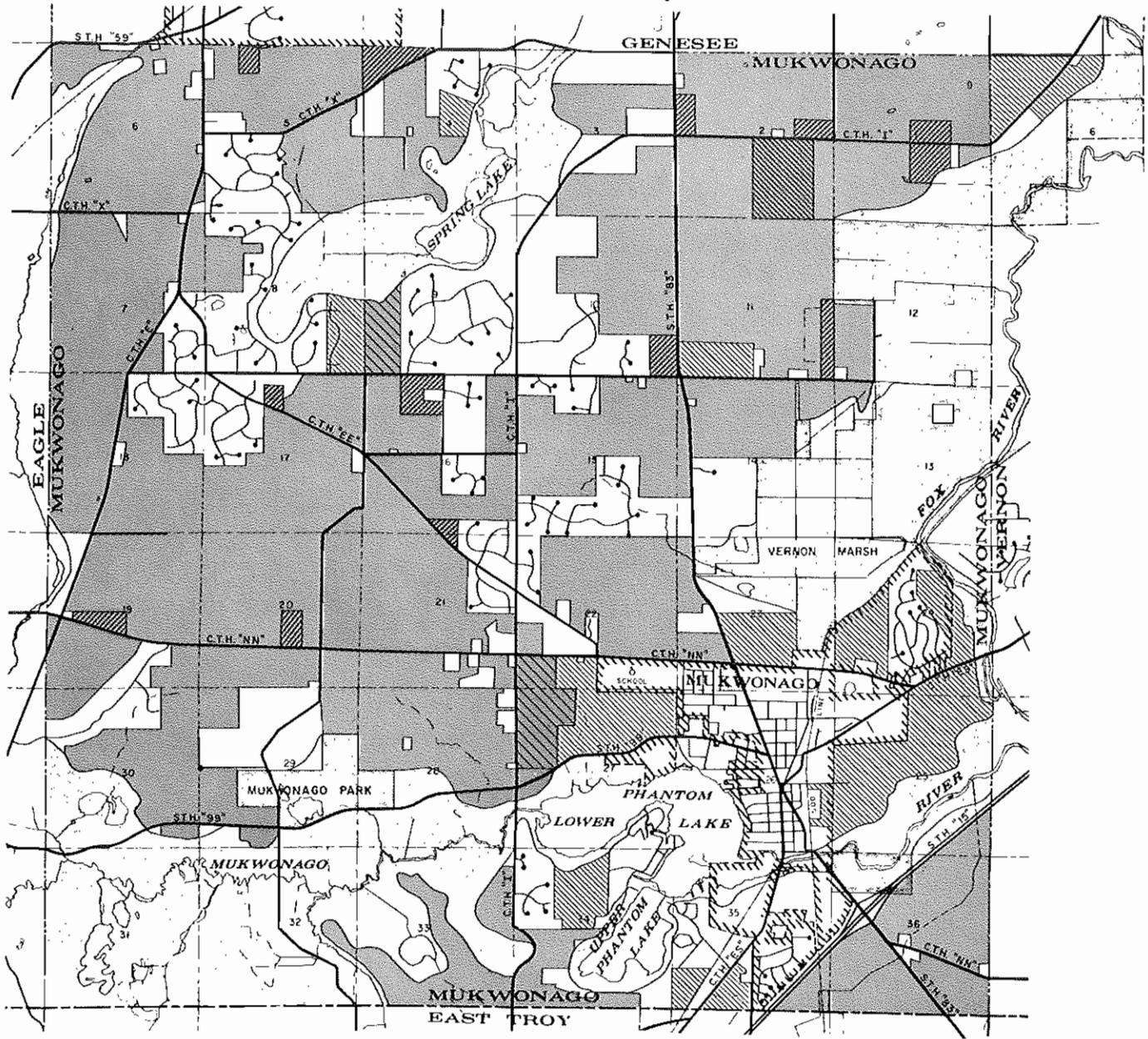
PREPARED BY: WAUKESHA COUNTY PARK AND  
PLANNING COMMISSION 1980  
BASE MAP SOURCE: SEWRPC



MAP I  
T5N R18-19E

## WAUKESHA COUNTY AGRICULTURAL LAND PRESERVATION PLAN

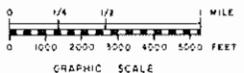
# MUKWONAGO TOWNSHIP WAUKESHA COUNTY, WISCONSIN



### LEGEND

- ▤ INCORPORATED CITY OR VILLAGE
- MAJOR PUBLIC LAND HOLDING
- ▨ RECOMMENDED FOR AGRICULTURAL PRESERVATION  
PARCEL SIZE 35 ACRES OR GREATER
- ▩ RECOMMENDED FOR AGRICULTURAL PRESERVATION  
PARCEL SIZE LESS THAN 35 ACRES
- ▧ RECOMMENDED FOR AGRICULTURAL PRESERVATION  
TRANSITIONAL LANDS
- ▦ LAND TO ACCOMMODATE FUTURE GROWTH
- ▤ ENVIRONMENTAL CORRIDOR
- OTHER LANDS

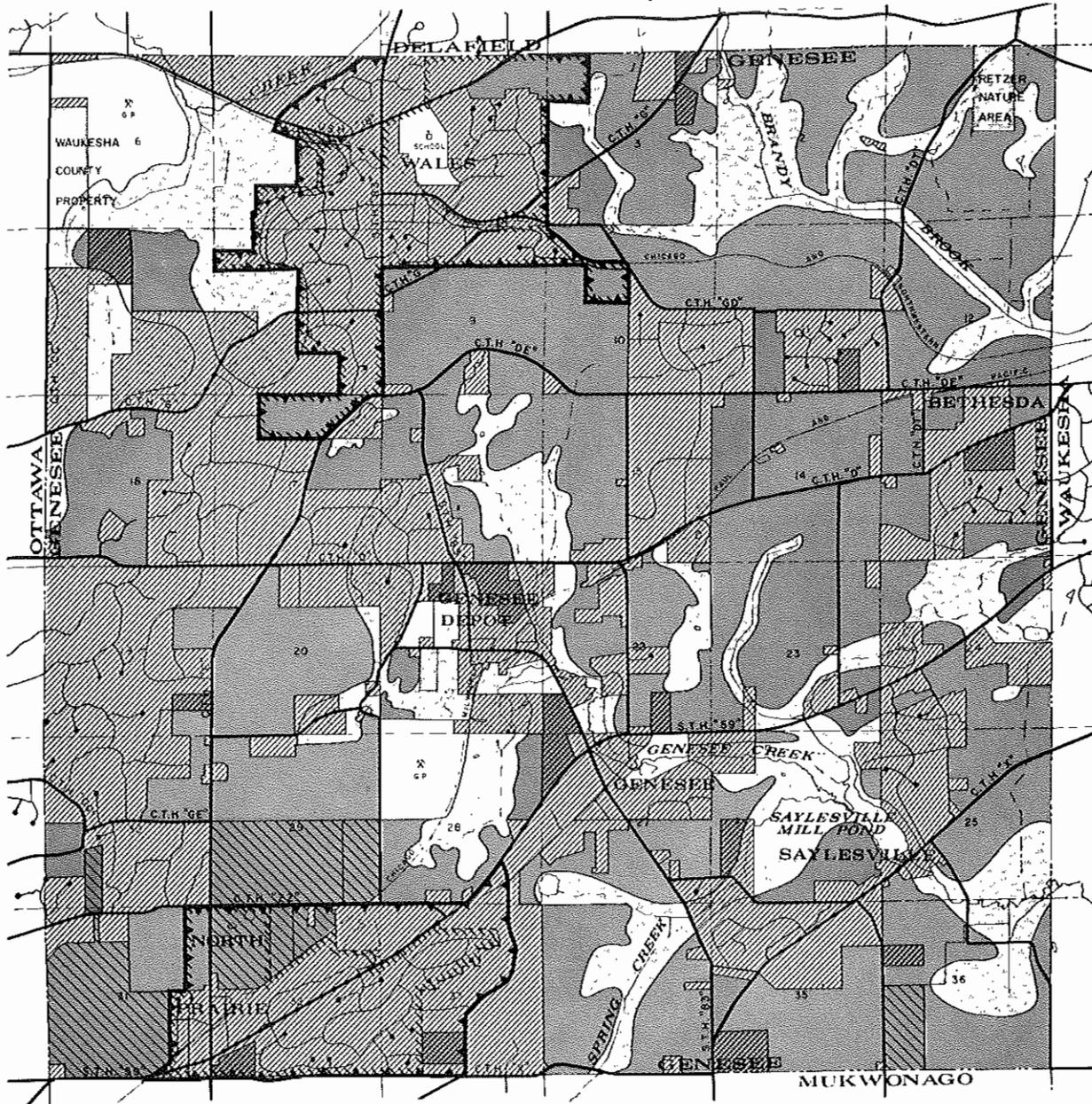
PREPARED BY WAUKESHA COUNTY PARK AND  
PLANNING COMMISSION 1980  
BASE MAP SOURCE SEWRPC



**MAP 2**  
T5N R18-19E

## WAUKESHA COUNTY AGRICULTURAL LAND PRESERVATION PLAN

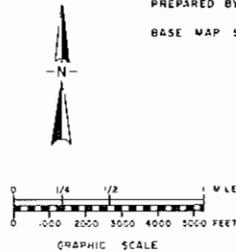
# GENESEE TOWNSHIP WAUKESHA COUNTY, WISCONSIN



### LEGEND

- INCORPORATED CITY OR VILLAGE
- MAJOR PUBLIC LAND HOLDING
- POTENTIAL SEWER SERVICE AREA - YEAR 2000
- ENVIRONMENTAL CORRIDOR
- DEVELOPED AND/OR FRAGMENTED LANDS - PARCELS LESS THAN 35 ACRES
- LAND IN AGRICULTURAL USE - PARCELS LESS THAN 35 ACRES
- LAND IN AGRICULTURAL USE - PARCELS 35 ACRES OR GREATER
- FARMS WITH AGRICULTURAL LAND PRESERVATION CONTRACTS
- OTHER LANDS

PREPARED BY: WAUKESHA COUNTY PARK AND  
PLANNING COMMISSION 1980  
BASE MAP SOURCE SEARPC

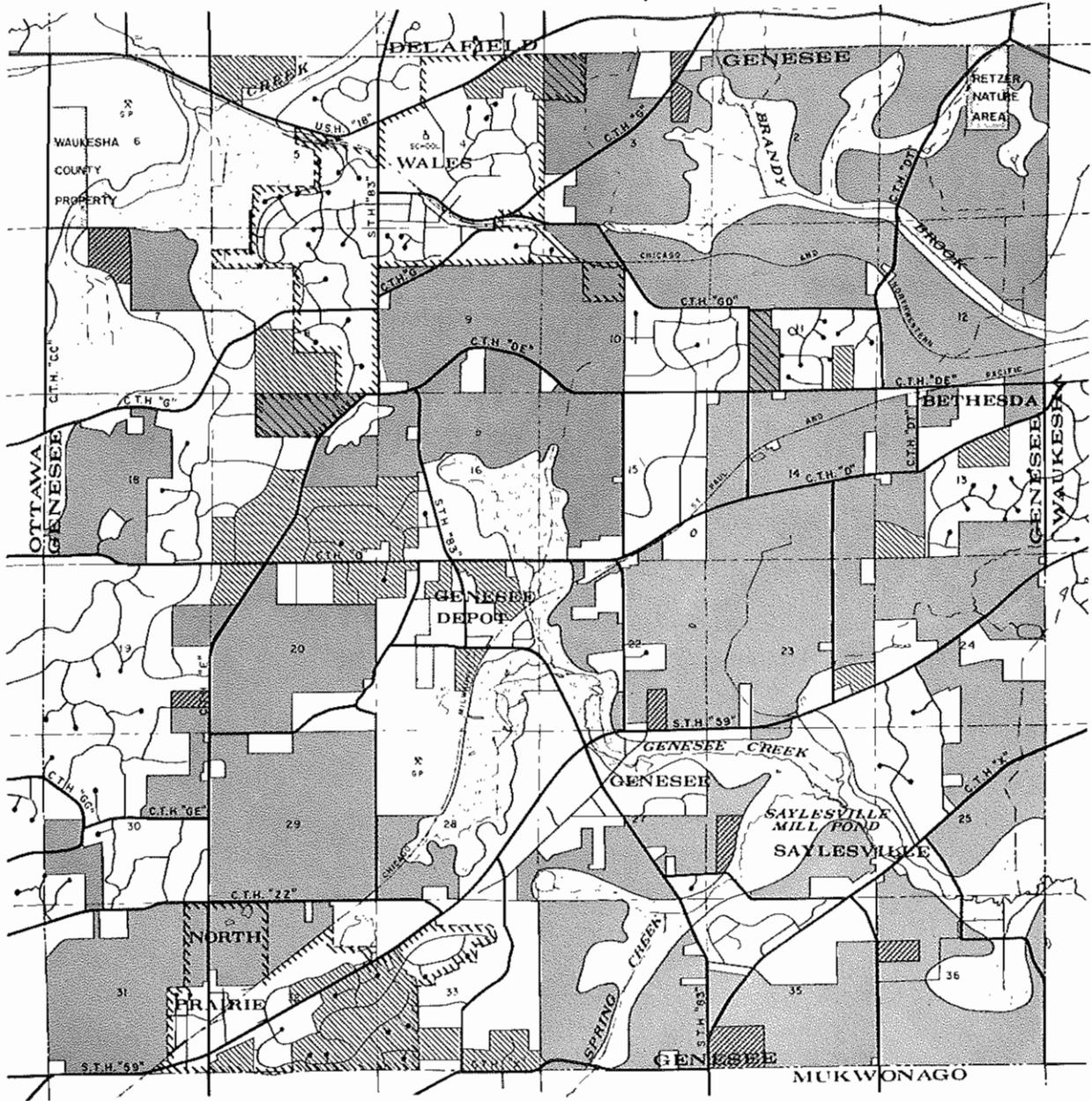


**MAP I**  
**T6N R18E**

## WAUKESHA COUNTY AGRICULTURAL LAND PRESERVATION PLAN

# GENESEE TOWNSHIP

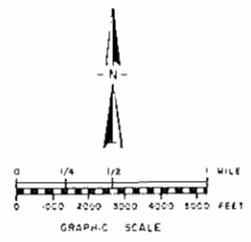
## WAUKESHA COUNTY, WISCONSIN



### LEGEND

- XXXX INCORPORATED CITY OR VILLAGE
- MAJOR PUBLIC LAND HOLDING
- RECOMMENDED FOR AGRICULTURAL PRESERVATION  
PARCEL SIZE 35 ACRES OR GREATER
- RECOMMENDED FOR AGRICULTURAL PRESERVATION  
PARCEL SIZE LESS THAN 35 ACRES
- RECOMMENDED FOR AGRICULTURAL PRESERVATION  
TRANSITIONAL LANDS
- LAND TO ACCOMMODATE FUTURE GROWTH
- ENVIRONMENTAL CORRIDOR
- OTHER LANDS

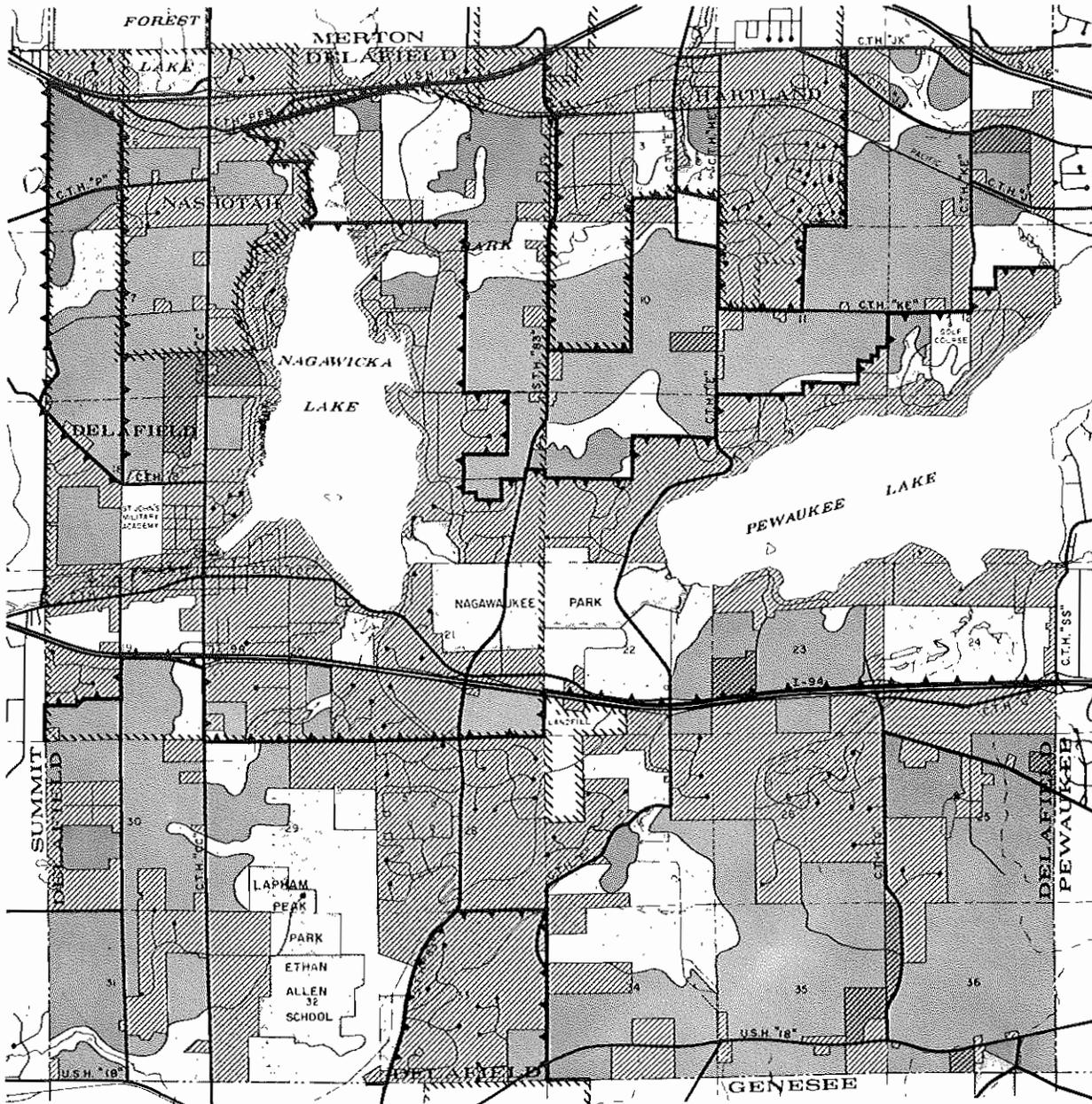
PREPARED BY WAUKESHA COUNTY PARK AND PLANNING COMMISSION 1980  
BASE MAP SOURCE SEWRPC



**MAP 2**  
T6N R18E

# WAUKESHA COUNTY AGRICULTURAL LAND PRESERVATION PLAN

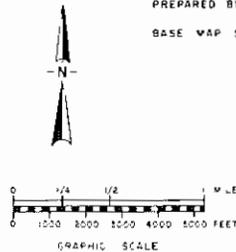
# DELAFIELD TOWNSHIP WAUKESHA COUNTY, WISCONSIN



### LEGEND

- ▤ INCORPORATED CITY OR VILLAGE
- MAJOR PUBLIC LAND HOLDING
- ▣ POTENTIAL SEWER SERVICE AREA - YEAR 2000
- ▤ ENVIRONMENTAL CORRIDOR
- ▨ DEVELOPED AND/OR FRAGMENTED LANDS - PARCELS LESS THAN 35 ACRES
- ▩ LAND IN AGRICULTURAL USE - PARCELS LESS THAN 35 ACRES
- ▧ LAND IN AGRICULTURAL USE - PARCELS 35 ACRES OR GREATER
- ▦ FARMS WITH AGRICULTURAL LAND PRESERVATION CONTRACTS
- OTHER LANDS

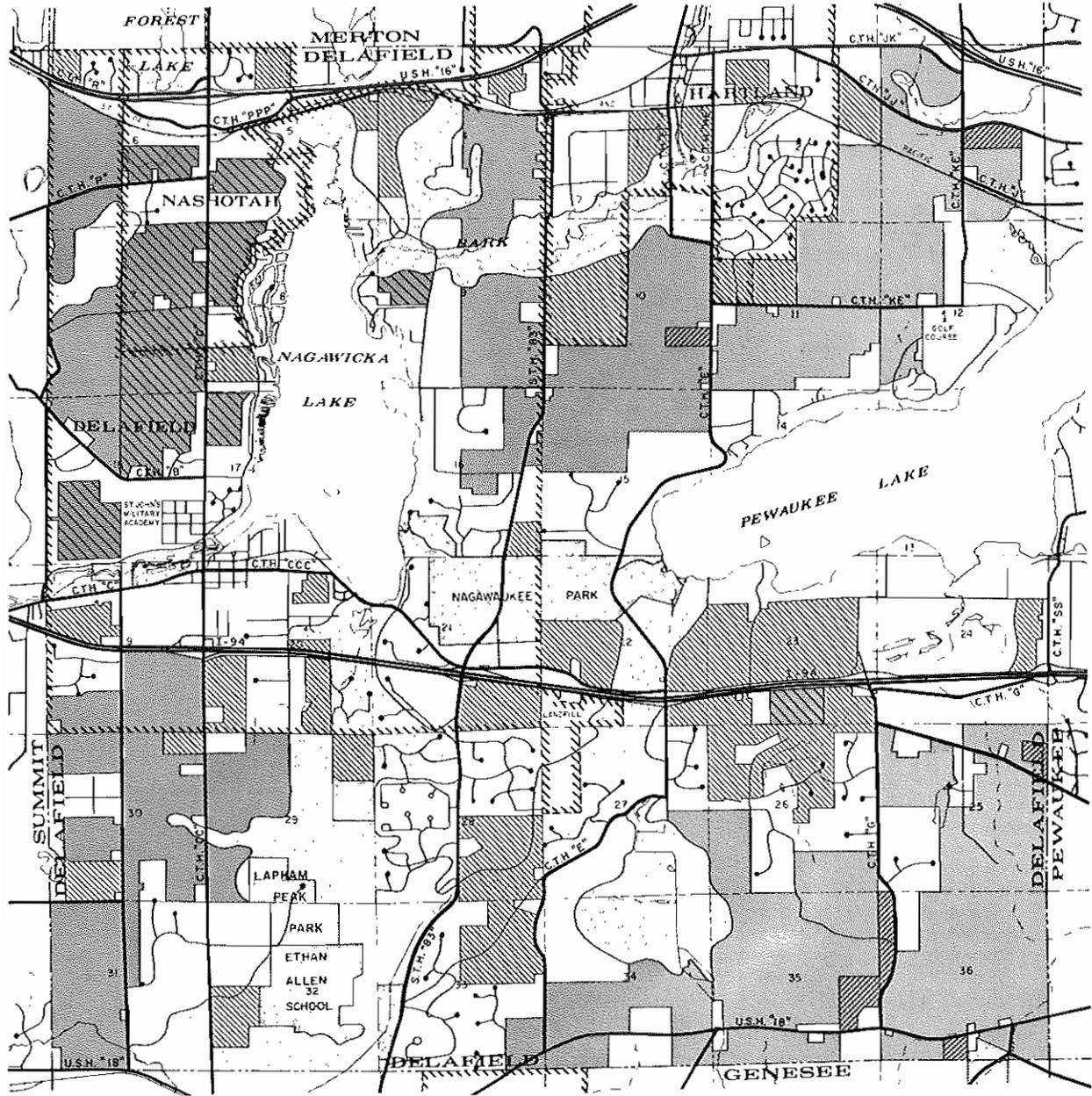
PREPARED BY WAUKESHA COUNTY PARK AND  
PLANNING COMMISSION 1980  
BASE MAP SOURCE SEARPC



**MAP I**  
**T7N R18E**

## WAUKESHA COUNTY AGRICULTURAL LAND PRESERVATION PLAN

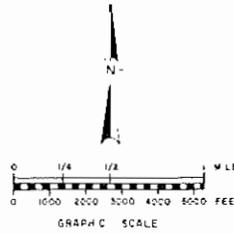
# DELAFIELD TOWNSHIP WAUKESHA COUNTY, WISCONSIN



### LEGEND

- ▤ INCORPORATED CITY OR VILLAGE
- MAJOR PUBLIC LAND HOLDING
- ▨ RECOMMENDED FOR AGRICULTURAL PRESERVATION  
PARCEL SIZE 35 ACRES OR GREATER
- ▩ RECOMMENDED FOR AGRICULTURAL PRESERVATION  
PARCEL SIZE LESS THAN 35 ACRES
- ▧ RECOMMENDED FOR AGRICULTURAL PRESERVATION  
TRANSITIONAL LANDS
- ▦ LAND TO ACCOMMODATE FUTURE GROWTH
- ENVIRONMENTAL CORRIDOR
- OTHER LANDS

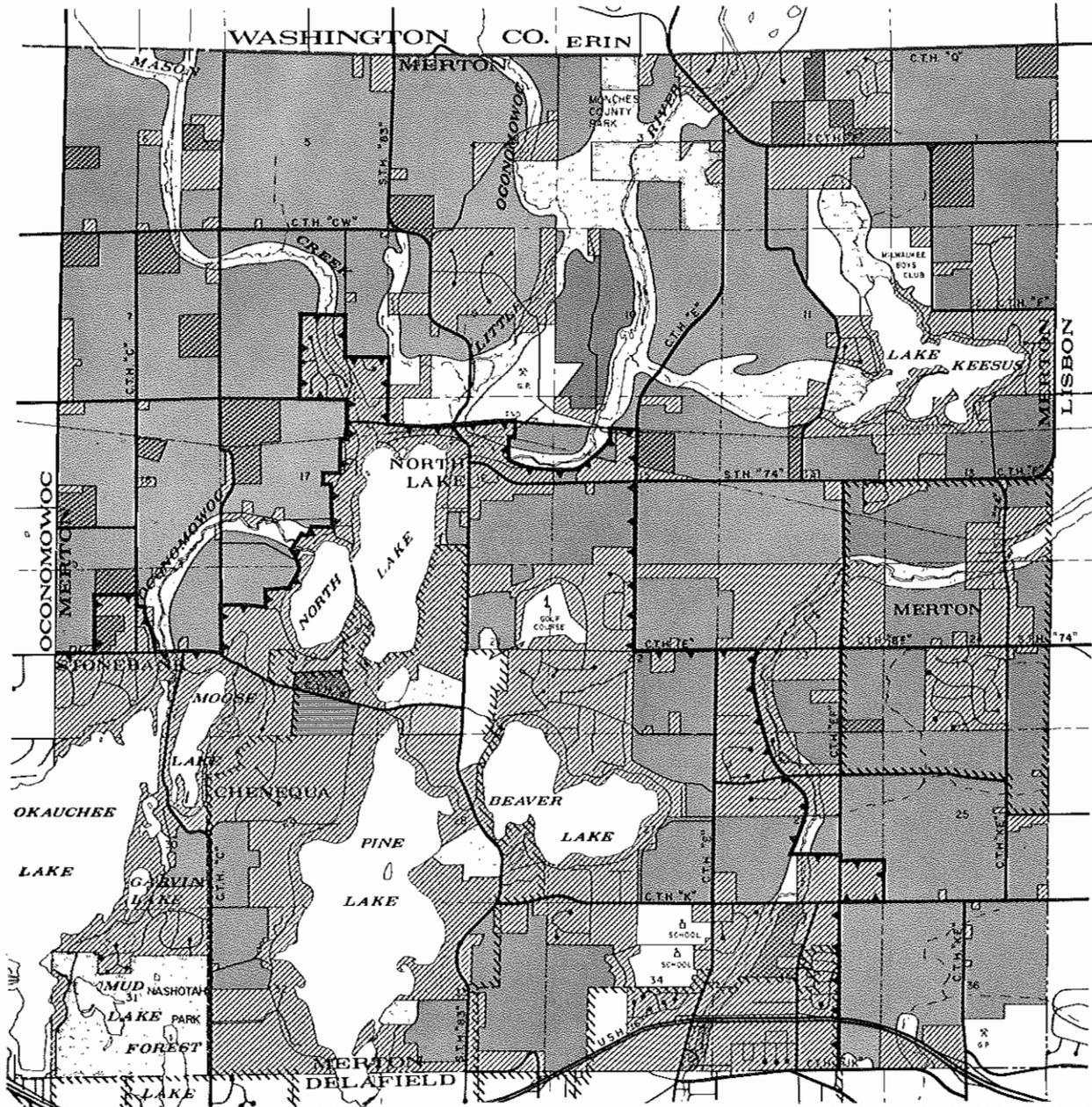
PREPARED BY WAUKESHA COUNTY PARK AND  
PLANNING COMMISSION 1980  
BASE MAP SOURCE SEWRPC



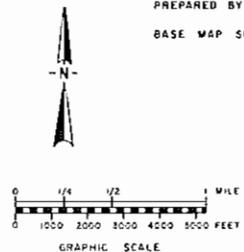
MAP 2  
T7N R18E

## WAUKESHA COUNTY AGRICULTURAL LAND PRESERVATION PLAN

# MERTON TOWNSHIP WAUKESHA COUNTY, WISCONSIN



- LEGEND**
- ▤ INCORPORATED CITY OR VILLAGE
  - ▨ MAJOR PUBLIC LAND HOLDING
  - ▧ POTENTIAL SEWER SERVICE AREA - YEAR 2000
  - ▩ ENVIRONMENTAL CORRIDR
  - DEVELOPED AND/OR FRAGMENTEO LANDS - PARCELS LESS THAN 35 ACRES
  - LAND IN AGRICULTURAL USE - PARCELS LESS THAN 35 ACRES
  - ▬ LAND IN AGRICULTURAL USE - PARCELS 35 ACRES OR GREATER
  - ▮ FARMS WITH AGRICULTURAL LAND PRESERVATION CONTRACTS
  - OTHER LANOS

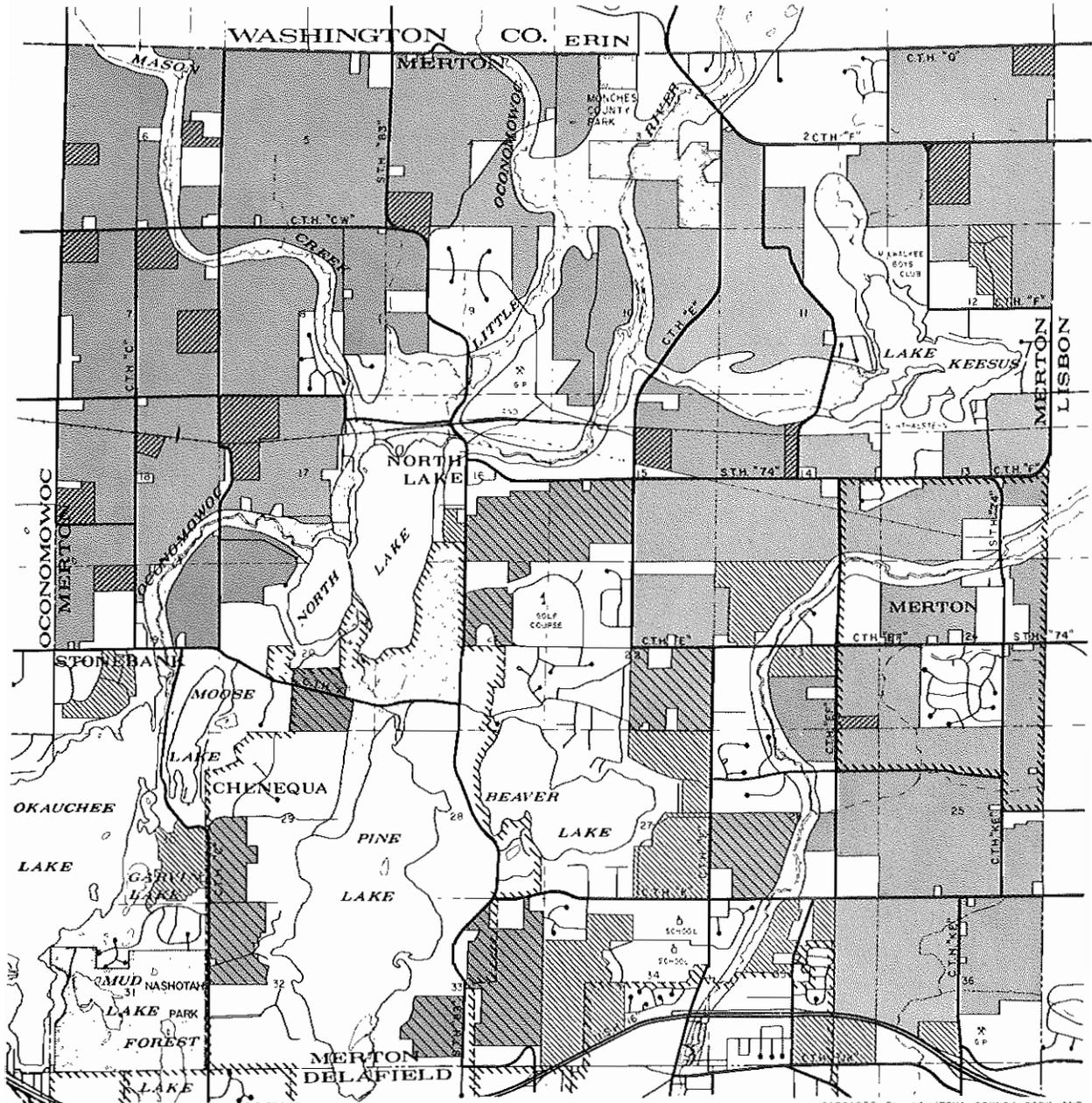


PREPARED BY: WAUKESHA COUNTY PARK AND PLANNING COMMISSION 1380  
BASE MAP SOURCE: SEWRPC

**MAP I  
T8N R18E**

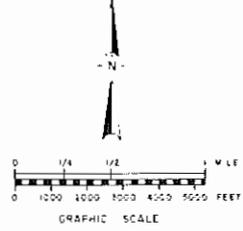
## WAUKESHA COUNTY AGRICULTURAL LAND PRESERVATION PLAN

# MERTON TOWNSHIP WAUKESHA COUNTY, WISCONSIN



- LEGEND**
- ▤ INCORPORATED CITY OR VILLAGE
  - MAJOR PUBLIC LAND HOLDING
  - ▨ RECOMMENDED FOR AGRICULTURAL PRESERVATION  
PARCEL SIZE 35 ACRES OR GREATER
  - ▩ RECOMMENDED FOR AGRICULTURAL PRESERVATION  
PARCEL SIZE LESS THAN 35 ACRES
  - ▧ RECOMMENDED FOR AGRICULTURAL PRESERVATION  
TRANSITIONAL LANDS
  - ▦ LAND TO ACCOMMODATE FUTURE GROWTH
  - ENVIRONMENTAL CORRIDOR
  - OTHER LANDS

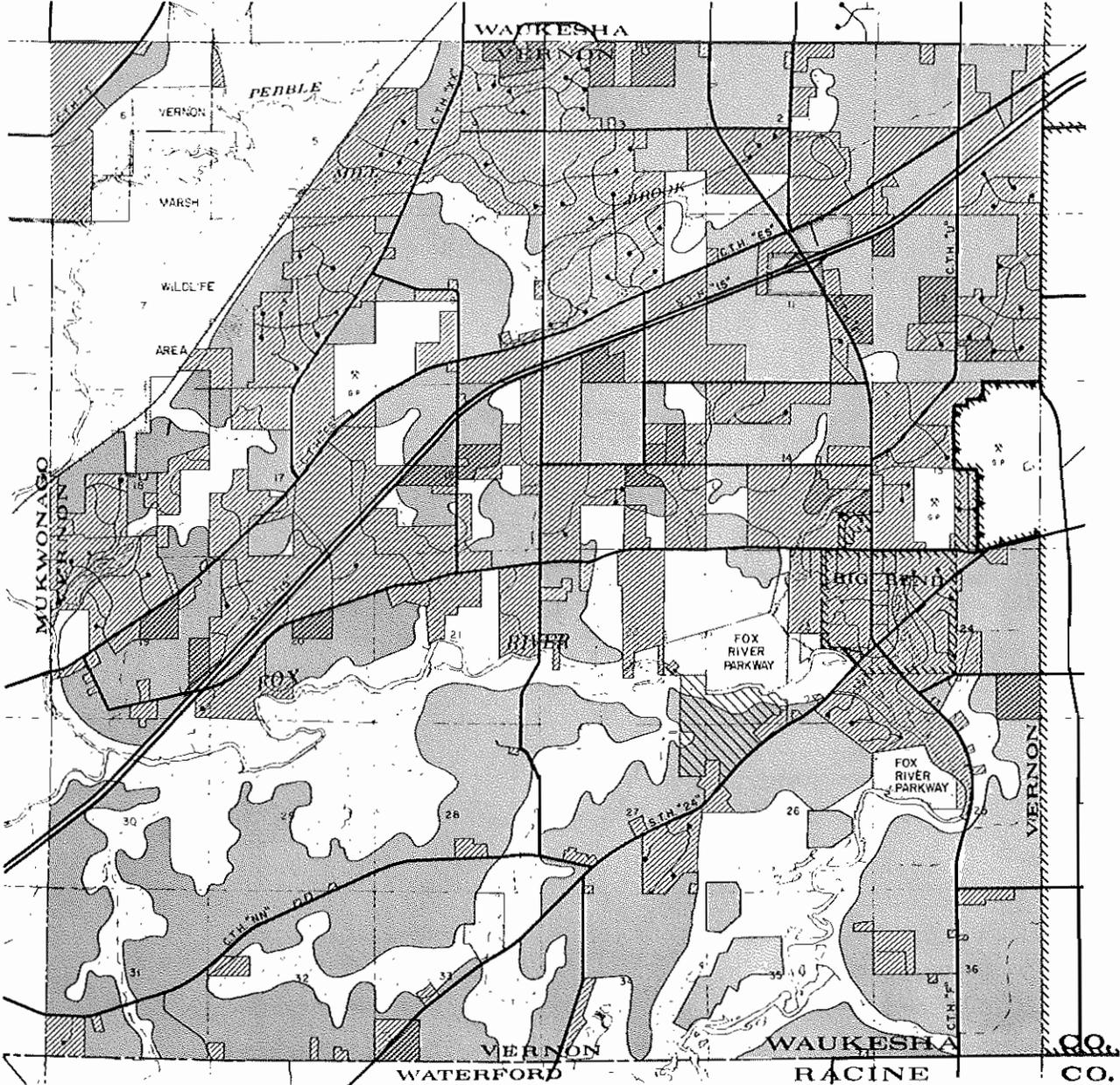
PREPARED BY WAUKESHA COUNTY PARK AND PLANNING COMMISSION 1980  
BASE MAP SOURCE SEARPC



**MAP 2**  
**T8N R18E**

## WAUKESHA COUNTY AGRICULTURAL LAND PRESERVATION PLAN

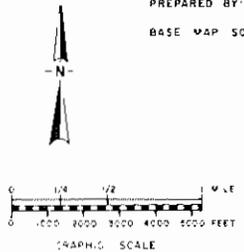
# VERNON TOWNSHIP WAUKESHA COUNTY, WISCONSIN



### LEGEND

- XXXX INCORPORATED CITY OR VILLAGE
- MAJOR PUBLIC LAND HOLDING
- ☐ POTENTIAL SEWER SERVICE AREA - YEAR 2000
- ▨ ENVIRONMENTAL CORRIDOR
- ▧ DEVELOPED AND/OR FRAGMENTED LANDS - PARCELS LESS THAN 35 ACRES
- ▩ LAND IN AGRICULTURAL USE - PARCELS LESS THAN 35 ACRES
- LAND IN AGRICULTURAL USE - PARCELS 35 ACRES OR GREATER
- FARMS WITH AGRICULTURAL LAND PRESERVATION CONTRACTS
- OTHER LANDS

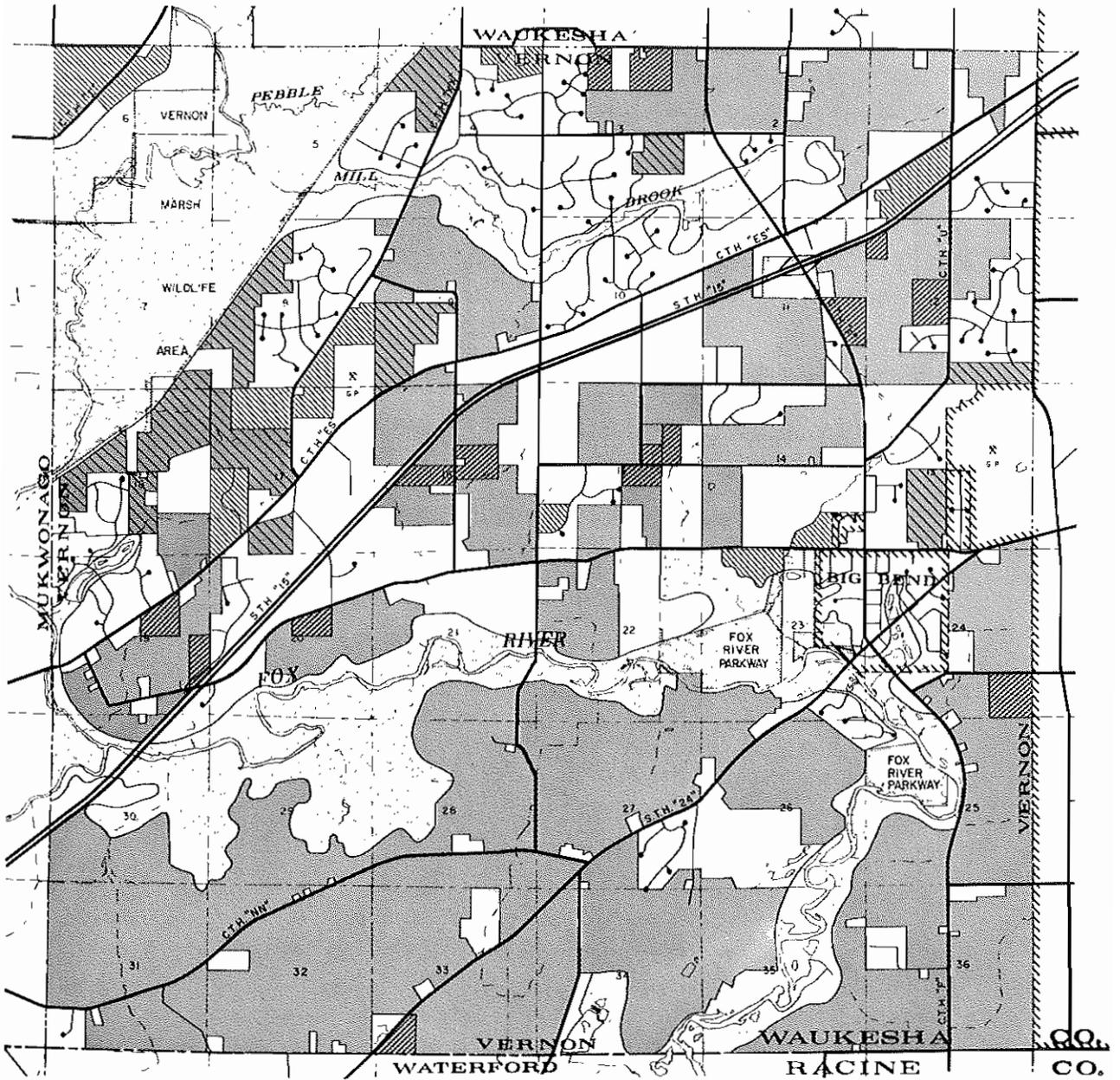
PREPARED BY: WAUKESHA COUNTY PARK AND PLANNING COMMISSION 1980  
BASE MAP SOURCE SEARPC



MAP I  
T5N R19E

## WAUKESHA COUNTY AGRICULTURAL LAND PRESERVATION PLAN

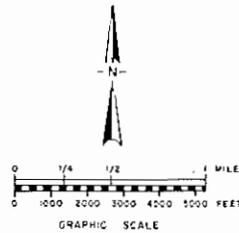
# VERNON TOWNSHIP WAUKESHA COUNTY, WISCONSIN



### LEGEND

- ▤▤▤▤ INCORPORATED CITY OR VILLAGE
- MAJOR PUBLIC LAND HOLDING
- RECOMMENDED FOR AGRICULTURAL PRESERVATION  
PARCEL SIZE 35 ACRES OR GREATER
- ▨ RECOMMENDED FOR AGRICULTURAL PRESERVATION  
PARCEL SIZE LESS THAN 35 ACRES
- ▩ RECOMMENDED FOR AGRICULTURAL PRESERVATION  
TRANSITIONAL LANDS
- ▧ LAND TO ACCOMMODATE FUTURE GROWTH
- ▨ ENVIRONMENTAL CORRIDOR
- OTHER LANDS

PREPARED BY WAUKESHA COUNTY PARK AND  
PLANNING COMMISSION 1980  
BASE MAP SOURCE SEWRPC



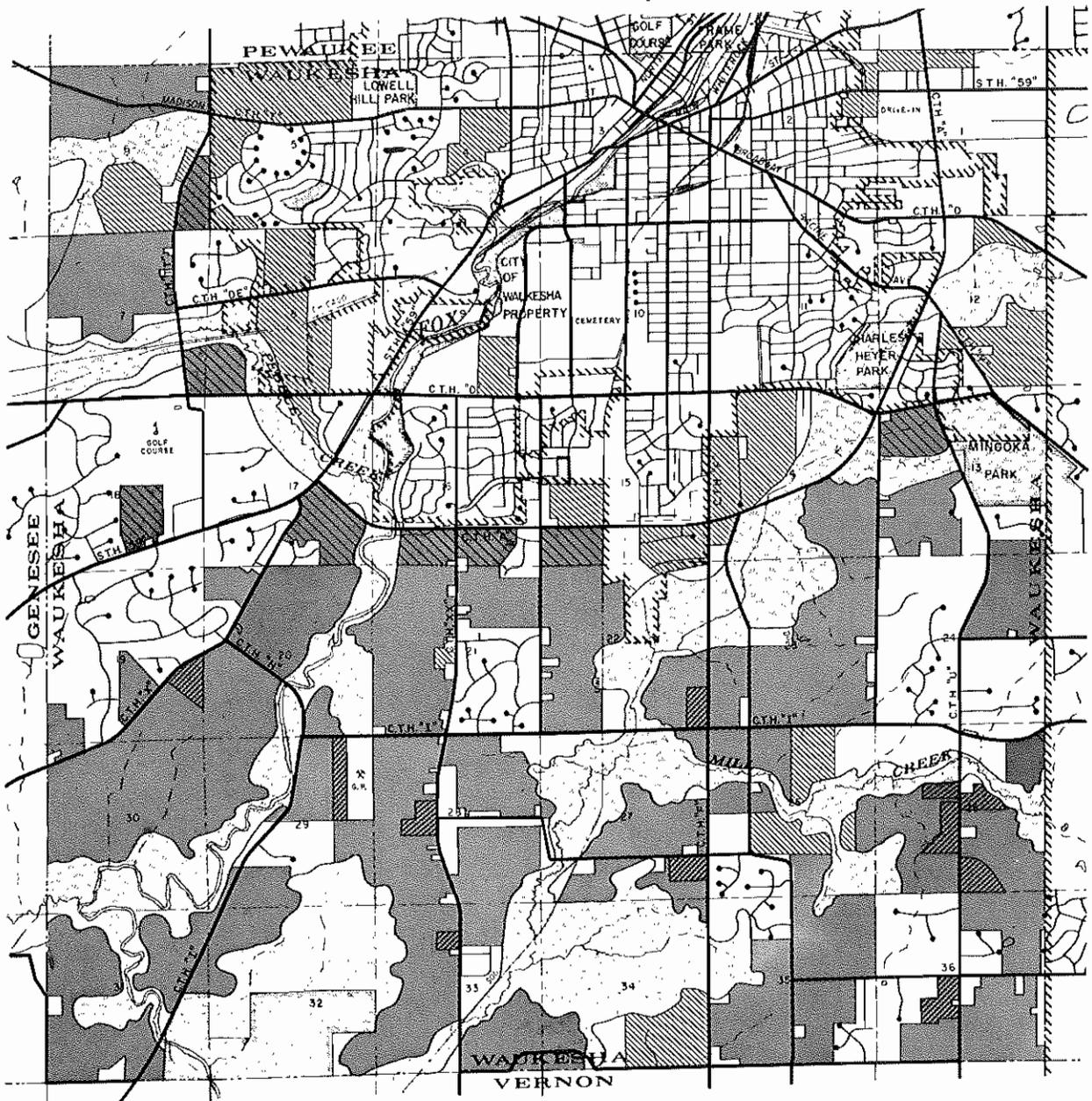
**MAP 2**  
T5N R19E

## WAUKESHA COUNTY AGRICULTURAL LAND PRESERVATION PLAN



# WAUKESHA TOWNSHIP

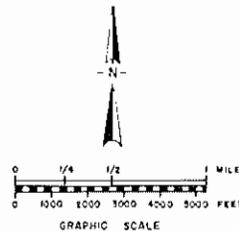
## WAUKESHA COUNTY, WISCONSIN



### LEGEND

- ▤ INCORPORATED CITY OR VILLAGE
- ▨ MAJOR PUBLIC LAND HOLDING
- RECOMMENDED FOR AGRICULTURAL PRESERVATION  
PARCEL SIZE 35 ACRES OR GREATER
- ▧ RECOMMENDED FOR AGRICULTURAL PRESERVATION  
PARCEL SIZE LESS THAN 35 ACRES
- ▩ RECOMMENDED FOR AGRICULTURAL PRESERVATION  
TRANSITIONAL LANDS
- ▨ LAND TO ACCOMMODATE FUTURE GROWTH
- ▤ ENVIRONMENTAL CORRIDOR
- OTHER LANDS

PREPARED BY WAUKESHA COUNTY PARK AND  
PLANNING COMMISSION 1980  
BASE MAP SOURCE SEWRPC

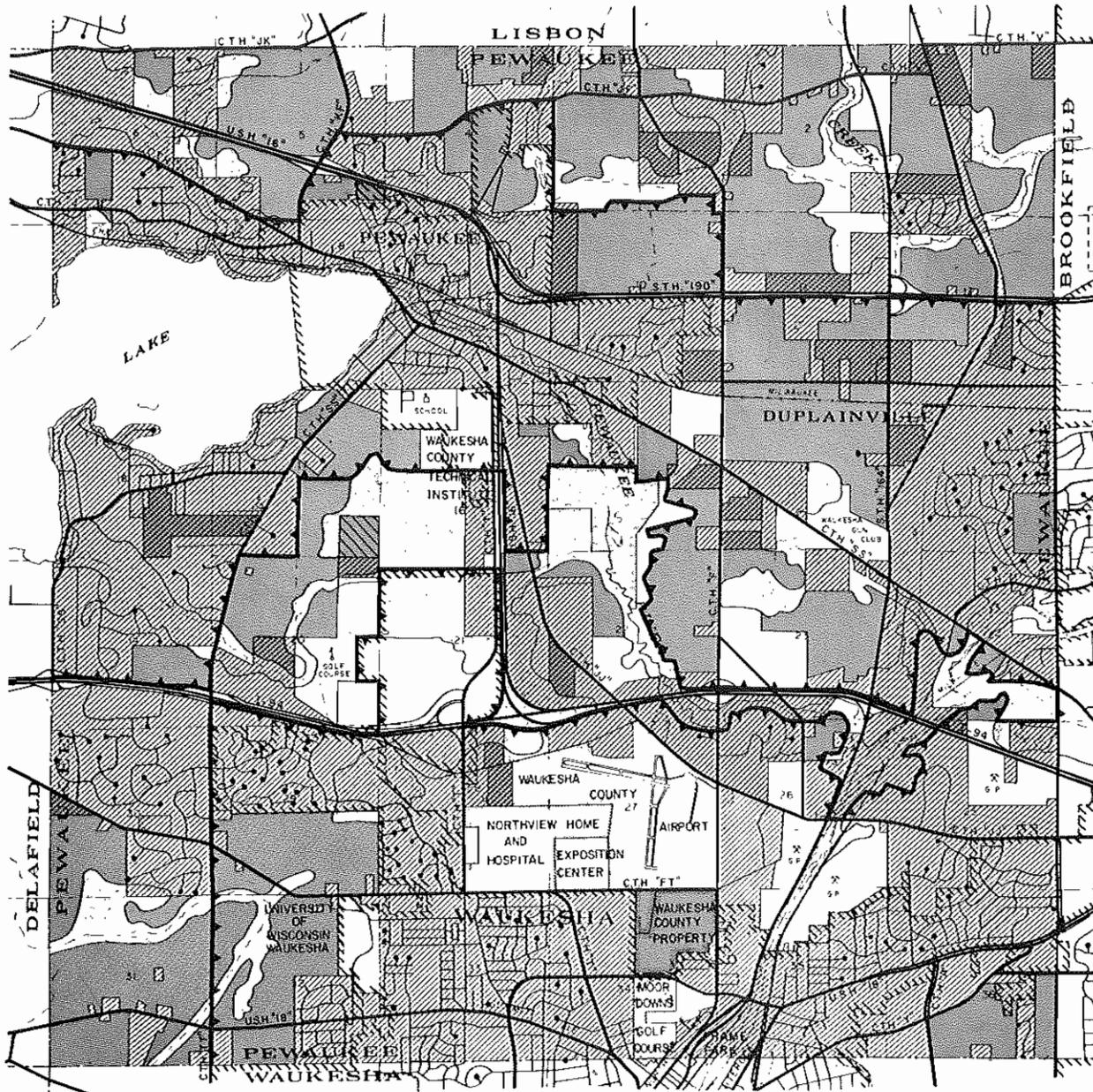


**MAP 2**  
T6N R19E

# WAUKESHA COUNTY AGRICULTURAL LAND PRESERVATION PLAN

# PEWAUKEE TOWNSHIP

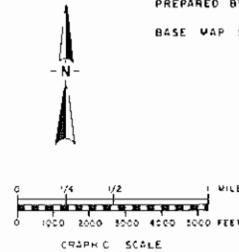
## WAUKESHA COUNTY, WISCONSIN



### LEGEND

- INCORPORATED CITY OR VILLAGE
- MAJOR PUBLIC LAND HOLDING
- POTENTIAL SEWER SERVICE AREA - YEAR 2000
- ENVIRONMENTAL CORRIDOR
- DEVELOPED AND/OR FRAGMENTED LANDS - PARCELS LESS THAN 35 ACRES
- LAND IN AGRICULTURAL USE - PARCELS LESS THAN 35 ACRES
- LAND IN AGRICULTURAL USE - PARCELS 35 ACRES OR GREATER
- FARMS WITH AGRICULTURAL LAND PRESERVATION CONTRACTS
- OTHER LANDS

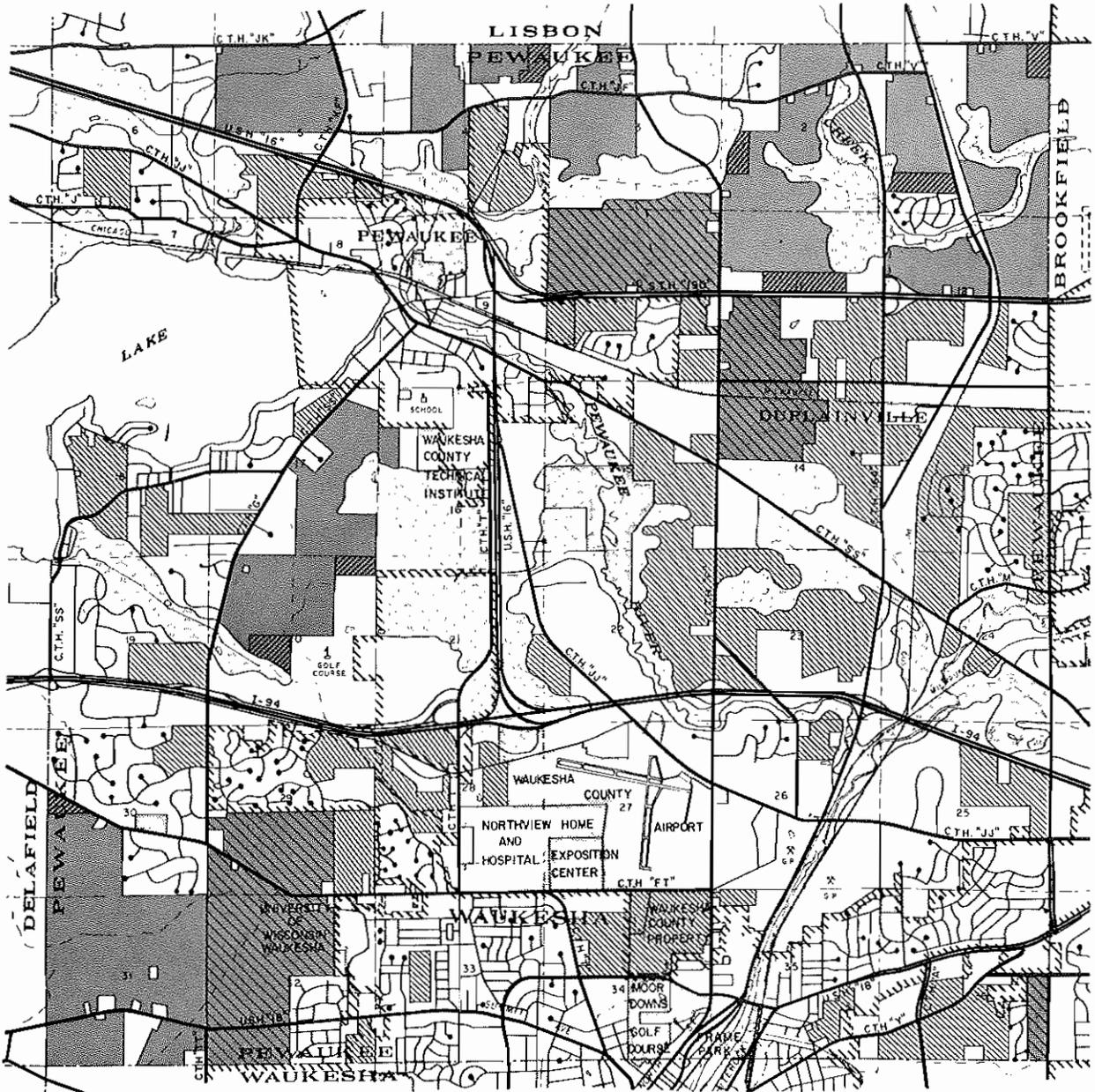
PREPARED BY: WAUKESHA COUNTY PARK AND PLANNING COMMISSION 1980  
BASE MAP SOURCE: SEAWPC



MAP 1  
T7N R19E

# WAUKESHA COUNTY AGRICULTURAL LAND PRESERVATION PLAN

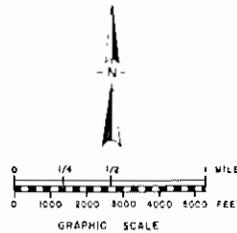
# PEWAUKEE TOWNSHIP WAUKESHA COUNTY, WISCONSIN



### LEGEND

- ▤ INCORPORATED CITY OR VILLAGE
- MAJOR PUBLIC LAND HOLDING
- ▨ RECOMMENDED FOR AGRICULTURAL PRESERVATION  
PARCEL SIZE 35 ACRES OR GREATER
- ▩ RECOMMENDED FOR AGRICULTURAL PRESERVATION  
PARCEL SIZE LESS THAN 35 ACRES
- ▧ RECOMMENDED FOR AGRICULTURAL PRESERVATION  
TRANSITIONAL LANDS
- ▦ LAND TO ACCOMMODATE FUTURE GROWTH
- ▧ ENVIRONMENTAL CORRIDOR
- OTHER LANDS

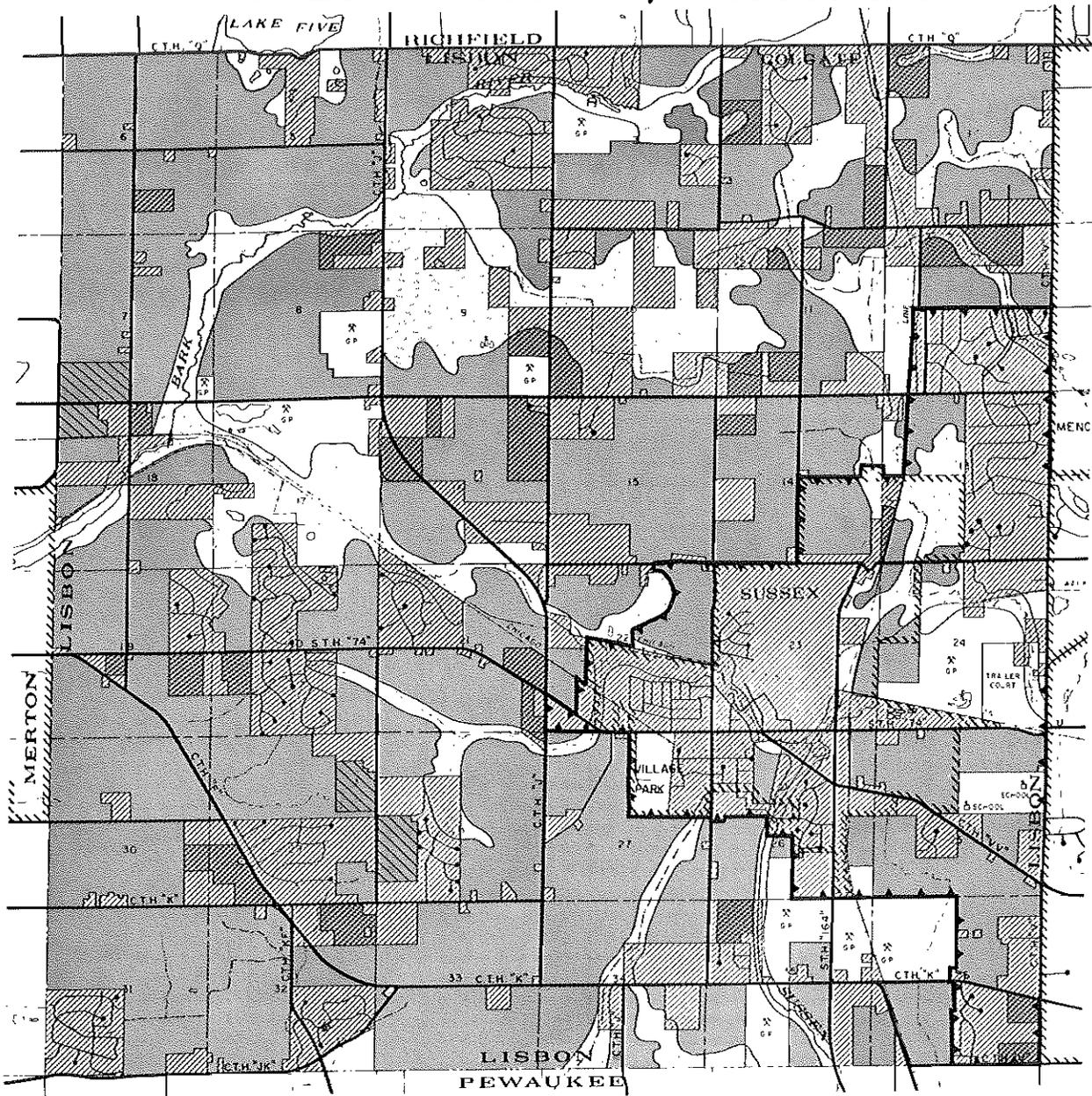
PREPARED BY WAUKESHA COUNTY PARK AND  
PLANNING COMMISSION 1980  
BASE MAP SOURCE SEWRPC



**MAP 2**  
T7N R19E

## WAUKESHA COUNTY AGRICULTURAL LAND PRESERVATION PLAN

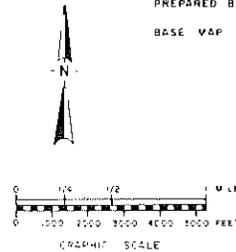
# LISBON TOWNSHIP WAUKESHA COUNTY, WISCONSIN



## LEGEND

- ▤ INCORPORATED CITY OR VILLAGE
- MAJOR PUBLIC LAND HOLDING
- ▤ POTENTIAL SEWER SERVICE AREA - YEAR 2000
- ▤ ENVIRONMENTAL CORRIDOR
- ▤ DEVELOPED AND/OR FRAGMENTED LANDS - PARCELS LESS THAN 35 ACRES
- ▤ LAND IN AGRICULTURAL USE - PARCELS LESS THAN 35 ACRES
- ▤ LAND IN AGRICULTURAL USE - PARCELS 35 ACRES OR GREATER
- ▤ FARMS WITH AGRICULTURAL LAND PRESERVATION CONTRACTS
- OTHER LANDS

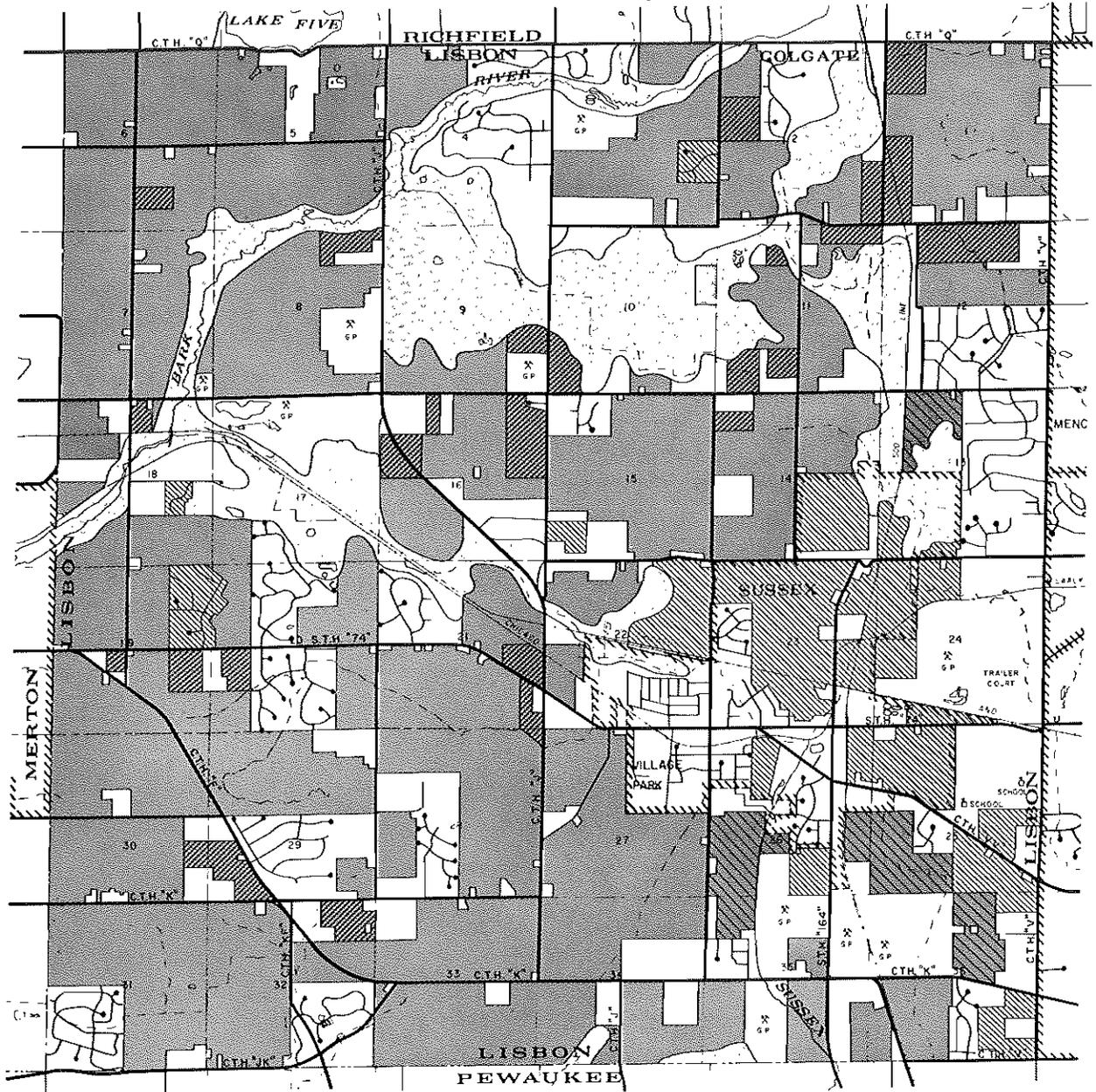
PREPARED BY: WAUKESHA COUNTY PARK AND  
PLANNING COMMISSION 1980  
BASE MAP SOURCE SEARPC



MAP 1  
T8N R19E

# WAUKESHA COUNTY AGRICULTURAL LAND PRESERVATION PLAN

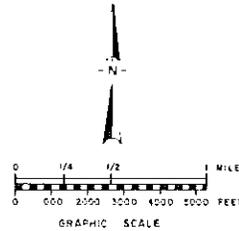
# LISBON TOWNSHIP WAUKESHA COUNTY, WISCONSIN



## LEGEND

- ▤ INCORPORATED CITY OR VILLAGE
- MAJOR PUBLIC LAND HOLDING
- ▨ RECOMMENDED FOR AGRICULTURAL PRESERVATION  
PARCEL SIZE 35 ACRES OR GREATER
- ▩ RECOMMENDED FOR AGRICULTURAL PRESERVATION  
PARCEL SIZE LESS THAN 35 ACRES
- ▧ RECOMMENDED FOR AGRICULTURAL PRESERVATION  
TRANSITIONAL LANDS
- ▦ LAND TO ACCOMMODATE FUTURE GROWTH
- ▤ ENVIRONMENTAL CORRIDOR
- OTHER LANDS

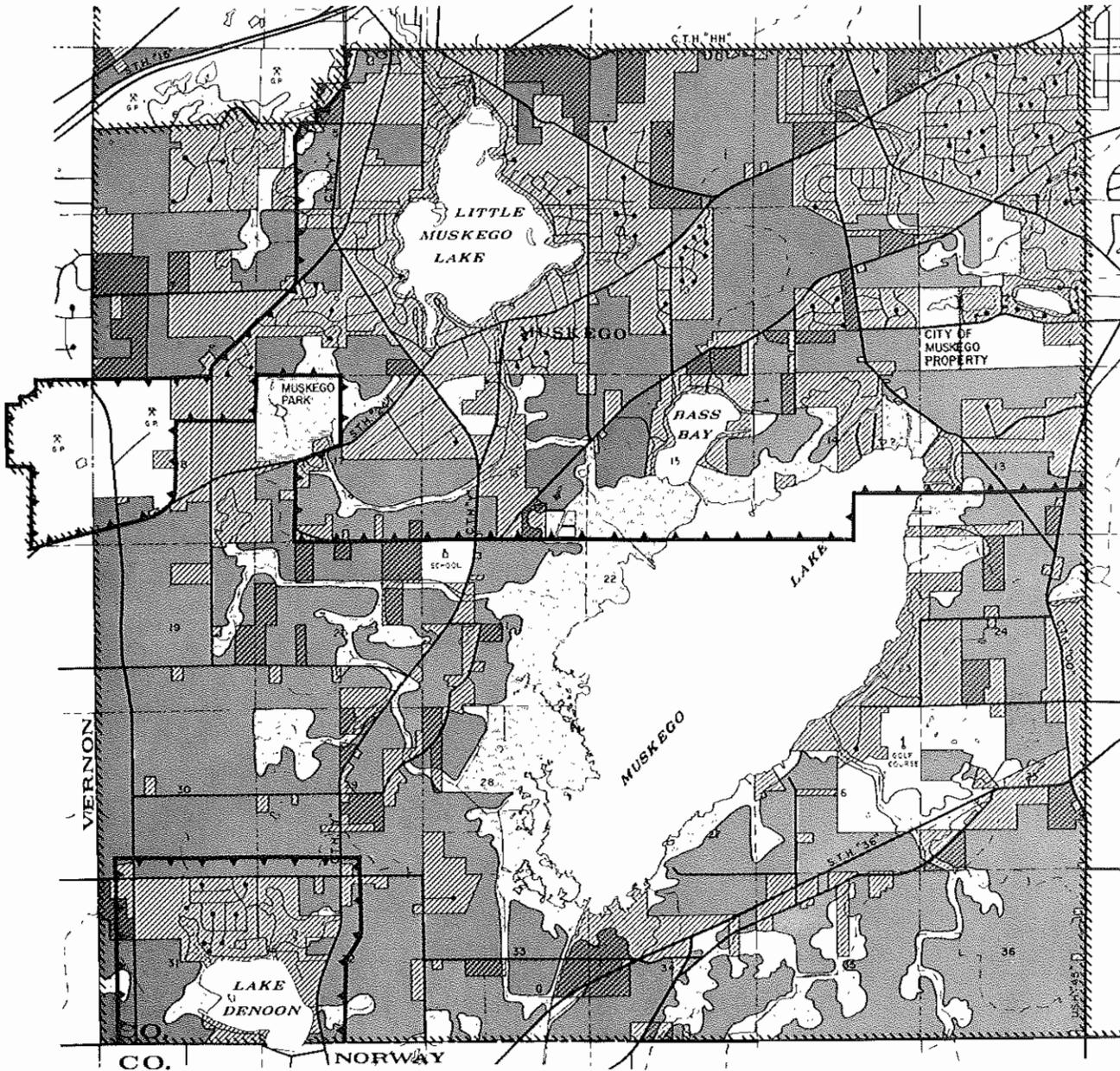
PREPARED BY WAUKESHA COUNTY PARK AND  
PLANNING COMMISSION 1980  
BASE MAP SOURCE SEWRPC



MAP 2  
T8N R19E

# WAUKESHA COUNTY AGRICULTURAL LAND PRESERVATION PLAN

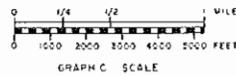
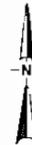
# MUSKEGO TOWNSHIP WAUKESHA COUNTY, WISCONSIN



## LEGEND

- ▤ INCORPORATED CITY OR VILLAGE
- ▨ MAJOR PUBLIC LAND HOLDING
- ▧ POTENTIAL SEWER SERVICE AREA - YEAR 2000
- ▩ ENVIRONMENTAL CORRIDOR
- DEVELOPED AND/OR FRAGMENTED LANDS - PARCELS LESS THAN 35 ACRES
- LAND IN AGRICULTURAL USE - PARCELS LESS THAN 35 ACRES
- ▬ LAND IN AGRICULTURAL USE - PARCELS 35 ACRES OR GREATER
- ▮ FARMS WITH AGRICULTURAL LAND PRESERVATION CONTRACTS
- OTHER LANDS

PREPARED BY: WAUKESHA COUNTY PARK AND  
PLANNING COMMISSION 1980  
BASE MAP SOURCE SEARPC

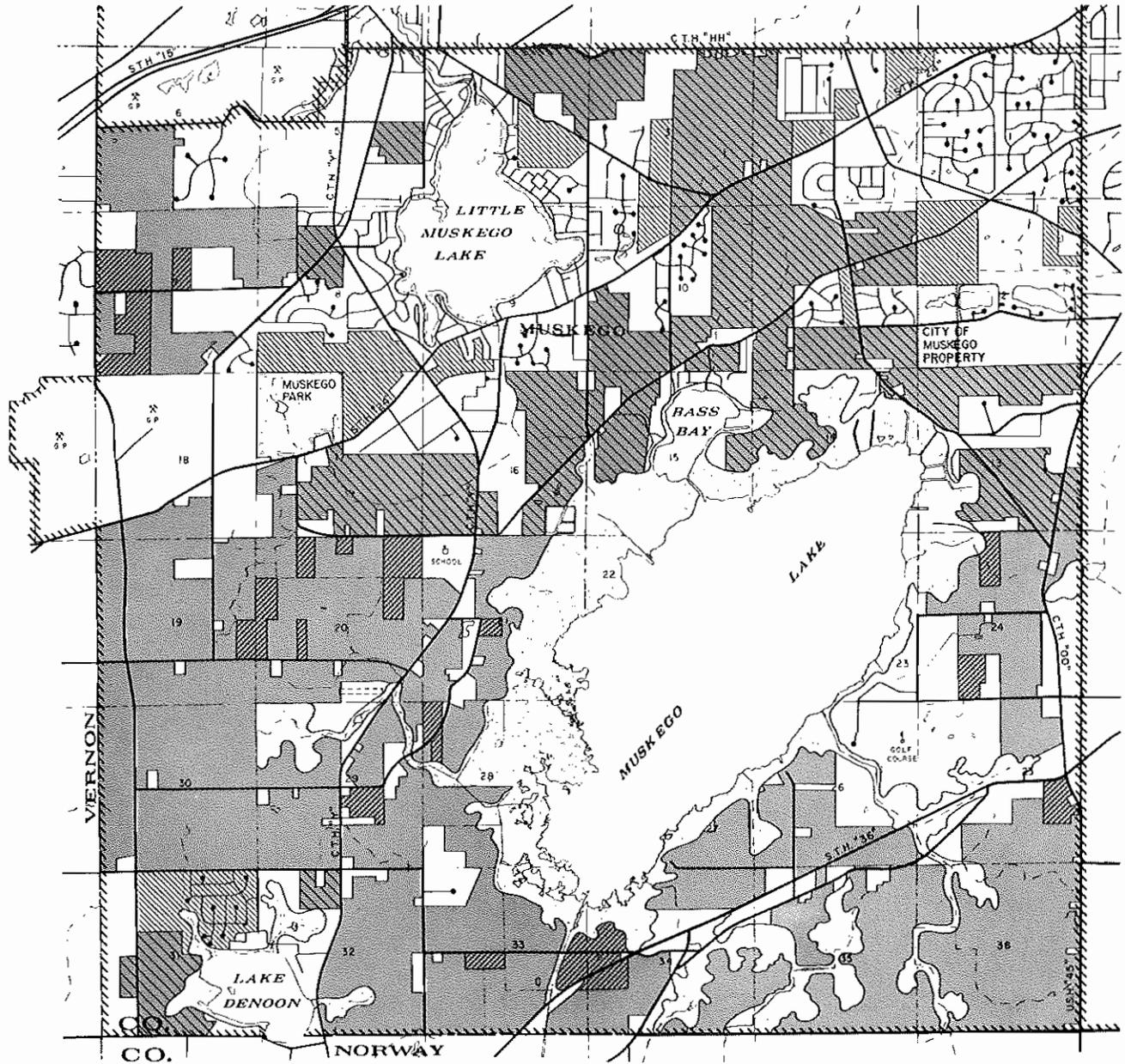


MAP 1  
T5N R20E

# WAUKESHA COUNTY AGRICULTURAL LAND PRESERVATION PLAN

# MUSKEGO TOWNSHIP

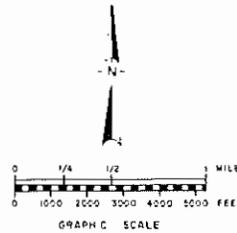
## WAUKESHA COUNTY, WISCONSIN



### LEGEND

- ▤ INCORPORATED CITY OR VILLAGE
- MAJOR PUBLIC LAND HOLDING
- ▨ RECOMMENDED FOR AGRICULTURAL PRESERVATION  
PARCEL SIZE 35 ACRES OR GREATER
- ▩ RECOMMENDED FOR AGRICULTURAL PRESERVATION  
PARCEL SIZE LESS THAN 35 ACRES
- ▧ RECOMMENDED FOR AGRICULTURAL PRESERVATION  
TRANSITIONAL LANDS
- ▦ LAND TO ACCOMMODATE FUTURE GROWTH
- ENVIRONMENTAL CORRIDOR
- OTHER LANDS

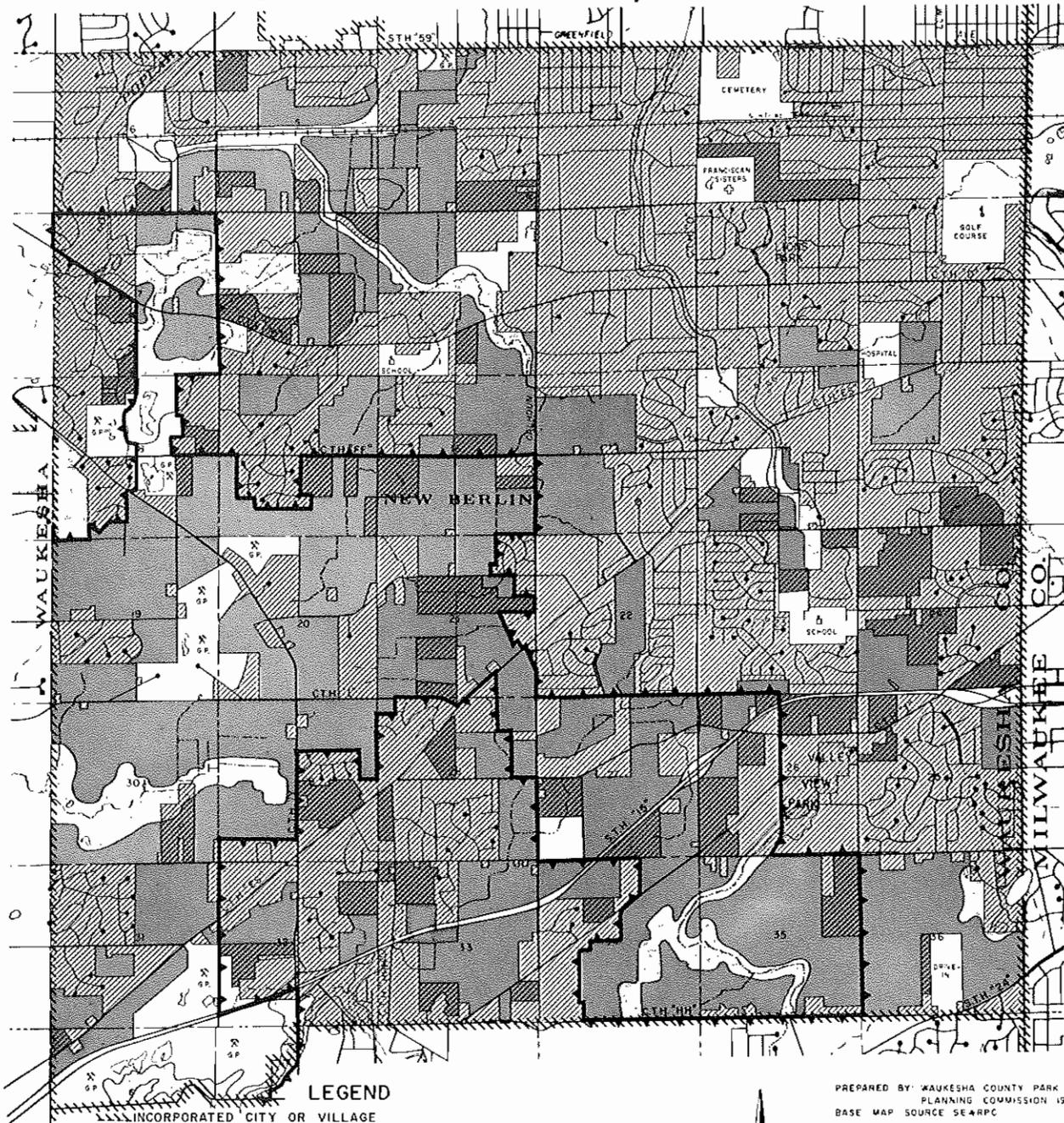
PREPARED BY WAUKESHA COUNTY PARK AND  
PLANNING COMMISSION 1986  
BASE MAP SOURCE SEARPC



MAP 2  
T5N R20E

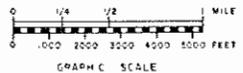
# WAUKESHA COUNTY AGRICULTURAL LAND PRESERVATION PLAN

# NEW BERLIN TOWNSHIP WAUKESHA COUNTY, WISCONSIN



- LEGEND**
- INCORPORATED CITY OR VILLAGE
  - MAJOR PUBLIC LAND HOLDING
  - ▨ POTENTIAL SEWER SERVICE AREA - YEAR 2000
  - ▨ ENVIRONMENTAL CORRIOR
  - ▨ DEVELOPED AND/OR FRAGMENTED LANDS - PARCELS LESS THAN 35 ACRES
  - ▨ LAND IN AGRICULTURAL USE - PARCELS LESS THAN 35 ACRES
  - ▨ LAND IN AGRICULTURAL USE - PARCELS 35 ACRES OR GREATER
  - ▨ FARMS WITH AGRICULTURAL LAND PRESERVATION CONTRACTS
  - OTHER LANDS

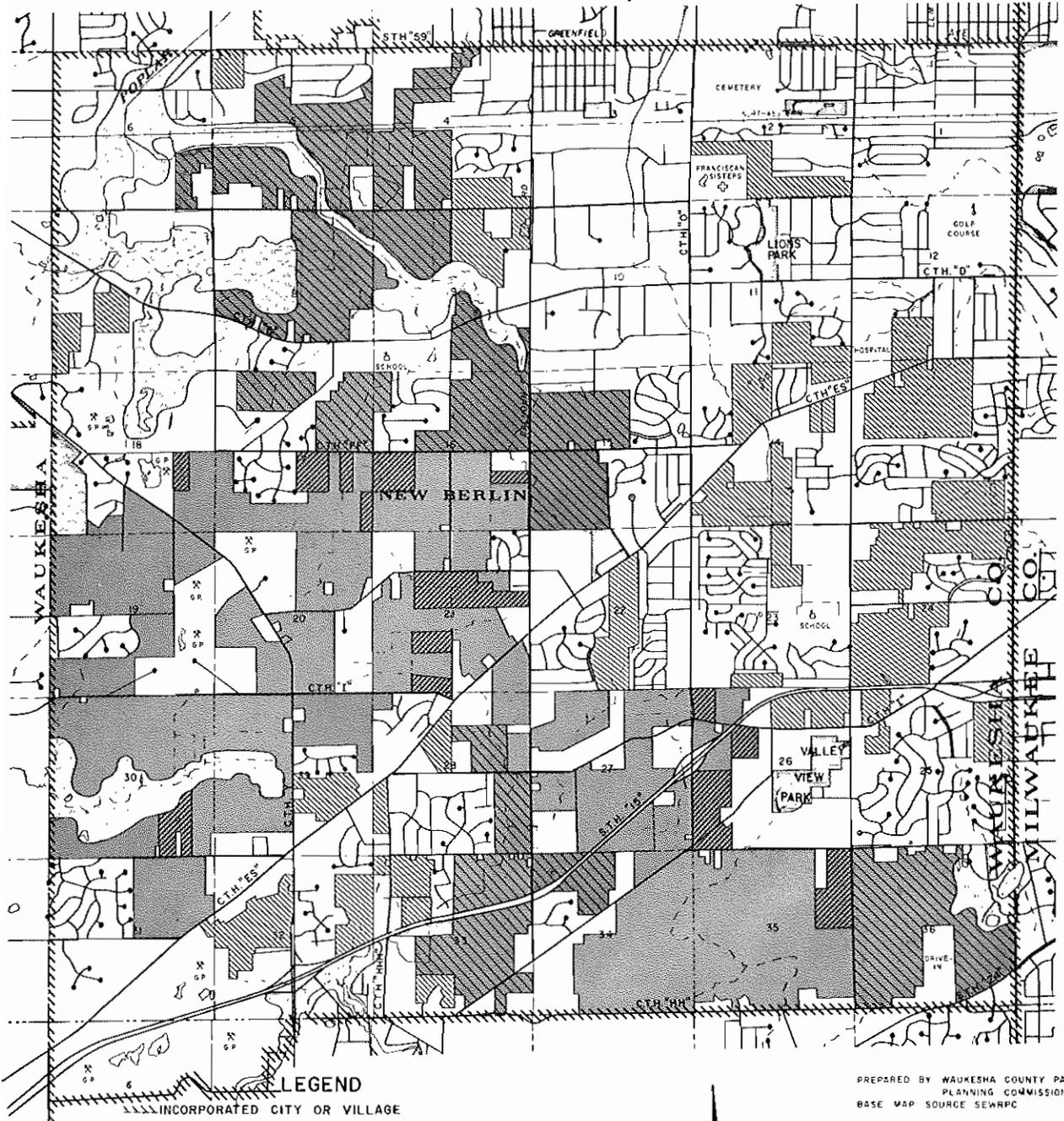
PREPARED BY: WAUKESHA COUNTY PARK AND PLANNING COMMISSION 1980  
BASE MAP SOURCE SEARPC



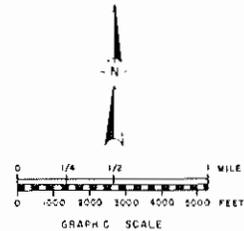
**MAP 1**  
**T6N R20E**

## WAUKESHA COUNTY AGRICULTURAL LAND PRESERVATION PLAN

# NEW BERLIN TOWNSHIP WAUKESHA COUNTY, WISCONSIN



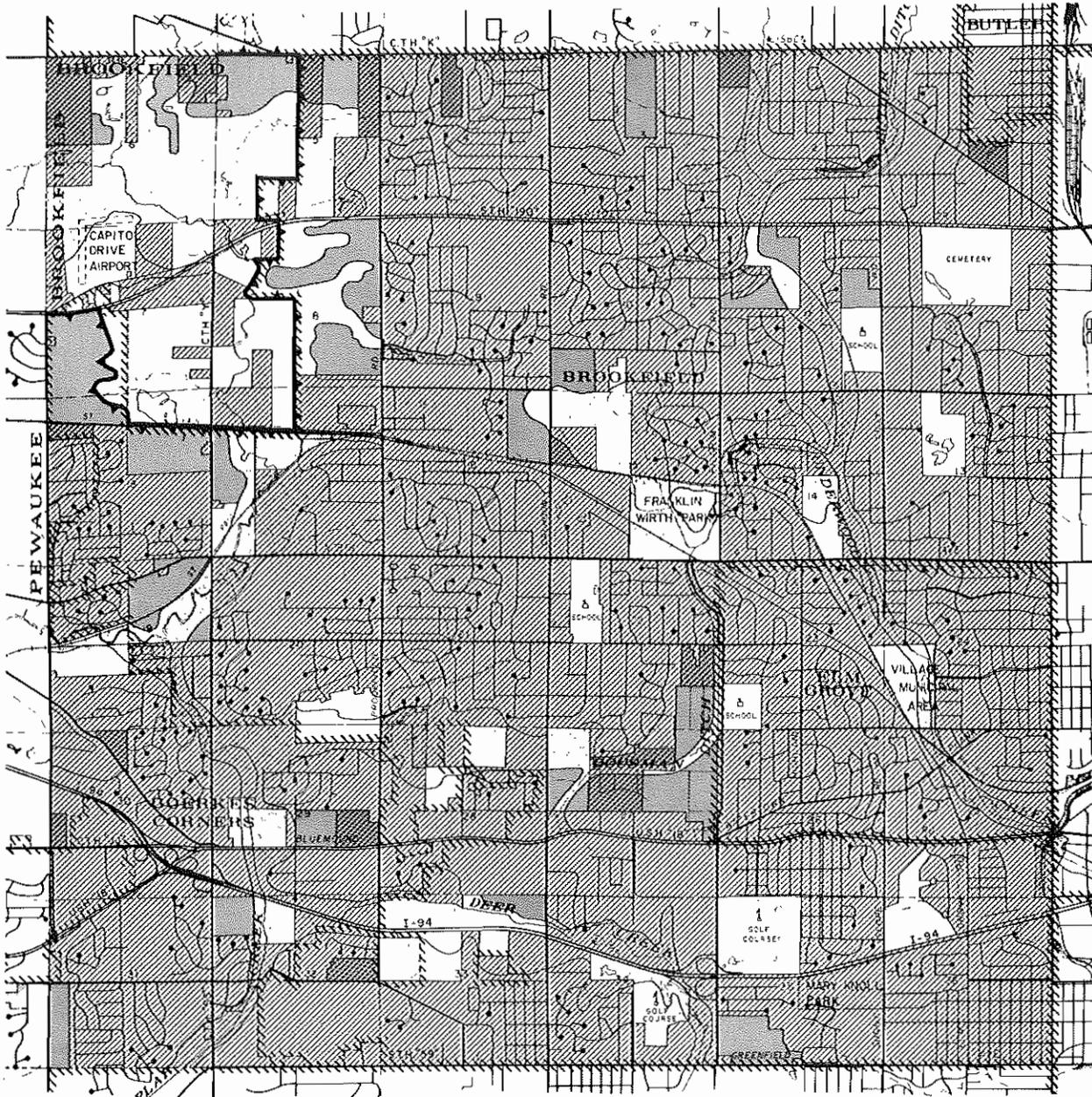
PREPARED BY WAUKESHA COUNTY PARK AND  
PLANNING COMMISSION 1980  
BASE MAP SOURCE SEWRPC



**MAP 2**  
**T6N R20E**

## WAUKESHA COUNTY AGRICULTURAL LAND PRESERVATION PLAN

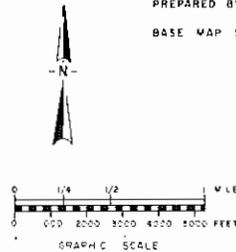
# BROOKFIELD TOWNSHIP WAUKESHA COUNTY, WISCONSIN



## LEGEND

- ▤ INCORPORATED CITY OR VILLAGE
- MAJOR PUBLIC LAND HOLDING
- ▨ POTENTIAL SEWER SERVICE AREA - YEAR 2000
- ▩ ENVIRONMENTAL CORRIDOR
- ▧ DEVELOPED AND/OR FRAGMENTED LANDS - PARCELS LESS THAN 35 ACRES
- ▦ LAND IN AGRICULTURAL USE - PARCELS LESS THAN 35 ACRES
- ▥ LAND IN AGRICULTURAL USE - PARCELS 35 ACRES OR GREATER
- ▤ FARMS WITH AGRICULTURAL LAND PRESERVATION CONTRACTS
- ▩ OTHER LANDS

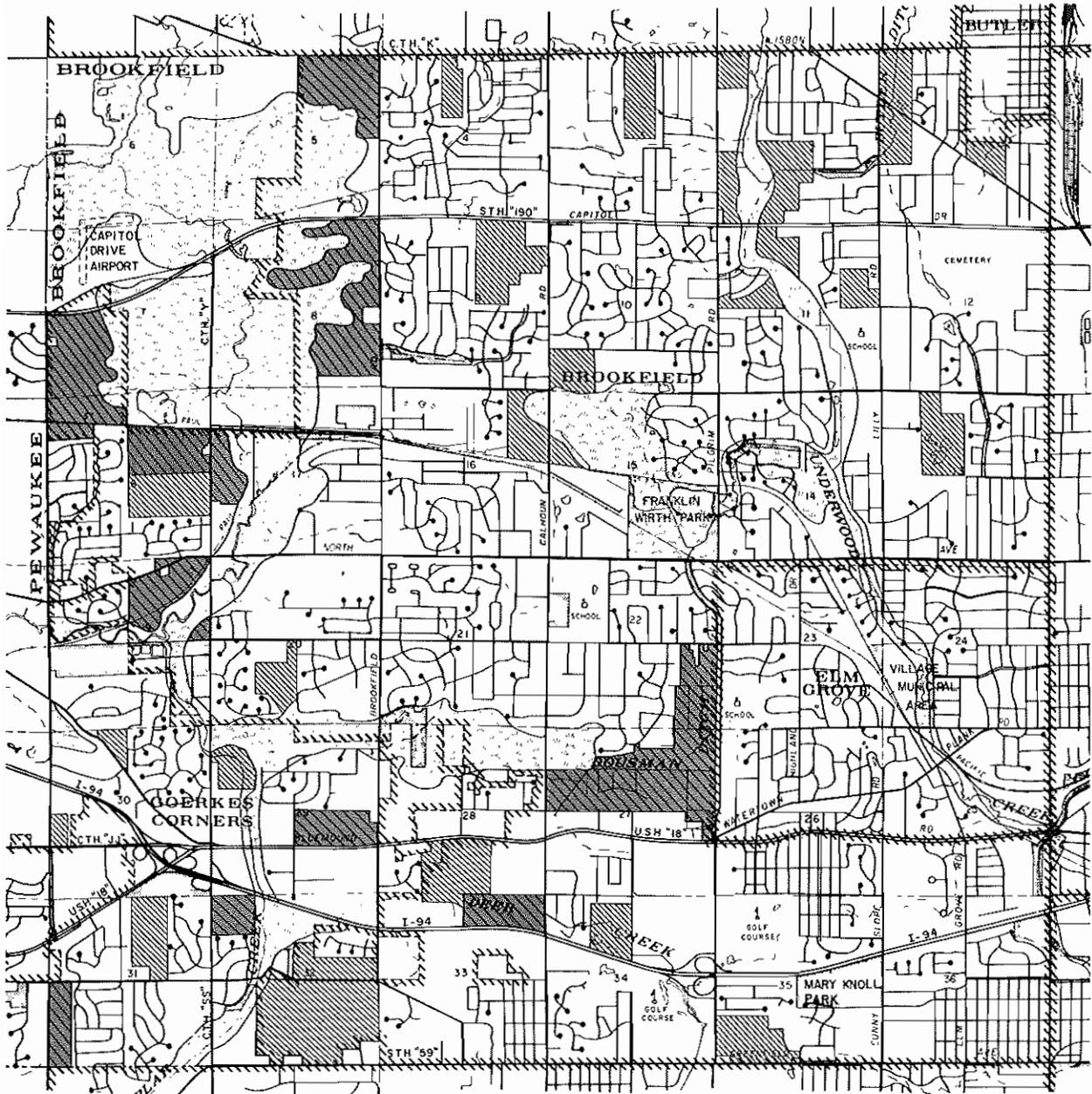
PREPARED BY WAUKESHA COUNTY PARK AND  
PLANNING COMMISSION 1980  
BASE MAP SOURCE SEARPC



MAP 1  
T7N R20E

# WAUKESHA COUNTY AGRICULTURAL LAND PRESERVATION PLAN

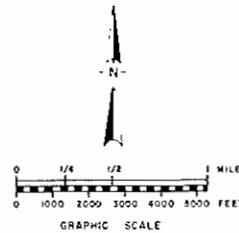
# BROOKFIELD TOWNSHIP WAUKESHA COUNTY, WISCONSIN



### LEGEND

- ▤▤▤▤ INCORPORATED CITY OR VILLAGE
- MAJOR PUBLIC LAND HOLDING
- ▨ RECOMMENDED FOR AGRICULTURAL PRESERVATION  
PARCEL SIZE 35 ACRES OR GREATER
- ▩ RECOMMENDED FOR AGRICULTURAL PRESERVATION  
PARCEL SIZE LESS THAN 35 ACRES
- ▧ RECOMMENDED FOR AGRICULTURAL PRESERVATION  
TRANSITIONAL LANDS
- ▦ LAND TO ACCOMMODATE FUTURE GROWTH
- ▤ ENVIRONMENTAL CORRIDOR
- OTHER LANDS

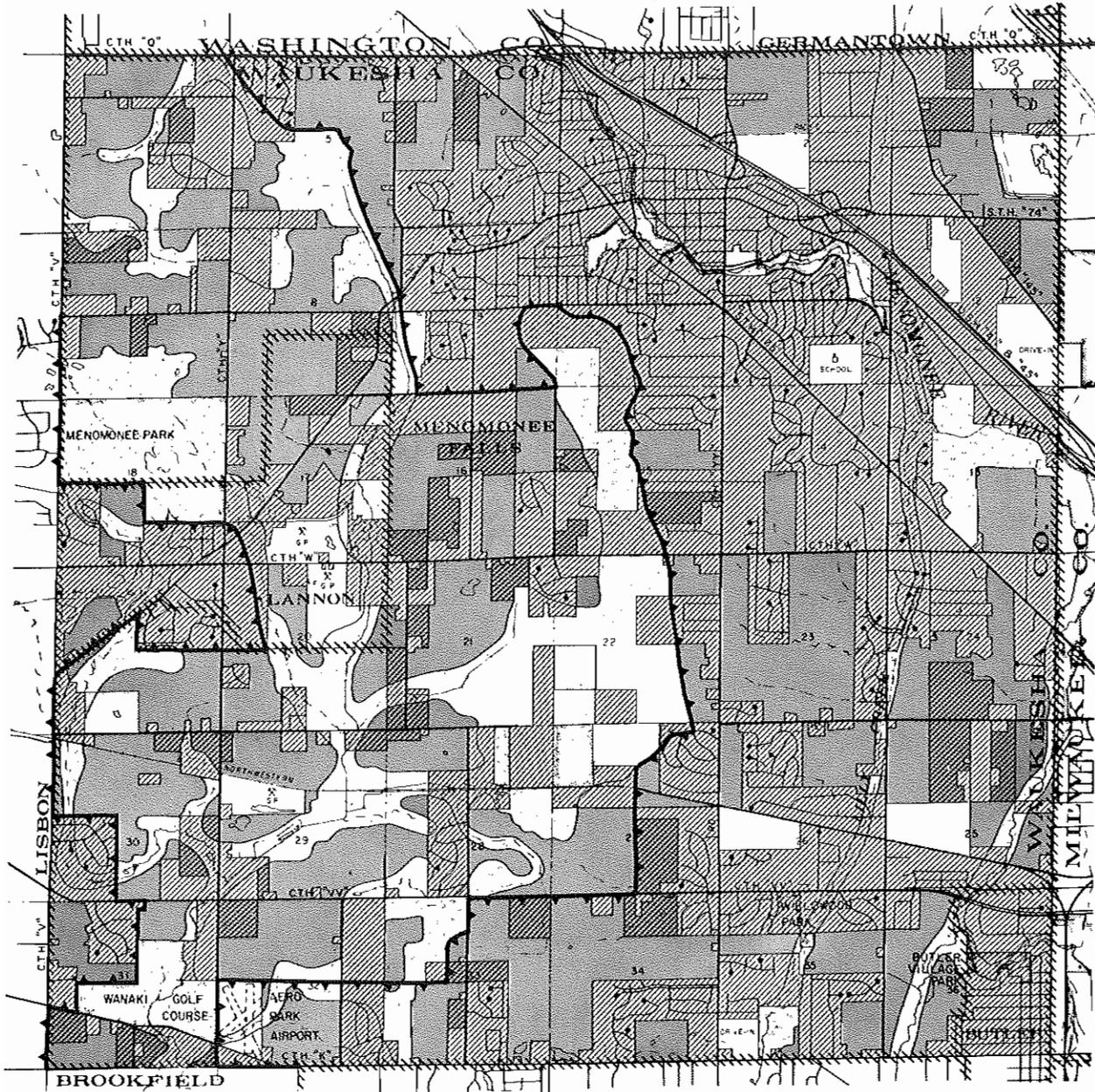
PREPARED BY WAUKESHA COUNTY PARK AND  
PLANNING COMMISSION 1980  
BASE MAP SOURCE SEWRPC



**MAP 2**  
T7N R20E

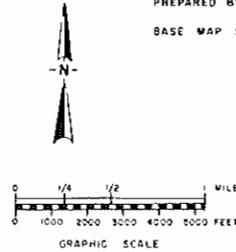
## WAUKESHA COUNTY AGRICULTURAL LAND PRESERVATION PLAN

# MENOMONEE TOWNSHIP WAUKESHA COUNTY, WISCONSIN



- LEGEND**
- ▤ INCORPORATED CITY OR VILLAGE
  - MAJOR PUBLIC LAND HOLDING
  - ▨ POTENTIAL SEWER SERVICE AREA - YEAR 2000
  - ▧ ENVIRONMENTAL CORRIDOR
  - ▩ DEVELOPED AND/OR FRAGMENTED LANDS - PARCELS LESS THAN 35 ACRES
  - LAND IN AGRICULTURAL USE - PARCELS LESS THAN 35 ACRES
  - LAND IN AGRICULTURAL USE - PARCELS 35 ACRES OR GREATER
  - ▬ FARMS WITH AGRICULTURAL LAND PRESERVATION CONTRACTS
  - OTHER LANDS

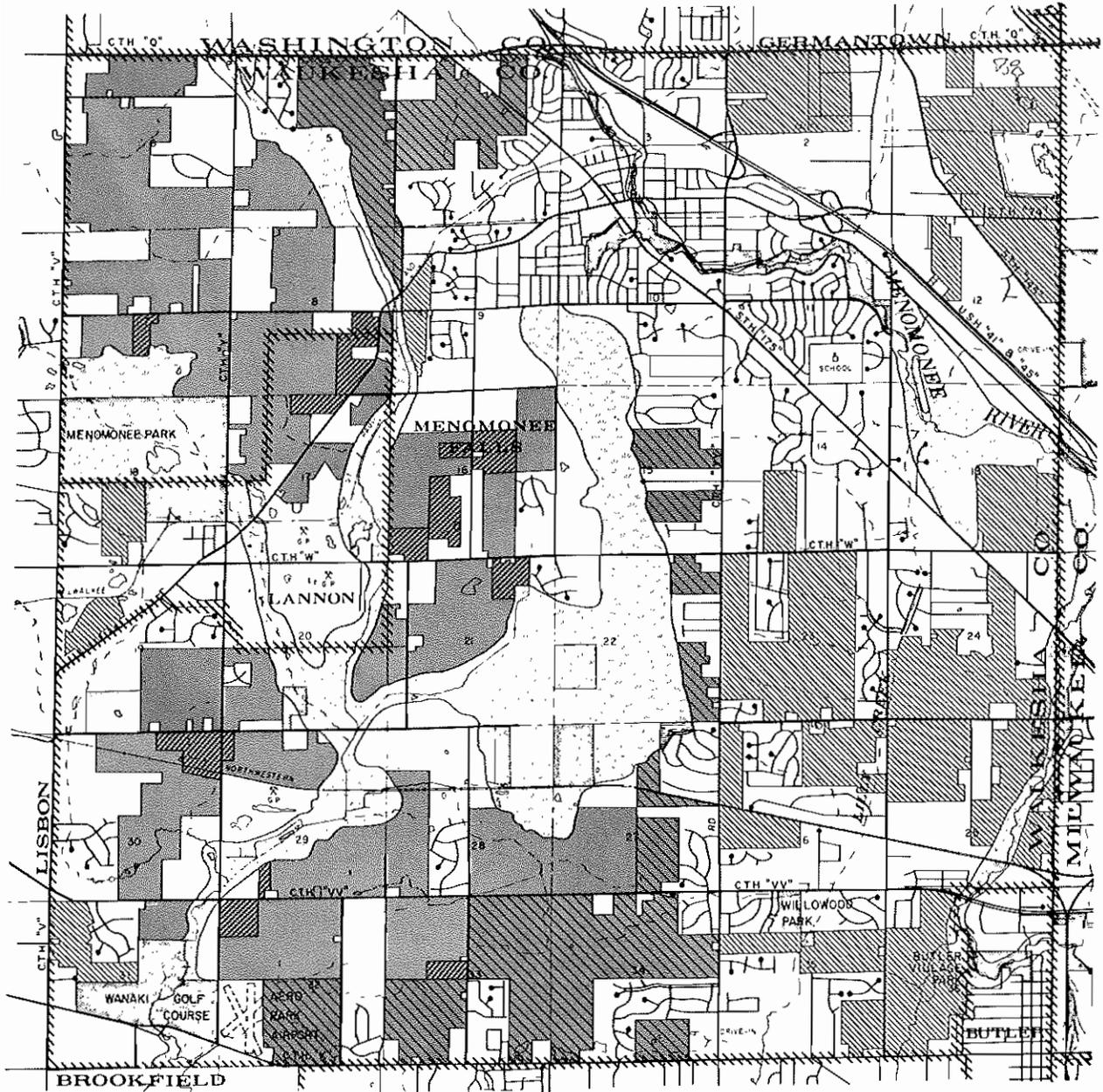
PREPARED BY: WAUKESHA COUNTY PARK AND PLANNING COMMISSION 1980  
BASE MAP SOURCE: SEARPC



**MAP 1**  
**T8N R20E**

## WAUKESHA COUNTY AGRICULTURAL LAND PRESERVATION PLAN

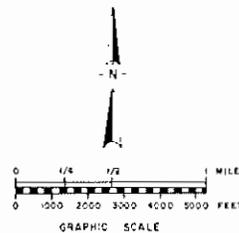
# MENOMONEE TOWNSHIP WAUKESHA COUNTY, WISCONSIN



### LEGEND

- ▤ INCORPORATED CITY OR VILLAGE
- MAJOR PUBLIC LAND HOLDING
- RECOMMENDED FOR AGRICULTURAL PRESERVATION  
PARCEL SIZE 35 ACRES OR GREATER
- ▨ RECOMMENDED FOR AGRICULTURAL PRESERVATION  
PARCEL SIZE LESS THAN 35 ACRES
- ▩ RECOMMENDED FOR AGRICULTURAL PRESERVATION  
TRANSITIONAL LANDS
- ▤ LAND TO ACCOMMODATE FUTURE GROWTH
- ▤ ENVIRONMENTAL CORRIDOR
- OTHER LANDS

PREPARED BY WAUKESHA COUNTY PARK AND  
PLANNING COMMISSION 1980  
BASE MAP SOURCE SEWRPC



**MAP 2**  
T8N R20E

## WAUKESHA COUNTY AGRICULTURAL LAND PRESERVATION PLAN

## CHAPTER VI

### SUMMARY AND CONCLUSION

#### INTRODUCTION

Waukesha County has led the State in the conversion of farmlands to urban uses in the last 20 years. Increasing concern is being shown by citizens who see a diminished agricultural economy, a loss of aesthetic and environmental values and increased cost resulting from providing services to sprawling, discontinuous residential developments. With these changes in the conversion of farmlands come compatibility problems that often frustrate the new resident as well as the farmer who wishes to continue farming. Farming is a business and to operate that business most productively, a farmer must manage the operation in a way which may clash with the residential user. Conversely, farm operators object to providing a recreational outlet for the new residential user and as a result suffer cut fences, loss in crops and other difficulties in connection with their operations adjacent to or in close proximity to residential subdivisions.

Waukesha County leaders both in and out of government have addressed the issue of farming versus the competing demand for farmland that residential, commercial and industrial users represent but not in such a comprehensive way as the present plan does. At various times in the past, studies have been commissioned to look at the problem, but too often the recommendations of those study groups failed to become implemented. With the enactment of the Wisconsin Farmland Preservation Act in June of 1977, the Waukesha County Board of Supervisors assigned the responsibility of reviewing agricultural land preservation agreements jointly to the Waukesha County Park and Planning Commission and to the Agriculture and Resource Committee of the County Board of Supervisors. The Board took the further step of charging the Waukesha County Park and Planning Commission with the task of developing for Waukesha County an Agricultural Land Preservation Plan. The staff has been engaged in that process and has been assisted in part by a grant award from the Department of Agriculture, Trade and Consumer Protection and the former Department of Local Affairs and Development, now known as the Department of Development. The Waukesha County Park and Planning Commission has acted as the Technical Advisory Committee guiding the development of that plan.

This plan is intended to serve as a guide to decision makers as are all plans. In accordance with its earlier stated purposes, if this plan is followed, it will not only provide adequate room for growth for the forecast levels of population but will also deal sensitively with environmentally delicate lands and will nurture a continued healthy presence of the agricultural economic base in this community. The question of whether this plan will be followed, of course, is dependent upon considerations and resultant actions of the various local units of government in Waukesha County. By Statute, enactment of the plan itself, will not continue the eligibility of any current participant in the Tax Credit Program or expand the eligibility to any others beyond the September 30, 1982 termination date.

Local units of government, if they wish to maintain tax credit benefits to area farmers or enable additional participation in the program, must act to amend their existing zoning ordinances, both in text and map, to closely resemble the recommendations of the adopted plan. In addition, with the adoption of zoning ordinances that serve to implement the plan, increased levels of tax credit become available.

## INVENTORY ANALYSIS

From a population level of 85,901 in 1950, the population of Waukesha County has increased to 280,326 in 1980. In the period 1954-1979, over 36,000 acres of land have converted to residential subdivisions in Waukesha County. Over 650 additional miles of local streets have resulted. In the period of the 1970's alone, over 18,000 acres of land have undergone residential subdivision indicating an increased rate of land consumption for this period. Certainly not all of this land was in active farm operations immediately prior to its conversion but a substantially large amount was in active farm operations within the ten years prior to its conversion. According to 1977 data, there are 763 farms in Waukesha County, comprising 132,687 acres. This compares to a total number of farms in the year 1950 of 3,049 with a total farm acreage of 297,496 acres. The average farm size in 1950 was 96 acres and in 1977 rose to 173.9 acres. We see from this data that the total number of farms is down and that the average farm size is up. Other data available from the State Department of Agriculture indicates a long term shift away from the traditional dairy producer who grew substantial hay cover crops, which tended to be more conserving of the soil resource, to a cash/grain situation both with and without livestock operations.

The spatial distribution of known conservation practices rather strongly suggests an anticipation of transition of land use from the current rural oriented farm operation to a cash/grain situation and eventually, to an urban land use. Many fewer conservation practices are in place in the townships of Brookfield, New Berlin, Waukesha and Pewaukee than in the other townships of the County. Likewise with livestock operations, relatively fewer operations are located in areas locally envisioned as available for conversion to urban use.

### Natural Resource Base

The natural resource base of Waukesha County, including its woodlands, wetlands, ground and surface waters as well as its mineral resource in the form of sand and gravel materials and peat, are important natural resource elements of the community as a whole and any meaningful planning effort needs to recognize this and to appropriately provide for the protection and wise use of the natural resource base. Insofar as environmental corridors often consist of combinations of the aforementioned natural resource elements, they represent the best continuing examples of these elements in Waukesha County. The environmental corridors depicted on Map 2 for each respective township of Waukesha County constitute 75,356 acres or about 21 percent of the County.

### Land Use

The changes in land use in the last 30 years following the end of World War II has been demand responsive to the growing metropolitan area needs. Over that period, the demands made by the growing population of Waukesha County have continued to place demands for the filling of wetlands, the conversion of good agricultural lands and the creation of what has become known as urban sprawl, a condition of diffused, separated, discreet residential, commercial and industrial developments located in such a way as to make difficult and unnecessarily costly the reasonable extension of public services. The public services most often considered necessary and which are the most prohibitive in terms of costs are public sanitary sewer and public water supply. Where growth has been centralized, as in the older cities of Waukesha County with known recognized centers from which growth has emanated, services such as sewer and water have been more reasonably extended to serve their residents. In other municipalities and the towns where growth has occurred in a less rational pattern, many communities are experiencing the difficulties and high expense associated with extending services to existing, spread out developments.

To a large degree, the existing land use controls in Waukesha County, mainly in the form of zoning ordinances, have inappropriately been used as community plans and have contributed to the premature conversion of natural resources and lands which might better have remained in agricultural use. Implementation of this plan certainly will not reverse the mistakes of the past but it may arrest the continued inappropriate use of the land resource. With the proper application of zoning districts in concert with the Plan adoption, zoning as a tool to implement the plan has the potential of achieving a high level of success.

Waukesha County consists of thirteen towns, six cities and eighteen villages. In the cities and villages of Waukesha County, zoning and planning is a local matter. This plan applies strictly as an advisory document to those cities and villages. In the towns of Waukesha County, the Waukesha County Park and Planning Commission has the responsibility for the development of this plan. Insofar as zoning to implement this plan is concerned, that will be a matter for the local initiative of each town planning commission and town board. In any case, the plan is strictly advisory in all of the communities of Waukesha County. Of the thirteen towns of Waukesha County, five lie within the jurisdiction of the Waukesha County Zoning Code and eight others with the approval of the Waukesha County Board of Supervisors administer their own zoning ordinances. Zoning text amendments to the Waukesha County Zoning Code have been adopted by the Waukesha County Board of Supervisors in September, 1980, and meet the requirements of the State Agricultural Land Preservation Board insofar as language is concerned. In order for the eight remaining towns of Waukesha County to gain the full benefit of adoption and implementation of this plan, it will be necessary for those towns to draft the appropriate language to be included within their ordinances as well as to amend the respective zoning maps to reflect the recommendations of the plan.

#### PLAN IMPLEMENTATION

The recommended Agricultural Land Use Plan for Waukesha County provides a mechanism for the attainment of the goals outlined in Chapter III and provides for the growth of the community consistent with the anticipated population demands which are expected to be placed on the community over the planning period to the Year 2000. The attainment of those goals will, however, require a level of cooperation and dedication which has been lacking in the past. The actions of local people will be paramount in the success of this program. The responsibility for its success, in large part, lies with the respective town, city and village governments and the Waukesha County Board of Supervisors.

#### PUBLIC REACTION TO THE PLAN

A public informational meeting was held \_\_\_\_\_ 1982 for the purpose of briefing the public and for receiving comments on the Agricultural Land Preservation Plan from farm owners and operators, other interested citizens and public officials. The meeting was conducted in accordance with the Wisconsin State Statutes, after notification of public hearing and the sixty day review and comment period. The reaction to the plan was somewhat controversial in that some support was voiced for the adoption of the plan and its implementation through zoning as well as support for the abandonment of the plan and continuing the present system of zoning as it now exists in the various communities of Waukesha County. (This section will be completed following the public information meeting depending on what comments come out.)

## CONCLUSION

The Agricultural Land Preservation Plan for Waukesha County, as its name implies, is a Plan. A plan is a guide for decision makers, for future courses of action, enabling a determination to be made as to whether or not those future courses of action are consistent with agreed upon goals. The data presented in this plan, its analysis and the goals and policies that have been adopted concurrently will serve to guide decision makers in their tasks.

It is fairly certain that if the forecast levels of population increase are attained and the land use demands generated follow the pattern this plan suggests, a balance between competing forces for the land resource can be achieved. The wide diversity of land use and opportunities that this plan represents is an advantageous asset to Waukesha County. Of course, there are no certainties when it comes to population estimates. Many future scenarios are possible. This plan represents what we believe to be the most reasonable scenario.

Adoption of this plan and its certification by the Agricultural Land Preservation Board will bring the farmers in Waukesha County one step closer to attaining Tax Credits to offset property tax increases and to assist them in the qualification for the maximum tax credit as provided by law for their own particular situation. Implementation of this plan will be necessary for the full impact of the Tax Credit Program to be felt.

4. The county should provide for public participation in the mapping program. The process for involving the public should be stated, and the timing of public involvement should be specified.

Staff response:

The public participation has been and will be accomplished through workshop presentations in which initial sets of discussion maps have been prepared to serve as points of departure.

5. The county or agency preparing the maps should utilize the best possible base maps consistent with the county definition or productive agricultural land and the general purpose of the county farmland preservation program. The base maps should generally be at a minimum scale of 1:24,000.

Staff response:

The minimum scale of 1:24,000 has been used throughout the study.

6. The county or agency preparing the map must adopt a definition of which agricultural lands in the county are to be considered for preservation. This definition must be based on:

- a. soil type as it relates to the U.S. Soil Conservation Service capability classes
- b. physical and economic productivity of land currently in agricultural use
- c. potential productivity of land, given particular improvements such as clearings, irrigation, or drainage

Staff response:

The Waukesha County Park and Planning Commission in a motion made October 18, 1978, provided for a definition of lands to be considered for preservation which incorporated the above.

Standards for Farmland Mapping  
under the  
Farmland Preservation Program

(Adopted by the Agricultural Lands Preservation Board, December 21, 1977)

1. Counties may request financial assistance in mapping farmland to be considered for preservation under the Farmland Preservation Act. A formal resolution requesting such funds must be approved by a vote of the county board.

Staff Response:

The Waukesha County Board of Supervisors authorized the request for financial assistance under resolution #197 of the 132nd Board year. Waukesha County Park and Planning Commission was awarded grant #ALP-79-6091 for the purpose of preparing maps to be used in the planning process and preparing the plan.

2. It is the responsibility of the county board to oversee the county farmland mapping program.

Staff response:

The Waukesha County Board of Supervisors has final authority over the entire Agricultural Land Preservation Program and are kept informed as to its progress by the County Board Supervisors who serve on the Waukesha County Park & Planning Commission and the minutes of that Commission.

3. It is the responsibility of the county board to establish a technical advisory group to generally assist with the county's mapping program. The group or committee should generally include as a minimum the following staff persons, if available to the county:

- a. county extension agent
- b. U.S. Soil Conservation Service representative
- c. county zoning administrator
- d. county planner
- e. soil and water conservation district staff member
- f. regional planning commission staff member

Staff response:

The Technical Advisory Group established by the Waukesha County Board is the Waukesha County Park and Planning Commission who have directed the staff to prepare maps and consult the above mentioned professional as the need warrants it.

APPENDIX 'A'

PLANNING STANDARDS

7. The county or agency preparing the map must also adopt criteria for excluding any of these lands from the map. These criteria generally include:
- acreage available in a single block
  - nature of the surrounding land uses
  - location or current use of the land is not compatible with agricultural use
- Any excluded land and the reason for its exclusion should be identified on the map.

Staff response:

The intent of the Waukesha County Park and Planning Commission in having areas which initially were considered excluded from the map was to use the local input provided in the public participation workshop sessions.

8. In making the determination of which specific lands in the county should be considered for preservation, the county or agency preparing the map should utilize the best information available from the U.S. Soil Conservation Service, U.S. Agricultural Stabilization Service, University of Wisconsin-Extension, and other public agencies or private sources.

Staff Response:

The best information available for the preparation of maps showing lands to be considered for preservation has been used and has included:

- 1) The USDA-SCA Soil Survey for Milwaukee and Waukesha Counties
- 2) The most recent aerial photography dated July 1, 1979 from USDA-APCS
- 3) Staff prepared synthesis of factors which are relevant to the consideration, i.e., urban committed areas, primary environmental corridors, publicly owned or targeted areas and lands which ostensibly would meet the minimum requirements of the law.

A. General Standards:

- (1) All requirements of s.91.51 to s.91.63 must be met.
- (2) The planning process should include all of the following elements: goal formulation, inventory and data collection, data analysis, plan selection and adoption, and implementation. The plan must document this process.
- (3) The plan document must provide evidence that a citizen participation process was used in developing the following elements: goal formulation, plan selection and adoption, and implementation.
- (4) Inventories and studies required under s.91.53 must be included and must be current, and based on timely and relevant data. In most cases this will be the most recent data available.
- (5) The plan shall indicate how anticipated urban growth can be accommodated, and shall specify capacity and location of growth areas.
- (6) A County Development Plan components may be incorporated into Ag Plans when such components are derived from inventories and studies that are based on timely and relevant data.

B. Policy Statements:

- (1) County agricultural preservation plans shall include statements of policy regarding: preservation of agricultural lands; urban growth; provision of public facilities; and protection of significant natural resource, open space, scenic, historic or architectural areas. (s.91.55(1)(a)).
- (2) Statements of policy are general statements of purpose or intent for government actions taken or to be taken to achieve goals relating to the above.
  - (a) The statements of policy should be set out in one place in the plan document.
  - (b) The location of additional policies which may be contained in supporting plans or ordinances should be referenced in the plan document.
  - (c) Any inconsistencies among ordinances, other plans and the policy statements should be identified, explained, and resolved where possible.

- (d) The plan document should describe how policies are the result of studies, citizen input, and other sources.
- (e) The plan should document how policies are to be used.

C. Maps:

- (1) The following maps shall be prepared in the plan process: agricultural areas to be preserved, areas of special environmental, natural resources or open space significance, and, if any, transition areas. (s.91.55(1)(b)).
- (2) Planning maps shall be of a sufficient scale to be usable in both plan development and land use decisions. Required maps must be at minimum scale of 1" to 2,000', i.e., a ratio of 1:24,000.
- (3) Maps shall be included with the plan document or reductions of the maps shall be included in the document.

D. Implementation Programs

- (1) Section 91.57 of the Statutes requires agricultural preservation plans to include programs of specific public actions designed to preserve agricultural lands and guide urban growth. At a minimum, these programs must:
  - (a) describe land use controls and programs to implement the policy statements of the plan (for example, zoning subdivision and sanitary ordinances, special review procedures and acquisition programs);
  - (b) describe the character, location, timing, use, capacity and financing of existing and proposed public facilities serving existing and new development (where, when, how and for what purpose appropriate facilities such as roads and highways, water and sewer, solid waste disposal, schools, parks, fire and police should be provided in order to serve existing and projected development. The size and capacity of these facilities should be described. Justification for the choice of services treated in the plan, and the level of descriptive detail, should be provided);
  - (c) identify procedures and standards for controlling the installation and maintenance of private waste disposal systems, including the specific identification of areas which are not suitable for installation of private waste disposal systems (maps or descriptions of all areas not suitable, under state and local codes, for on-site waste disposal and sanitary ordinances, building codes or other measures used by the county to control private waste disposal systems);

- (d) protect areas of special environmental, natural resource, or open space significance. (Describe how the county protects these areas through such means as conservation zoning, acquisition, management agreement, and inter-governmental agreements. Describe how such areas are identified).

(2) General guidelines:

- (a) Describe how programs implement the policy statements.
- (b) Conflicts or inconsistencies among implementation programs should be identified and explained.
- (c) Status of all programs should be explained.

E. Agricultural Lands Preservation Board Review and Certification Procedures:

- (1) A plan must be submitted to the Board at least 30 days prior to the date of Board review.
- (2) At least 5 copies of a plan must be submitted to the Board for review.
- (3) The Board shall not generally make a certification decision on the same day of the Board review.
- (4) The Board shall document its findings in writing, specifying reasons for certification or denial.

## UNITED STATES DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

LIM-WI-1

Madison, Wisconsin 53711

December 3, 1976

## LAND INVENTORY AND MONITORING MEMORANDUM WI-1

From: J.C. Hytry, State Conservationist

Re : Prime and Unique Farmlands

Purpose of Policy

The U.S. Department of Agriculture and the SCS are concerned about any action that tends to impair the production capacity of American agriculture. Decisionmakers at all government levels need to know the extent and location of the best farmland to guide future land-use decisions and protect the productive capacity of agriculture. Farmlands that are prime, unique, or are of statewide or local importance for producing these crops need to be identified. Supplement 1 to Secretary's Memo 1827 contains USDA policy of prime farmland, forestland, and rangeland.

Policy

The SCS will make and keep current an inventory of prime, unique, and other significant farmlands of the state. This inventory will be carried out on a county-wide basis in cooperation with other interested agencies at the state and local levels of government. The objective of the inventory is to identify the extent and location of prime, unique, and other significant farmland needed to produce food, feed, fiber, forage, and oilseed crops. Inventories developed under this memorandum do not constitute a designation of any land area to a specific land use. Such designations are the prerogative of state and local officials assigned this responsibility under law.



## Responsibilities

### State

The assistant state conservationist for programs will provide leadership in making and keeping current a statewide inventory of prime, unique, and other significant farmlands by:

1. Organizing a "state prime land committee" consisting of representatives of other interested federal and state agencies and organizations. The function of this committee will be to establish and recommend statewide criteria for defining and delineating unique farmland and other significant farmlands of statewide importance.
2. Annually designating the counties to be inventoried. See attachment 2. Selections of counties will be based on the following criteria:
  - a. Amount of competition for farmland by nonagricultural uses and total amount of farmland.
  - b. Availability of complete soil survey data.
  - c. Recommendations from prime land committee, area conservationists, and staff.
  - d. Availability of funds.
3. Compiling county lists of prime land units and establishing criteria for unique lands and other significant farmlands of statewide importance.
4. Establish schedules for completion of inventories and make technical reviews of draft inventory maps. (Map compilation will be made by private contractors under contract at the national level.)

### Area Office

The area conservationist is responsible for coordinating and arranging for appropriate training and technical assistance within area boundaries to carry out and keep county inventories current.

### Field Office

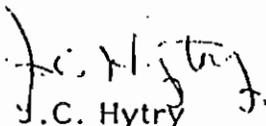
District conservationists, as designated by the state conservationist, are responsible for carrying out and keeping county inventories current. Specific responsibilities include:

- 3 -

1. Updating one set of published soil survey maps by neatly delineating:
  - a. In blue - water areas (lakes, rivers, streams) more than 10 acres in size.
  - b. In red - urban and built-up areas more than 10 acres in size.
  - c. In brown - areas not soil surveyed.
  - d. In yellow - unique farmland areas. (See unique farmland criteria.)

This updated set of maps, together with lists of prime farm and other significant farmland areas, when completed will be forwarded via the state office for delivery to a map contractor for compilation.

2. Organizing a local prime farmland committee consisting of representatives of soil and water conservation districts, Agricultural and Stabilization Service, Farmers Home Administration, Department of Natural Resources, planning agencies, Forest Service, UW-Extension, and planning commissions. The function of this committee is to identify significant farmlands of local importance and the criteria for delineating these areas. These lands will be in addition to prime lands, unique farmlands, and other significant farmlands of statewide importance. (See criteria, attachment 1.)
3. Reviewing the prime land list of mapping units provided by the state office.
4. Providing for the technical editing of draft prime farmland maps prepared by the map contractor. (The state and area offices will provide further guidance on editing.)
5. Recommend to the state conservationist the number of copies of final maps that will be needed locally.

  
J.C. Hytry  
State Conservationist

Attachments

## Inventory Criteria

Prime Farmland

## Definition:

Prime farmland is land best suited for producing food, feed, forage, fiber, and oilseed crops, and also is available for these uses. (The existing land use could be cropland, pastureland, rangeland, forest land, or other land but not urban built-up land or water.) It has the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops economically when treated and managed, including water management, according to modern farming methods.

## Minimum Size Area to be Delineated:

10 contiguous acres

National Prime Farmland Criteria

1. The soils have an adequate moisture supply. Included are:
  - a. Soils having aquic or udic moisture regimes. These soils commonly are in humid or subhumid climates that have well-distributed rainfall or have enough rain in summer that the amount of stored moisture plus rainfall is approximately equal to or exceeds the amount of potential evapotranspiration. Water moves through the soil at some time in most years.
  - b. Soils having sufficient available water capacity within a depth of 40 inches (1 meter), or in the root zone if the root zone is less than 40 inches deep, to produce the commonly grown crops in 7 or more years out of 10.
2. The soils have a soil temperature regime that is frigid or mesic. These soils are at a depth of 20 inches (50 cm); have a mean annual temperature higher than 32°F (0°C). In addition, the mean summer temperature at this depth in soils with a O horizon is higher than 47°F (8°C); in soils that have no O horizon the mean summer temperature is higher than 59°F (15°C)
3. The soils have a pH between 4.5 and 8.4 in all horizons within a depth of 40 inches (1 meter) or in the root zone if the root zone is less than 40 inches deep. This range of pH is favorable for growing a variety of crops without adding large amounts of amendments.

4. The soils have no water table or a water table that is maintained at a sufficient depth during the cropping season to allow food, fiber, forage, and oilseed crops common to the area to be grown.
5. The soils are not flooded frequently during the growing season (less often than once in 2 years).
6. The soils have a product of K (erodibility factor) x percent slope of less than 2.0 and a product of I (soil erodibility) x C (climate factor) not exceeding 60. That is, prime farmland does not include soils having a serious erosion hazard.
7. The soils have a permeability rate of at least 0.06 inches (0.15 cm) per hour in the upper 20 inches (50 cm) and the mean annual soil temperature at a depth of 20 inches (50 cm) is less than 57°F (14°C); permeability rate is not a limiting factor if the mean annual soil temperature is 57°F (14°C) or higher.
8. Less than 10 percent of the surface layer in these soils consists of rock fragments coarser than 3 inches (7.6 cm). These soils present no particular difficulty in cultivating with large equipment.

Within Wisconsin the national prime farmland criteria can be applied to capability units as follows:

1. All capability unit I soils on slopes of less than 2 percent.  
Examples: Fayette, Judson, Miami, Plano, Spencer.
2. All soils in capability units IIe1, IIe2, IIe3, IIe5, IIe6, IIe8, IIe9, IIe10, and IIe11 on 2 to 6 percent slopes. Examples: Fayette, Judson, Miami, Palsgrove, Plano, Spencer.
3. All soils in capability units IIs1, IIs2, and IIs7 on 0 to 6 percent slopes. Examples: Antigo, Fenwood, Fox, Norden, Padus, and Tell.
4. All soils in capability units IIw1, IIw2, IIw3, IIw4, IIw5, IIw6, IIw11, and IIw13 on 0 to 6 percent slopes. Examples: Ashkum, Brookston, Marshan, Poygan, Almena, Blount, Curran, Kibbie, Manawa, Orion, and Solona.

#### Unique Farmland

##### Definition:

Unique farmland is land other than prime farmland that is used for the production of specific high-value food and fiber crops. It has the special combination of soil quality, location, growing season, and moisture supply needed to produce sustained high quality and/or high

yields of a specific crop when treated and managed according to modern farming methods.

Minimum Size Area to be Delineated:

10 acres

Unique Farmland Criteria

1. The land is presently used for a specific high-value crop, such as cranberries, apples, cherries, and mint.
2. The land has a moisture supply that is adequate for the specific crop grown. The supply is from stored moisture, precipitation, or a developed water management system. Includes all soils in capability units IVs3, IVs4, IVe4, VIs3, VIs4, VIe4, and VIs8 on 0 to 12 percent slopes that are irrigated.
3. The area combines favorable factors of soil quality, growing season, temperature, humidity, air drainage, elevation, aspect, or other conditions such as nearness to market that favor the growth of a specific food or fiber crop. (Unique areas are not determined by soil properties above.) County committees may designate other areas that they feel are unique to their county.
4. The land does not qualify as prime farmland.

Farmland of Statewide Importance (Other Significant Farmland)

Definition:

This is land in addition to prime and unique farmlands that is of statewide importance for the production of food, feed, fiber, forage, and oilseed crops.

Minimum Size Area to be Delineated:

10 acres

Farmland of Statewide Importance Criteria

1. The land does not qualify as prime or unique farmland.
2. Within Wisconsin the farmland of statewide importance criteria can be applied to capability units as follows:
  - a. All soils in capability units IIIe1, IIIe2, IIIe3, IIIe4, IIIe5, IIIe6, IIIe7, IIIe8, IIIe9, IIIe10, IIIe11, and IIIe12 on slopes of 1 to 12 percent. Examples: Ahmeek, Iron River, Dakota, Dodge, Fayette, Fox, Freeon, Hixton, Longrie, McHenry, Miami, Norden, Onamia, Onaway, Padus, Palsgrove, Renova,

Rockton, Seaton, Sisson, Stambaugh, , Wea, Whalan, Worthen, Boyer, Dickinson, Lapeer, and Wyocena.

- b. All soils in capability units IIIs2, IIIs4, and IIIs8 on slopes of 0 to 6 percent. Examples: Casco, Mecan, Menominee, Pence, and Wyocena.
- c. All soils in capability units IIIw1, IIIw3, IIIw5, IIIw6, IIIw8, IIIw9, IIIw12, IIw8, and IVw9 on 0 to 6 percent slopes. Examples: Carlisle, Houghton, Seelyeville, Willette, Rifle, Carbondale, Lupton, Richter, Rimer, Fairchild, and Duelm.

3. The area is not a wetland type 3 through 20.

#### Farmland of Local Importance (Other Significant Farmland)

##### Definition:

In some local areas there is concern for certain additional farmlands for the production of food, feed, fiber, forage, and oilseed crops even though these lands are not identified as having national or statewide importance.

##### Minimum Size Area to be Delineated:

10 acres

#### Farmland of Local Importance Criteria

Local "prime farmland" committees are to determine if there is a need to delineate local farmlands of importance and propose criteria. The proposed criteria should be submitted to the state conservationist for review and approval. After approval the district conservationist will prepare a list of mapping units that meets the criteria or delineate the areas on the soil survey maps.

APPENDIX C  
LIST OF MAPS PREPARED TO SUPPORT THE PLAN

- A) Base Maps 1:24000 scale used throughout project. 1 for each township (16 in all) reproducible mylar
- B) Color coded Agricultural Soils at 1:12000 scale. 1 for each township (16 in all) photo reproducible hand colored maps.
- C) Color coded Wetland Soils at 1:12000 scale. 1 for each township (16 in all) photo reproducible hand colored maps.
- D) Agricultural Landownership map-series depicting fragmentation 1:62500 scale. 1 for each township (16 in all) xerox reproducible.
- E) Historical Subdivision activity map. 1 for the county plus 1 for each township, a 1:24000 base along with other items to form a composite.
- F) Primary Environmental Corridors on same composite cited in E. 1 for each township (16 in all) derived from examination of 1" = 400' aerial photographs.
- G) Publicly Owned Lands 1:62500 scale and 1:24000 base as part of composite cited in E.
- H) Potential Urban Development Lands 1:24000 scale presented for initial discussion purposes on composite cited in E. 1 for each township (16 in all) photo reproducible.
- I) SCS Cooperator inventory file plotted on 1:62500 'Rockford' plat maps. 1 for each township (16 in all).
- J) Adopted Regional Land Use Plan Year 2000 1:24000 transferred to the base. 1 for each township (16 in all) photo reproducible hand colored maps.
- K) Adopted Regional Park and Open Space Plan Year 2000 1:24000. 1 for each township (16 in all) photo reproducible hand colored maps.
- L) Aerial Photographs 1:24000 1 for each township (16 in all) providing an overview of developed areas, environmental corridors and used to display and develop proposals for local communities to consider. Photo reproducible.
- M) Aerial Photographs 1" = 400'/1:4800 scale depicting urban committed lands, environmental corridors, contract farms and intended to serve as the basis hands-on work sheet for local plan commissions to consider, ruminate upon and use in delineating recommendations. 9 for each township. 4 square miles on each sheet (144 in all) photo reproducible - manually prepared.
- N) Areas to Consider Thematic map 1:24000 scale in which all the above elements have been considered and which is provided as an overall guide to local people to use while reviewing 1" = 400' aerial photographs - photo reproducible - hand colored maps 1 for each township (16 in all)

UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE

CONS-15

Washington, D. C. 20250

May 5, 1975

## CONSERVATION PLANNING MEMORANDUM-15

FROM: Kenneth E. Grant, Administrator

Re: Conservation of Wetlands

This memorandum states Soil Conservation Service policy regarding wetlands. The policy applies in all cases except where SCS commitments were made prior to the date of this memorandum. Policies, procedures, and guidelines in other SCS documents that are inconsistent with this policy are superseded. Those documents are to be revised to be consistent with this policy. Biology Memorandum-2 and -3 and Inter-agency Memorandum-8 are canceled.

SCOPE

This memorandum applies to wetland types 1 through 20 as described in Circular 39 of the Fish and Wildlife Service, U. S. Department of the Interior, published in 1956.

It does not apply to lands artificially diked and flooded to produce commercial crops of domestic rice, wild rice, or cranberries nor to previously wet soils converted to other substantially irrevocable uses.

BACKGROUND

Because of the fragile nature of wetlands, human activity can and often does inflict lasting change on them, sometimes seriously altering their natural functions. Millions of acres of the Nation's original wetlands have been impaired or converted to other uses. Extraordinary care and effort are required to protect the remaining aquatic ecosystems.

Wetlands moderate extremes in water flow and have value as natural flood-control mechanisms. They aid in water purification by trapping, filtering, and storing sediment and other pollutants and by recycling nutrients. Many serve as ground-water recharge areas. All function as nursery areas for numerous aquatic animal species and are critical habitat for a wide variety of plant and animal species. Wetlands produce economically important crops of fur, fish, wildlife, timber, wild rice, wild hay, wild cranberries, and other products. Many return profits through fees for hunting, fishing, and trapping privileges.

AO

CONS-15

The plants that grow in tidal marshes and other estuaries yield the nutrients required to sustain high yields of aquatic life. Tidal and wind currents redistribute the nutrients and sediments throughout the aquatic areas, thereby helping to maintain the substrate for all creatures using these areas. Tidal marshes and other estuaries are a primary base for many of the Nation's marine and maritime commercial and sport fisheries. A large number of salt-water finfish and shellfish spend some phase of their lives in such areas.

Riparian wetlands similarly support adjacent or downstream aquatic ecosystems in addition to the complex web of life within those aquatic environments. Bordering marshes, for example, provide the spawning areas required by northern pike to maintain their populations in associated streams, rivers, lakes, and reservoirs.

Various kinds and degrees of management may be required to insure desired stages of productivity of existing wetlands. Management involves manipulation of plant species and densities through measures such as water depth control, burning, grazing, and mowing. Offsite measures are often essential to control wind and water erosion, to minimize sedimentation, to maintain optimum salinity, and to divert pollutants.

On the other hand, many wetlands, if drained, could be used as prime cropland for the production of food and fiber. It is important to assess long-term needs for protection of environmental resources for the enjoyment and well-being of future generations and to reach a balance with projected needs for food and fiber. The resource inventory, interpretation and planning assistance provided by the SCS is of value in helping achieve this balance.

#### POLICY

1. SCS is not to provide technical and financial assistance for draining or otherwise altering wetlands types 3 through 20 in order to convert them to other land uses.
2. SCS can provide technical and financial assistance to alter wetlands types 1 and 2, including conversion to other uses such as cropland and pastureland. Such assistance in Minnesota, South Dakota, and North Dakota is to be given in accordance with item 3. SCS is to encourage the preservation of wetland types 1 and 2 where they are adjacent to wetland types 3 through 20 and are needed to maintain a balanced aquatic or semiaquatic ecosystem. When a decision is made by the land owner or user to alter wetland types 1 and 2 or to convert them to other uses, SCS is to encourage the application of land treatment measures needed to reduce erosion and sedimentation and protect environmental values; and SCS is to encourage decisions to preserve key areas and, where possible, to include enhancement measures on such areas.

3. In the states of Minnesota, North Dakota, and South Dakota, SCS technical or financial assistance for draining or otherwise altering wetlands of types 1 and 2 in order to convert them to other uses is to be provided in accordance with provisions of P. L. 87-732.
4. Project actions, such as watershed or RC&D projects, are not to include features designed for the purpose of draining or otherwise altering wetlands types 3 through 20 in order to convert them to other land uses. If such projects include features for other purposes that unavoidably result in losses to types 3 through 20 wetlands, the loss is to be mitigated by establishing wetland habitat values in the same vicinity that are equivalent, insofar as possible, to the wetland habitat values lost.

Provisions are to be established for managing these wetlands on a comparable or more intensive basis than those lost. Sponsors, conservation organizations, state fish and wildlife agencies, or others can assume these management responsibilities.

5. SCS is to assist in restoring damaged wetlands that are not irrevocably committed to other uses and in establishing wetland habitat, where appropriate.
6. SCS is to encourage landowners and project sponsors to consider and use the programs of other federal, state, and local agencies and private organizations that may help to preserve wetlands.

  
KENNETH E. GRANT  
Administrator

Acting

## Key to Wetland Types

Wisconsin contains eight different types of wetlands. Vegetation along with depth and permanency of water help to distinguish each wetland type.

Type I - Seasonally flooded cropland. Depressional areas in crop fields that are subject to "drowning out" are a typical example. Type I wetlands provide a source of high protein food for migrating waterfowl in spring.

Type II - Inland fresh meadow. The soil is often waterlogged to within a few inches of the surface, but usually without standing water. Vegetation includes Reeds canarygrass, bulrush, and spikerush, and other species of marsh grasses. Wild hay or bedding is often cut from these areas. Although waterfowl use these areas for limited nesting, their primary value is for supplemental feeding.

Type III - Inland shallow fresh marsh. Soil is either waterlogged or has up to 6 inches of surface water during the year. Vegetation includes cattails, arrowhead, pickerelweed, bulrush, and spikerush. Marshes of this type are used extensively for nesting and feeding habitat.

Type IV - Inland deep fresh meadow. Soil is covered with 6 inches to 3 feet of water during the year. Cattails, bulrush, reeds, wild rice, and waterlilies may grow in these areas. Type IV wetlands comprise excellent breeding habitat and are important feeding grounds.

Type V - Inland open fresh water. Shallow ponds are included in this type. Water is usually less than 10 feet deep. Vegetation such as waterlilies, coontail, and wild celery may border the area at depths of 6 feet or less. Waterfowl use these areas for feeding and nesting, especially during migration.

Type VI - Shrub swamps. Soil is waterlogged with up to 6 inches of water during the growing season. Willows, dogwood, and alder are the primary vegetation.

Type VII - Wooded swamps. Soils are waterlogged. Trees present include tamarack, black spruce, and black ash.

Type VIII - Bogs. Soil is waterlogged and supports spongy moss covering. Cranberries, black spruce, and tamarack are common.

Of the eight wetland types only Types I through V are eligible for the Water Bank Program. Types III, IV, and V comprise the wetland area. Types I and II are considered to be adjacent land.

The adopted Regional Objectives, Principles and Standards of the Year 2000 Land Use Plan.

LAND USE DEVELOPMENT OBJECTIVES, PRINCIPLES, AND STANDARDS

**OBJECTIVE NO. 1**

A balanced allocation of space to the various land use categories which meets the social, physical, and economic needs of the regional population.

PRINCIPLE

The planned supply of land set aside for any given use should approximate the known and anticipated demand for that use.

STANDARDS

1. For each additional 100 dwelling units to be accommodated within the Region at each residential density, the following minimum amounts of residential land should be set aside:

No.	Residential Density Category	Net Area <sup>a</sup> (Acres/100 Dwelling Units)	Gross Area <sup>b</sup> (Acres/100 Dwelling Units)
1a	High Density Urban <sup>c</sup> . . . . .	8	13
1b	Medium Density Urban <sup>c</sup> . . . . .	23	32
1c	Low Density Urban <sup>c</sup> . . . . .	83	109
1d	Suburban <sup>d</sup> . . . . .	167	204
1e	Rural <sup>d</sup> . . . . .	500	588

\*NOTE: In order to convert dwelling units to resident population, factors ranging from a minimum of 2.6 persons per dwelling unit in Milwaukee County to a maximum of 3.5 persons per dwelling unit in Waukesha and Ozaukee Counties were used. This represents an average of 2.9 persons per dwelling unit for the Region as a whole.

2. For each additional 1,000 persons to be accommodated within the Region, the following minimum amounts of public park and recreation land should be set aside:

No.	Public Park and Recreation Land Category <sup>e</sup>	Net Area <sup>a</sup> (Acres/1,000 Persons)	Gross Area <sup>f</sup> (Acres/1,000 Persons)
2a	Major . . . . .	4	5
2b	Other . . . . .	8	9

3. For each additional 100 industrial employees to be accommodated within the Region, the following minimum amounts of industrial land should be set aside:

No.	Industrial Land Category	Net Area <sup>a</sup> (Acres/100 Employees)	Gross Area <sup>g</sup> (Acres/100 Employees)
3a	Major and Other . . . . .	7	9

4. For each additional 100 commercial employees to be accommodated within the Region, the following minimum amounts of commercial land should be set aside:

No.	Commercial Land Category	Net Area <sup>a</sup> (Acres/100 Employees)	Gross Area <sup>g</sup> (Acres/100 Employees)
4a	Major . . . . .	1	3
4b	Other . . . . .	2	6

5. For each additional 1,000 persons to be accommodated within the Region, the following minimum amounts of governmental and institutional land should be set aside:

No.	Governmental and Institutional Land Category	Net Area <sup>a</sup> (Acres/1,000 Persons)	Gross Area <sup>h</sup> (Acres/1,000 Persons)
5a	Major and Other . . . . .	9	12

es.

**OBJECTIVE NO. 2**

A spatial distribution of the various land uses which will result in a compatible arrangement of land uses.

PRINCIPLE

The proper allocation of uses to land can avoid or minimize hazards and dangers to health, safety, and welfare and maximize amenity and convenience in terms of accessibility to supporting land uses.

STANDARDS

1. Urban high-, medium-, and low-density residential uses should be located within planning units which are served with centralized public sanitary sewerage and water supply facilities and contain, within a reasonable walking distance, necessary supporting local service uses, such as neighborhood park, local commercial, and elementary school facilities, and should have reasonable access through the appropriate component of the transportation system to employment, commercial, cultural, and governmental centers and secondary school and higher educational facilities.
2. Rural and suburban density residential uses should have reasonable access through the appropriate component of the transportation system to local service uses; employment, commercial, cultural, and governmental centers; and secondary school and higher educational facilities.
3. Industrial uses should be located to have direct access to arterial street and highway facilities and reasonable access through an appropriate component of the transportation system to residential areas and to railway, seaport, and airport facilities and should not be intermixed with commercial, residential, governmental, recreational, or institutional land uses.
4. Regional commercial uses should be located in centers of concentrated activity on only one side of an arterial street and should be afforded direct access to the arterial street system.

**OBJECTIVE NO. 3**

A spatial distribution of the various land uses which will result in the protection and wise use of the natural resources of the Region, including its soils, inland lakes and streams, wetlands, woodlands, and wildlife.

PRINCIPLE

The proper allocation of uses to land can assist in maintaining an ecological balance between the activities of man and the natural environment which supports him.

1. Soils

Principle

The proper relation of urban and rural land use development to soils type and distribution can serve to avoid many environmental problems, aid in the establishment of better regional settlement patterns, and promote the wise use of an irreplaceable resource.

STANDARDS

- 1a. Sewered urban development, particularly for residential use, should not be located in areas covered by soils identified in the regional detailed operational soil survey as having severe or very severe limitations for such development.
- 1b. Unsewered suburban residential development should not be located in areas covered by soils identified in the regional detailed operational soil survey as having severe or very severe limitations for such development.
- 1c. Rural development, including agricultural and rural residential development, should not be located in areas covered by soils identified in the regional detailed operational soil survey as having severe or very severe limitations for such uses.

2. Inland Lakes and Streams

Principle

Inland lakes and streams contribute to the atmospheric water supply through evaporation; provide a suitable environment for desirable and sometimes unique plant and animal life; provide the population with opportunities for certain scientific, cultural, and educational pursuits; constitute prime recreational areas; provide a desirable aesthetic setting for certain types of land use development; serve to store and convey flood waters; and provide certain water withdrawal requirements.

## STANDARDS

2a (1). A minimum of 25 percent of the perimeter or shoreline frontage of lakes having a surface area in excess of 50 acres should be maintained in a natural state.

2a (2). Not more than 50 percent of the length of the shoreline of inland lakes having a surface area in excess of 50 acres should be allocated to urban development, except for park and outdoor recreational uses.

2a (3). A minimum of 10 percent of the shoreline of each inland lake having a surface area in excess of 50 acres should be maintained for public uses, such as a beach area, pleasure craft marina, or park.

2b (1). It is desirable that 25 percent of the shoreline of each inland lake having a surface area less than 50 acres be maintained in either a natural state or some low-intensity public use, such as park land.

2c (1). A minimum of 25 percent of both banks of all perennial streams should be maintained in a natural state.

2c (2). Not more than 50 percent of the length of perennial streams should be allocated to urban development, except for park and outdoor recreational uses.

2d. Floodlands<sup>j</sup> should not be allocated to any urban development<sup>k</sup> which would cause or be subject to flood damage.

2a. No unauthorized structure or fill should be allowed to encroach upon and obstruct the flow of water in the perennial stream channels<sup>l</sup> and floodways.<sup>m</sup>

### 3. Wetlands

#### Principle

Wetlands support a wide variety of desirable and sometimes unique plant and animal life; assist in the stabilization of lake levels and streamflows; trap and store plant nutrients in runoff, thus reducing the rate of enrichment of surface waters and obnoxious weed and algae growth; contribute to the atmospheric oxygen supply; contribute to the atmospheric water supply; reduce storm water runoff by providing area for floodwater impoundment and storage; trap soil particles suspended in runoff and thus reduce stream sedimentation; and provide the population with opportunities for certain scientific, educational, and recreational pursuits.

#### STANDARD

3a. All wetland areas<sup>n</sup> adjacent to streams or lakes, all wetlands within areas having special wildlife and other natural values, and all wetlands having an area in excess of 50 acres should not be allocated to any urban development except limited recreation and should not be drained or filled. Adjacent surrounding areas should be kept in open-space use, such as agriculture or limited recreation.

### 4. Woodlands<sup>o</sup>

#### Principle

Woodlands assist in maintaining unique natural relationships between plants and animals; reduce storm water runoff; contribute to the atmospheric oxygen supply; contribute to the atmospheric water supply through transpiration; aid in reducing soil erosion and stream sedimentation; provide the resource base for the forest product industries; provide the population with opportunities for certain scientific, educational, and recreational pursuits; and provide a desirable aesthetic setting for certain types of land use development.

#### STANDARDS

4a. A minimum of 10 percent of the land area of each watershed<sup>p</sup> within the Region should be devoted to woodlands.

4b. For demonstration and educational purposes, the woodland cover within each county should include a minimum of 40 acres devoted to each major forest type: oak-hickory, northern hardwood, pine, and lowland forest. In addition, remaining examples of the native forest vegetation types representative of the pre-settlement vegetation should be maintained in a natural condition and be made available for research and educational use.

4c. A minimum regional aggregate of five acres of woodland per 1,000 population should be maintained for recreational pursuits.

### 5. Wildlife<sup>q</sup>

Principle

Wildlife, when provided with a suitable habitat, will supply the population with opportunities for certain scientific, educational, and recreational pursuits; comprises an integral component of the life systems which are vital to beneficial natural processes, including the control of harmful insects and other noxious pests and the promotion of plant pollination; provides a food source; offers an economic resource for the recreation industries; and serves as an indicator of environmental health.

STANDARD

6a. The most suitable habitat for wildlife—that is, the area wherein fish and game can best be fed, sheltered, and reproduced—is a natural habitat. Since the natural habitat for fish and game can best be achieved by preserving or maintaining in a wholesome state other resources such as soil, air, water, wetlands, and woodlands, the standards for each of these other resources, if met, would ensure the preservation of a suitable wildlife habitat and population.

OBJECTIVE NO. 4

A spatial distribution of the various land uses which is properly related to the supporting transportation, utility, and public facility systems in order to assure the economical provision of transportation, utility, and public facility services.

PRINCIPLE

The transportation and public utility facilities and the land use pattern which these facilities serve and support are mutually interdependent in that the land use pattern determines the demand for, and loadings upon, transportation and utility facilities; and these facilities, in turn, are essential to, and form a basic framework for, land use development.

STANDARDS

1. Urban development should be located so as to maximize the use of existing transportation and utility systems.
2. The transportation system should be located and designed to provide access not only to all land presently devoted to urban development but to land proposed to be used for such urban development.
3. All land developed or proposed to be developed for urban medium-, high-, and low-density residential use should be located in areas serviceable by an existing or proposed public sanitary sewerage system and preferably within the gravity drainage area tributary to such systems.
4. All land developed or proposed to be developed for urban medium-, high-, and low-density residential use should be located in areas serviceable by an existing or proposed public water supply system.
5. All land developed or proposed to be developed for urban medium- and high-density residential use should be located in areas serviceable by existing or proposed primary, secondary, and tertiary mass transit facilities.
6. The transportation system should be located and designed to minimize the penetration of existing and proposed residential neighborhood units by through traffic.
7. Transportation terminal facilities, such as off-street parking, off-street truck loading, and mass transit loading facilities, should be located in close proximity to the principal land uses to which they are accessory.

OBJECTIVE NO. 5

The development and conservation of residential areas within a physical environment that is healthy, safe, convenient, and attractive.

PRINCIPLE

Residential areas developed in designed neighborhood units can assist in stabilizing community property values, preserving residential amenities, and promoting efficiency in the provision of public and community service facilities; can best provide a desirable environment for family life; and can supply the population with improved levels of safety and convenience.

STANDARDS

1. Urban high-, medium-, and low-density residential development should be located in neighborhood units which are physically self-contained within clearly defined and relatively permanent isolating boundaries, such as arterial streets and highways, major park and open space reservations, or significant natural features, such as rivers, streams, or hills.
2. Urban residential neighborhood units should contain enough area to provide: housing for the population served by one elementary school and one neighborhood park; an internal street system which discourages penetration of the unit by through traffic; and all of the community and commercial facilities necessary to meet the day-to-day living requirements of the family within the immediate vicinity of its dwelling unit.
3. Suburban and rural density residential development should be located in areas where onsite soil absorption sewage disposal systems and private wells can be accommodated and access to other services and facilities can be provided through appropriate components of the transportation system at the community or regional level, thereby properly relating such development to a rural environment.

To meet the foregoing standards, land should be allocated in each urban and rural development category as follows:

Land Use Category	Percent of Area in Land Development Category					
	Urban High-Density (7.0 - 17.9 Dwelling Units/Net Residential Acre)	Urban Medium-Density (2.3 - 6.9 Dwelling Units/Net Residential Acre)	Urban Low-Density (0.7 - 2.2 Dwelling Units/Net Residential Acre)	Suburban Density (0.2 - 0.6 Dwelling Units/Net Residential Acre)	Rural Density (0.1 - 0.2 Dwelling Units/Net Residential Acre)	Agricultural (<0.2 Dwelling Units/Net Residential Acre)
Residential . . . . .	66.0	71.0	76.5	82.0	85.0	6.0
Streets and Utilities . . . .	25.0	23.0	20.0	18.0	15.0	4.0
Parks and Playgrounds . . .	3.5	2.5	1.5	-	..	..
Public Elementary Schools . . . . .	2.5	1.5	0.5	..	..	..
Other Governmental and Institutional . . . . .	1.5	1.0	1.0	..	..	..
Retail and Service . . . . .	1.5	1.0	0.5	-	..	..
Nonurban . . . . .	..	-	..	..	..	90.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

**OBJECTIVE NO. 6**

The preservation, development, and redevelopment of a variety of suitable industrial and commercial sites both in terms of physical characteristics and location.

PRINCIPLE

The production and sale of goods and services are among the principal determinants of the level of economic vitality in any society, and the important activities related to these functions require areas and locations suitable to their purpose.

STANDARDS

1. Regional industrial development should be located in planned industrial districts which meet the following standards:
  - a. Minimum gross site area of 320 acres or a minimum employment of 3,500 persons.
  - b. Direct access to the arterial street and highway system and access within two miles to the freeway system.
  - c. Direct access to railroad facilities.
  - d. Direct access to primary, secondary, and tertiary mass transit service.
  - e. Access to a basic transport airport within a maximum travel time of 30 minutes and access to seaport facilities within a maximum travel time of 60 minutes.
  - f. Available adequate water supply.
  - g. Available adequate public sanitary sewer service.
  - h. Available adequate storm water drainage facilities.
  - i. Available adequate power supply.
  - j. Site should be covered by soils identified in the regional soils survey as having very slight, slight, or moderate limitations for industrial development.

**2. Regional commercial development, which would include activities primarily associated with the sale of shopper's goods, should be concentrated in regional commercial centers which meet the following minimum standards:**

- a. Accessibility to a population of between 75,000 and 150,000 persons located within either a 20-minute one-way travel period or a 10-mile radius.
- b. A minimum gross site area of 60 acres.
- c. At least two general sales and service department stores offering a full range of commodities and price levels.
- d. Direct access to the arterial street system.
- e. Direct access to the primary, secondary, and tertiary mass transit service.
- f. Available adequate water supply.
- g. Available adequate sanitary sewer service.
- h. Available adequate storm water drainage facilities.
- i. Available adequate power supply.
- j. The site should be covered by soils identified in the regional soils survey as having very slight, slight, or moderate limitations for commercial development.

**In addition to the above minimum standards, the following site development standards are desirable:**

- k. Provision of off-street parking for at least 5,000 cars.
- l. Provision of adequate off-street loading facilities.
- m. Provision of well-located points of ingress and egress which are controlled to prevent traffic congestion on adjacent arterial streets.
- n. Provision of adequate screening to serve as a buffer between the commercial use and adjacent noncommercial uses.
- o. Provision of adequate building setbacks from major streets.

**3. Local industrial development should be located in planned industrial districts which meet the following standards:**

- a. Direct access to the arterial street and highway system.
- b. Direct access to mass transit facilities.
- c. Available adequate water supply.
- d. Available adequate public sanitary sewer service.
- e. Available adequate storm water drainage facilities.
- f. Available adequate power supply.
- g. Site should be covered by soils identified in the regional soils survey as having very slight, slight, or moderate limitations for industrial development.

**4. Local commercial development, which includes activities primarily associated with the sale of convenience goods and services, should be contained within the residential planning units, the total area devoted to the commercial use varying with the residential density:**

- a. In urban low-density areas, land devoted to local commercial centers should comprise at least 0.5 percent of the total gross neighborhood area, or about 3.2 acres per square mile of gross neighborhood area.
- b. In urban medium-density areas, land devoted to local commercial centers should comprise at least 1.0 percent of the total gross neighborhood area, or about 6.4 acres per square mile of gross neighborhood area.
- c. In urban high-density areas, land devoted to local commercial centers should comprise at least 1.5 percent of the total gross neighborhood area, or about 9.6 acres per square mile of gross neighborhood area.

## OBJECTIVE NO. 7

The preservation and provision of open space<sup>f</sup> to enhance the total quality of the regional environment, maximize essential natural resource availability, give form and structure to urban development, and facilitate the ultimate attainment of a balanced year-round outdoor recreational program providing a full range of facilities for all age groups.

### PRINCIPLE

Open space is the fundamental element required for the preservation, wise use, and development of such natural resources as soil, water, woodlands, wetlands, native vegetation, and wildlife; it provides the opportunity to add to the physical, intellectual, and spiritual growth of the population; it enhances the economic and aesthetic value of certain types of development; and it is essential to outdoor recreational pursuits.

### STANDARDS<sup>5</sup>

1. Major or regional park and recreation sites should be provided within a 10-mile service radius of every dwelling unit in the Region, and should have a minimum gross site area of 250 acres.
2. Local park and recreation sites should be provided within a maximum service radius of one mile of every dwelling unit in an urban area, and should have a minimum gross site area of 5 acres.
3. Areas having unique scientific, cultural, scenic, or educational value should not be allocated to any urban or agricultural land uses; and adjacent surrounding areas should be retained in open space use, such as agriculture or limited recreation.

## OBJECTIVE NO. 8

The preservation of land areas for agricultural uses in order to provide for certain special types of agriculture, provide a reserve or holding zone for future needs, and ensure the preservation of those unique rural areas which provide wildlife habitat and which are essential to shape and order urban development.

### PRINCIPLE

Agricultural areas, in addition to providing food and fiber, can supply significant wildlife habitat; contribute to maintaining an ecological balance between plants and animals; offer locations proximal to urban centers for the production of certain food commodities which may require nearby population concentrations for an efficient production-distribution relationship; support the agricultural and agricultural-related economy of the Region; and provide open spaces which give form and structure to urban development.

### STANDARDS

1. All prime agricultural areas<sup>1</sup> should be preserved.
2. All agricultural lands surrounding adjacent high-value scientific, educational, or recreational resources should be preserved.

In addition to the above, attempts should be made to preserve agricultural areas which are covered by soils rated in the regional detailed operational soil survey as having moderate limitations if these soils: a) generally occur in concentrations greater than five square miles and surround or lie adjacent to areas which qualify under either of the above standards, or b) occur in areas which may be designated as desirable open spaces for shaping urban development.

<sup>a</sup> Net land use area is defined as the actual site area devoted to a given use, and consists of the ground floor site area occupied by any buildings plus the required yards and open spaces.

<sup>b</sup> Gross residential land use area is defined as the net area devoted to this use plus the area devoted to all supporting land uses, including streets, neighborhood parks and playgrounds, elementary schools, and neighborhood institutional and commercial uses, but not including freeways and expressways and other community and areawide uses.

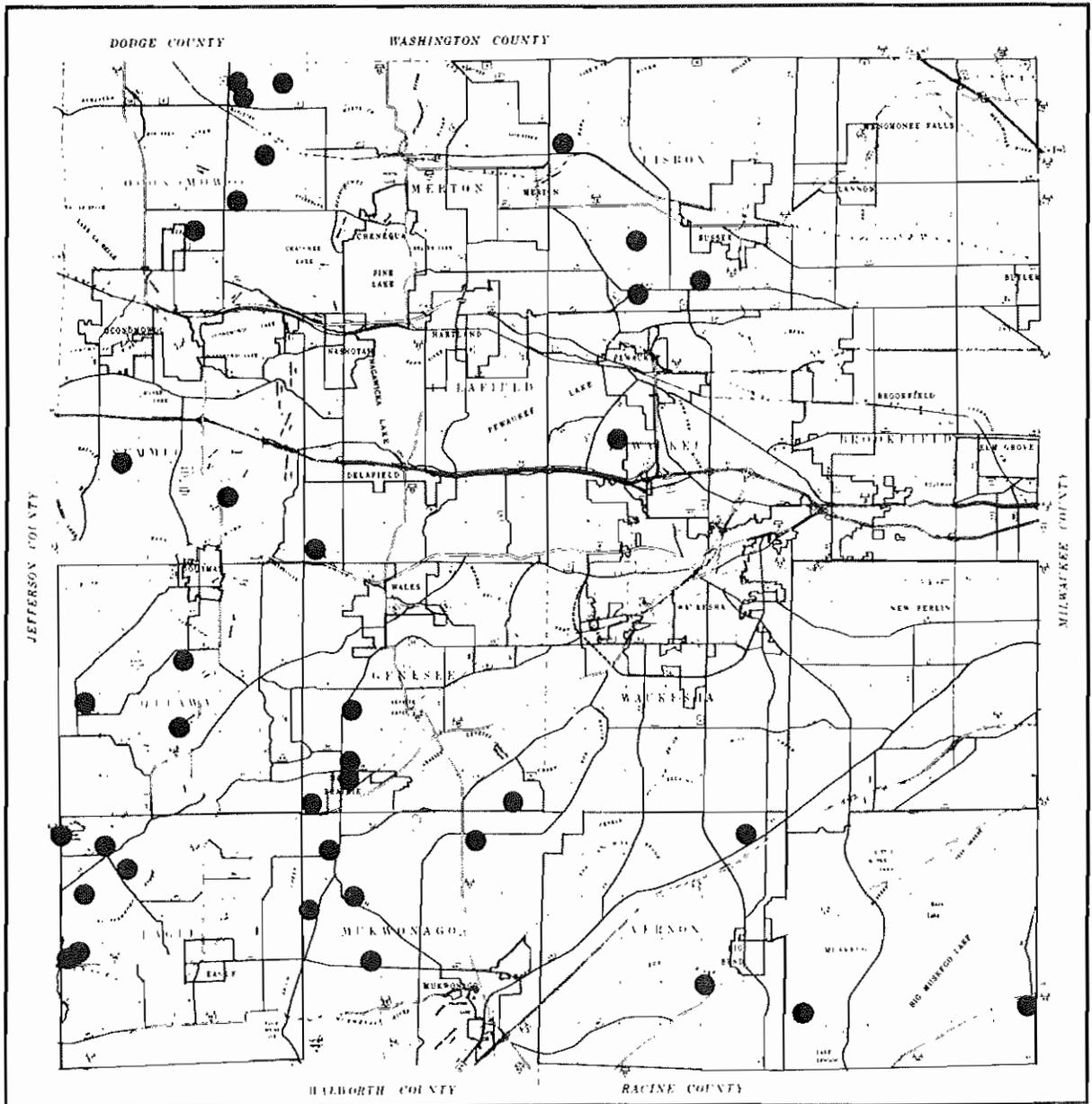
<sup>c</sup> Areas served, proposed to be served, or required to be served by public sanitary sewerage and water supply facilities; require neighborhood facilities.

<sup>d</sup> Areas not served, not proposed to be served, nor required to be served by public sanitary sewerage and water supply facilities; do not require neighborhood facilities.

- e* These categories do not include large open-space areas not developed for active recreation use or school playgrounds.
- f* Gross public park and recreation area is defined as the net area devoted to active or intensive recreation use plus the adjacent "backup" lands and lands devoted to other supporting land uses such as roads and parking areas.
- g* Gross commercial and industrial area is defined as the net area devoted to these uses plus the area devoted to supporting land uses, including streets and off-street parking.
- h* Gross governmental and institutional area is defined as the net area devoted to governmental and institutional use plus the area devoted to supporting land uses, including streets and onsite parking.
- i* Direct access implies adjacency or immediate proximity.
- j* Floodlands are herein defined as those lands inundated by a flood having a recurrence interval of 100 years where hydrologic and hydraulic engineering data are available, and as those lands inundated by the maximum flood of record where such data are not available.
- k* Urban development, as used herein, refers to all land uses except agriculture, water, woodlands, wetlands, open lands, and quarries.
- l* A stream channel is herein defined as that area of the floodplain lying either within legally established bulkhead lines or within sharp and pronounced banks marked by an identifiable change in flora and normally occupied by the stream under average annual high-flow conditions.
- m* Floodway lands are herein defined as those designated portions of the floodlands that will safely convey the 100-year recurrence interval flood discharge with small, acceptable upstream and downstream stage increases.
- n* Wetland areas, as used herein, are defined as those lands which are partially covered by marshland flora and generally covered with shallow standing water, open lands intermittently covered with water, or lands which are wet and spongy due to a high water table or character of the soil and encompassing an area of one acre or more.
- o* The term woodlands, as used herein, is defined as a dense, concentrated stand of trees and underbrush encompassing an area of one acre or more.
- p* A watershed, as used herein, is defined as a portion of the surface of the earth occupied by a surface drainage system discharging all surface water runoff to a common outlet and an area 25 square miles or larger in size.
- q* Includes all fish and game.
- r* Open space is defined as land or water areas which are generally undeveloped for urban residential, commercial, or industrial uses and are or can be considered relatively permanent in character. It includes areas devoted to park and recreation uses and to large land-consuming institutional uses, as well as areas devoted to agricultural use and to resource conservation, whether publicly or privately owned.

APPENDIX F

Distribution of agricultural land preservation applicants in Waukesha County 1978-1981.



AGRICULTURAL LAND PRESERVATION PARTICIPANTS 1978-1981

NAME	FILE #	TOWN/RANGE/SECTION	ZONING - MAJOR LAND USE	AG LAND USE COMPOSITION ACREAGE				CONTRACT NUMBERS	
				CROP	PASTURE	WOOD	OTHER - TOTAL		
Richard Reiman	78-1	5 - 18 (2,11)	A-1a grain, dairy	200	31	0	29	260	12/12/78 000367
Earl Millikin	78-2	8 - 17 (1,2)	A-1 grain, livestock	(161)	(35)	(2)	(0)	(198)	*
Geo. Kau	78-3	5 - 17 (6, 17-20)	A-1, A-2 grain A-E, C-1	322	25	5	98	450	12/11/78 000365
Richard Condon	78-4	8 - 19 (28, 29)	A-2 Res. grain, dairy	110	0	0	5	115	000366
Norman Pett	78-5	5 - 18 (6-8)	A-1a grain, dairy	143	5	18	13	179	001640
Gordon Erickson	78-6	5 - 17 (8)	A-1, C-1 grain, dairy, livestock	160	215	0	0	375	000815
Robert Kline	78-7	5 - 19 (22, 23, 26, 27)	A-2 grain, dairy, livestock	110	0	18	39	167	001029
Byron Peterson	78-8	8 - 17 (11)	A-1, C-1 grain, livestock	100	35	0	1	136	001016
Donald Klussendorf	78-9	6 - 17 (36) 6 - 18 (31)	A-2 grain, dairy	444	32	30	28	534	001020
Allan Lurvey	78-10	6 - 17 (15, 16)	A-1 grain, dairy	305	0	0	5	310	1/9/79 001028
Geo. McKerrow & Sons Co.	78-11	8 - 19 (33) 7 - 19 (5)	A-2 Res. grain, livestock Ag, C	300	70	12	0	382	**
LaVern Brown	78-12	6 - 18 (36)	A-1 grain, livestock	70	6	0	3	79	1/30/79 001023
Alvin Kau	78-13	5 - 17 (6,7,8,18) 6 - 17 (31)	A-1 grain, dairy, livestock	350	20	10	20	400	11/16/79 001022
Hubert & H. Kipp	78-14	6 - 18 (29,30,32)	A-2, M-2 grain, dairy	260	49	0	0	309	1/30/79 001019
Anthony Kau	78-15	5 - 17 (5, 6)	A-1, C-1 grain	600	100	100	0	800	001027
Wm. Norris Trust	79-1	5 - 17 (6)	C-1, A-1 grain	28	10	0	20	58	001682
John Heintz	79-2	6 - 18 (29, 32)	A-2, M-1, grain, livestock RS-1	150	47	14	14	225	7/5/79 001681
John Meisner	79-3	8 - 19 (7, 18)	A-1 Res. grain, dairy A-2 Res.	115	0	0	2	117	001704
Charles Borisch	79-4	7 - 19 (17)	C, RS-1 vegetables, seed	40	0	0	0	40	001826
Walter Reimer	79-5	7 - 18 (31)	A-1, A-2, grain M-1	121	0	15	4	140	**

AGRICULTURAL LAND PRESERVATION PARTICIPANTS 1978-1981 (continued)

NAME	FILE #	TOWN/RANGE/SECTION	ZONING - MAJOR LAND USE	AG LAND USE COMPOSITION ACREAGE					CONTRACT NUMBERS
				CROP	PASTURE	WOOD	OTHER	TOTAL	
Carl Holtz	79-6	5 - 17 (12, 13) 5 - 18 (18)	A-2 A-1a, C-1	110	138	16	7	271	001829
Kemp Wilson	79-7	5 - 18 (20, 21, 28, 29)	A-1a dairy, grain	256	0	10	14	280	2/8/80 001824
Arnold Capinski	79-8	6 - 17 (21, 27, 28)	A-1 grain	42	4	0	14	60	**
Elizabeth Walter	79-9	5 - 19 (1)	R-1 dairy, grain	61	0	5	2	68	**
Dilys Jenkin Estate	79-10	6 - 18 (19, 20)	A-2 grain	220	0	20	25	265	**
Joseph Petroviak	80-1	5 - 20 (25)	Ag livestock, grain	85	0	0	0	85	**
Lee Roy Donald Swan	80-2	5 - 18 (17)	A-1a grain, dairy, 50 head	125	20	5	0	150	11/27/81 003319
Daniel Nettesheim	80-3	7 - 17 (26)	Ag, WF grain	55	0	4	19	78	**
Richard and Hazel Northey	81-1	6 - 17 (19)	A-1 grain, dairy, livestock	126	9	20	3	158	6/1/81 003944
Kenneth & Gerard Kau	81-2	5 - 17 (19)	A-2, C-1 grain	200	0	8	0	208	7/30/81 003966
Arlan Kummrow	81-3	7 - 17 (17,20)	Ag, RRE, livestock, grain WF	125	0	75	0	200	**
Walter F. Schmidt	81-4	8 - 17 (2)	A-1 grain	75	0	0	2.8	77.8	12/1/81
Florence Nold	81-5	8 - 17 (2)	A-1 grain	96	0	0	3	99	004201 12/1/81
Wegner Inc.	81-6	8 - 19 (27,34)	A-2 Res. grain	80	8.5	.5	11	100	004199 **
Esther Tess Hartman	81-7	5 - 20 (30)	Ag grain	72	8	0	0	80	**
Elnora Todd	81-8	8 - 17 (23)	R-1 Res. grain	85	5	5	5	100	12/2/81 004202
Arthur Rosenow	81-9	8 - 17 (22,27)	A-1 grain	110	0	0	70	180	**

TOTAL 1978-1981 5,651 837.5 390.5 456.8 7,535.8

\*Denied-inelegible applicant

\*\*No signed contract

SOURCE: Waukesha County

APPENDIX 'G'

Proposed Zoning Text Amendments to implement the Plan.

SECTION I

That Section 6.1 A-4 Agricultural Land Preservation District be created to read as follows:

6.1 A-4 Agricultural Land Preservation District

6.11 Purpose and Intent

The purposes of the A-4 Agricultural Land Preservation District are:

1. To preserve productive agricultural lands for the production of food and fibre.
2. To preserve productive farms by preventing land use conflicts between incompatible uses,
3. To control the cost of public services through efficient land use planning
4. To maintain a viable agricultural base to support agricultural processing and related service industries
5. To prevent conflicts between incompatible uses
6. To reduce costs both indirect and direct of providing services to scattered non-farm uses.
7. To pace and shape development in the changing rural landscape
8. To implement the provisions of the Waukesha County Agricultural Land Preservation Plan,
9. To comply with the provisions of the Wisconsin Farmland Preservation Act which permits eligible land owners to receive tax credits under Section 71.09(11) of the Wisconsin State Statutes.

6.12 Lands to be included within the A-4 Agricultural Land Preservation District are as follows:

- A. Lands historically exhibiting good crop yields or those capable of such good crop yields.
- B. Lands which have been demonstrated to be productive for dairying, livestock raising and grazing.

- C. Other lands which are integral parts of such farm operations.
- D. Lands used for the production of specialty crops such as cranberries, mint, sod, fruits and vegetables.
- E. Lands which are capable of productive use through economically feasible improvements such as irrigation or tile draining which do not convert or alter undisturbed or unimproved wetlands.

#### 6.13 Permitted Uses:

- A. Any permitted use as described in the AE Exclusive Agricultural District
- B. General farming including Apiculture, dairying, floraculture, forestry, livestock grazing, egg production, livestock raising, paddocks, stables, truck farming, viticulture, nurseries, sod farms, providing that farm buildings housing animals, barnyards and feedlots, shall not be located within a floodland nor closer than 100' to any navigable water course nor closer than 100' to an existing dwelling or adjacent residentially zoned lot.
- C. Existing dwellings, not necessary to any farm operation, or dwellings remaining after the consolidation of a farm enterprise, so long as parcels thereby created as a result of consolidation provide for the continued non-farm residential use of the dwelling and accessory structures but in no case less than one acre in size and meeting the offset, setback requirements of the R-1 Residential District.
- D. Farm dwellings for farm owners and laborers who derive the principal portion of their income from the permitted uses in this District subject to the building location, height regulation, area regulation and lot size requirements of this District.

### 6.15 Building Location

- (1) Setback, 50' minimum
- (2) Offset, 20' minimum

### 6.16 Height Regulations

- (1) Principal building, 35' maximum
- (2) Accessory Buildings
  - a. Farm, 60' maximum
  - b. Other, 15' maximum

### 6.17 Area Regulations

- (1) Floor area, minimum required
  - a. First floor, 900 sq.ft.
  - b. Total, one family, 1,100 sq.ft.
- (2) Maximum floor area ratio permitted, 10%

### 6.18 Lot Size

- (1) Minimum parcel size, 35 acres, except as may be provided in "C" above for those residual existing dwellings and parcels that result due to farm consolidation.
- (2) Minimum average width, 600' excepted as provided in "C" above.

## SECTION II

That Section 6.2 A-5 Agricultural Business District be created to read as follows:

### 6.2 A-5 Agricultural Business District

#### 6.21 Purpose

The primary purpose of this district is to maintain, encourage and promote agriculturally related business types of endeavors on appropriate lands within this community. Such

endeavors properly located and regulated serve to support and enhance the viability of agriculture as an economic activity in this County.

#### 6.22 Permitted Uses

All the following uses permitted by right in the A-4 Agricultural Business District are subject to site plan and operation plan approval of the Town Plan Commission and the County Zoning Agency.

- A. Corn shelling, hay baling and threshing services.
- B. Horticultural services including the retail sale of nursery landscape material produced on the site as an accessory use.
- C. Feed milling operations
- D. Cheese factories
- E. Bulk milk collection, storage and distribution facilities
- F. Veterinarian services
- G. Custom grain drying
- H. Egg production
- I. Residential use may be permitted only in conjunction with or accessory to otherwise permitted uses.

#### 6.23 Conditional Uses

- A. Feedlot operations subject to Section 3.08(7)I of this Ordinance.
- B. Agricultural machinery sales and service
- C. Other enumerated conditional uses of this Ordinance; see Sections 3.08(7)A, 3.08(7)D, 3.08(7)E, 3.08(7)G, 3.08(7)I, 3.08(7)J, 3.08(7)X.

#### 6.24 Building Locations

- (1) Setback, 50' minimum
- (2) Offset
  - (A) Buildings used for commercial purposes which include the housing of livestock 100' feet minimum unless adjacent district is the A-4, A-5, A-6 or AE Exclusive Agricultural District in which case 20' minimum
  - (B) Buildings used for commercial purposes not involving livestock housing or animal waste, 10' minimum
  - (C) The integrated site plan will relate buildings, parking areas and any loading dock facilities that may be necessary accessory to the use and shall be governed by suitable contemporary design criteria.

#### 6.25 Height Regulations

- (1) Principal building, 60' maximum
- (2) Accessory building, 30' maximum, except that both principal and accessory buildings may be increased to not more than 100' where both setback and offset equals the height of the structure.

#### 6.26 Area Regulations

- (1) Floor area
  - (A) Minimum required for residential purposes; 900 sq.ft. per dwelling unit.
  - (B) Maximum floor area ratio, 50% of the site
- (2) Lot Size
  - (A) Minimum area; 3 acres with the following note: Lot size for many of the proposed uses which are likely to be conducted in the A-5 Agricultural Business District are impossible to anticipate at

this time although the 3 acre minimum is suggested as just that, a minimum. Floor area ratio, setbacks, offsets, have all been considered and determined to be adequate to separate and minimize the possibility of incompatible uses developing in the future.

(B) Minimum average width, 300'

### SECTION III

That Section A-6, Existing Agricultural Overlay District, be created to read as follows:

Section 6.3 A-6 Existing Agricultural Overlay District

6.31 Purpose; The purpose of this district is to allow for the continued agricultural use of land while recognizing that other land uses of a rural or semi rural nature may be nearby and possible in the future. It is anticipated that the assignment of this Overlay District to specific parcels of land will provide a greater degree of freedom for farm operators and for Town Plan Commissions, Town Boards and the County Zoning Agency, in dealing with situations where present owners are committed to continuing an agricultural use but where land is in a transition and the future of continued agricultural use in the face of encroaching urban uses is likely and probable. The basic intent of the district is similar to that upon which conditional uses in this Ordinance are premised. The assignment of this district will grant the uses permitted in the A-4 District.

### SECTION IV

That Section 2.02 Specific Words and Phrases be amended to include the following:

(70) Overlay District be created to read as follows:

(70) An Overlay District is a special kind of zoning district established to provide for superimposing upon a basic district additional permissive uses and regulatory standards without disturbing the underlying basic district. As a special district, procedures involved are similar to

that of zoning amendment rather than conditional use.

## SECTION V

That Section 6 AE Exclusive Agricultural District be repealed and recreated as follows;

Section 6 Exclusive Agricultural Conservancy District

### 6.01 Purpose

This district is intended to apply to those areas of Waukesha County where except that they may be presently in agricultural use either by cultivation, pasture, or in some other way, would be classified as Conservancy lands by virtue of inherent soil characteristics and natural vegetation. The intent of the district is to preserve and maintain agricultural uses on lands suited for such purposes. They often include lands poorly suited for urban or suburban development while being particularly well suited for agricultural uses with and without high levels of soil management. In this district structures related to farm operations, including dwellings, are consistent with the purpose of this section where the location of buildings associated with the permitted agricultural operation is found to be healthful, sanitary and safe. Determination of such suitability shall be evidenced by onsite examination and evaluation. The intent for mapping purposes is that lands within this district are those which are agriculturally productive and which otherwise would qualify for conservancy lands due to wet soil and natural vegetation conditions, but which have been improved through drainage and other farm practices in the past.

### 6.02 Permitted Uses

- (A) Any use permitted in the C-1 Conservancy District
- (B) Ordinary farm uses including dairying, livestock, poultry raising, and truck farming, but not including the feeding of garbage to fatten swine.
- (C) Accessory uses in buildings normally associated with permitted agricultural

operations including dwellings and shelters for housing animals except that no structure shall be located in a floodland or upon lands not suited due to soil limitations. Any structures within floodlands must conform to Section 3.04(6)(A) of this Ordinance.

- (D) Nurseries, greenhouses and hatcheries limiting the retail sale to those items produced on the site.
- (E) Roadside stands - one stand per farm unit.
- (F) Signs not to exceed 12 sq.ft. in area displaying the name of the farm or farm organization.
- (G) Sod farming in conformance with Section 3.04(5) and Section 3.07(7)L of this Ordinance.

#### Section 6.03 Building Location

- (1) Setback, 50' minimum
- (2) Offset, 50' minimum

#### Section 6.04 Height Regulations

- (1) Dwelling - 35' maximum
- (2) Accessory buildings
  - (A) Farm, 60', other 15', except that this height limit may be relaxed to allow structures up to 100' where setback and offset is equal to or exceeds the height of the structure.

#### Section 6.05 Area Regulations

- (1) Floor area, minimum required
  - (A) Minimum required
    - 1. First floor, 900 sq.ft.
    - 2. Total one family; 1,000 sq.ft.
  - (B) Maximum floor area ratio permitted, 10%.

Lot Size

- (A) Minimum area; 35 acres
- (B) Minimum average width; 600'
- (C) Open space; 30 acres

SECTION VI

That Section 3.08(7)I be amended and recreated to read as follows:

- (I) Fur farms, pig farms, pea vineries, creameries, condensories, driers and other crop processing equipment and feedlot operations in agricultural or industrial districts subject to the following;
  1. The location, building and site plans, and plan of operation shall be submitted to and approved by the Plan Commission.
  2. No such use shall be permitted on a lot less than 5 acres in area.
  3. No building other than one used only for residence purposes shall be closer than 50 feet to the lot line of an adjoining lot in a district permitting residential use.

Feed Lot Operations: As defined in this ordinance including livestock and poultry of all types where the number of animal units exceed twenty five (25) per acre, May be permitted as a conditional grant in the A-1 Agricultural District subject to the following:

This conditional use category is created in recognition of the potential which exists in feed lot operations for uncontrolled runoff of animal wastes, pollution of surface and ground water and potential for such use to be a nuisance.

- (a) No feed lot operation shall be permitted on less than 20 acres of land.
- (b) No part of the feed lot operation shall be closer than 1000 feet to any residential district.
- (c) No residence other than that which is accessory to the principal use shall hereafter be permitted closer than 500 feet to the feed lot operation. No accessory residence shall hereafter be permitted closer than 100 feet to the feed lot operation.
- (d)
  - (1) Animal wastes shall not be mechanically spread or discharged into streams, lakes, open ditches, or ponds with outlets into public waters or on which two or more persons own, occupy or control frontage.
  - (2) Animal wastes shall not be mechanically spread between December 1 and April 1 on land which is less than 200 feet from a stream, lake, open ditch or pond with outlets into public waters or on which two or more persons own, occupy or control frontage. The animal waste may be spread in the above listed areas if it is incorporated into the soil immediately upon spreading or if the disposal site is part of an erosion control system which will prevent drainage into the listed streams, lakes, ditches or ponds.
  - (3) A minimum land area shall be under the control of the animal feed lot operation owner or manager for the purpose of animal waste disposal.
    - (a) The minimum controlled area for the disposal of dairy, beef, swine or sheep manure is one-third acre per annual animal unit.
    - (b) The minimum controlled area for poultry manure disposal is one-half acre per annual animal unit.
    - (c) If a method of disposal other than land disposal is proposed the Town shall require opinions evaluating the suitability of such proposal from both the Wisconsin

State Department of Natural Resources  
and the Soil Conservation Service of  
the United States Department of Agriculture.

(e) Runoff Control

- (1) An animal feed lot shall not contain within its boundaries streams, lakes, open ditches or ponds with outlets into public waters or on which two or more persons own, occupy, or control frontage. The owner may construct a crossing. The crossing shall be constructed of a durable material, stationary to stream flow and placed so that it will prevent the erosion of the stream bank and not present an obstruction to stream flow.
- (2) Owners shall eliminate point sources of animal wastes and control diffuse sources of pollution from contaminated runoff, which flows from animal lots or animal enclosures into streams, lakes, open ditches or ponds with outlets into public waters or on which two or more persons own, occupy or control frontage.
- (3) Means of controlling pollution from contaminated runoff include but is not limited to:
  - (a) Locating feed lots as far as possible from the aforementioned waters.
  - (b) Diverting uncontaminated runoff waters.
  - (c) Preventing the accumulation of animal wastes.
  - (d) Constructing diversion structures for contaminated runoff.

2. Application Procedure

- (a) Permit: No feed lot operation shall take place in any district without proper permit from the town.
- (b) Application shall be made on the form provided by the town for conditional use permits and

shall include:

- (1) A site plan showing drainage and the method to be employed to control, contain or divert the runoff of animal wastes.
- (2) An operations plan detailing the method of operation and the equipment necessary to accomplish a safe and sanitary disposal of animal wastes.
- (3) A statement of the number of animal units to be contained in the proposed animal feed lot. Any change in the number of animal units for a period of more than 30 days shall be reported.
- (4) A statement detailing the method of dead animal disposal to be employed.

### 3. Procedure for Action on Applications.

- (a) Referral to Plan Commission: The application and all data pertaining thereto shall be referred to the Plan Commission for public hearing and the Plan Commission may request technical review of the application and plans by the Soil Conservation Service and the Department of Natural Resources prior to its report and recommendation back to the Town Board. When the Plan Commission chooses to request technical assistance its final decision shall be rendered within 45 days of the public hearing.
- (b) Public Hearing: Within 30 days after an application has been filed, a public hearing shall be held at which all interested parties may be heard. In addition to the normal posting and publishing, notices also shall be sent through the mail or otherwise placed in the hands of all land owners within a half mile radius of the proposed feed lot operation. These notices shall be mailed or delivered at least 10 days prior to the date of public hearing. Substantial compliance with the notice requirements of this section shall be deemed sufficient.

(c) Action by Town Board: The Town Board shall, within 10 days after receipt of the recommendation of the Plan Commission, take action to approve or disapprove the application for the proposed feed lot operation and shall be guided by consideration of the public health, safety and welfare, and shall give particular consideration to the following factors in making their decision:

- (1) The effect of the proposed operation on drainage and water supply.
- (2) The possibility of soil erosion as a result of the proposed operation.
- (3) The degree and effect of odor as a result of the proposed operation.
- (4) The effect of the proposed operation on the natural beauty, character, tax base, land value, and land uses in the area.
- (5) The most suitable land use for the area.

(d) Additional Conditions: Any conditions accessory to the granting of a permit shall be in writing and copies made a part of the permit and a part of the records of the Town.

#### 4. Application to Existing Operations

(a) Permit: Within 60 days after the adoption of this Ordinance all existing feed lot operations as defined herein shall be required to register with the Town Clerk submitting pertinent data relative to the present operation as if it were a newly proposed operation.

APPENDIX H

WAUKESHA COUNTY

3791-03 1975 LAND USE BY DETAIL CATEGORY BY QUARTER SECTION

3/24/61

LU CODE	URBAN LAND USE DESC	1975 ACRES	LU CODE	RURAL LAND USE DESC	1975 ACRES
111	SING FAM RES 0.1 - 4.9 AC	40653.65	811	ROW CROPS	76718.49
113	SING FAM RES - FARM	1277.05	812	GRAIN CROPS	7227.74
120	TWO FAMILY RES	345.55	813	VEGETABLE CROPS	5877.94
141	MULTI-FAM RES 1-3 FLOORS	479.28	814	HAY CROPS	32761.55
142	MULTI-FAM RES 4+ FLOORS	.72	815	PASTURE AND OTHER AGRI	45748.82
150	MOBILE HOMES	87.69	820	ORCHARDS AND NURSERIES	1298.52
199	RES LAND UNDER DEVELOPMNT	10440.55	841	SOU FARM	984.82
	SUBTOTAL	53234.50	842	BERRY FIELDS	5.52
			849	APIARIES	1.01
210	RETAIL SALES AND SERVICE	1661.14	871	FARM BLDGS NO ANIMAL HUSB	1808.40
220	REI/SERVICE NON-INTENSIVE	385.22	872	FARM BLDGS - BEEF CATTLE	176.43
299	SALES & SERV UNDER DEV	191.57	873	FARM BLDGS - DAIRY CATTLE	502.30
	SUBTOTAL	2237.93	874	FARM BLDGS - HORSES	13.43
			875	FARM BLDGS - FOWL	54.52
310	MANUFACTURING	1175.74	876	FARM BLDGS - FUR	26.05
340	WHOLESALE	398.73	877	FARM BLDGS - HOGS	16.63
380	STORAGE	703.00	878	FARM BLDGS - SHEEP	3.04
399	INDUSTRIAL LAND UNDER DEV	820.25		SUB TOTAL	173225.79
	SUBTOTAL	3097.77	910	WETLANDS	51353.16
411	FREEWAY	2155.34	921	UNUSED URBAN LAND	2115.54
414	ARTERIALS AND EXPRESSWAYS	5320.55	922	UNUSED RURAL LAND	4925.82
418	LOCAL & COLLECTOR STREETS	9988.94	930	LAND FILL AND DUMPS	477.27
425	BUS TERMINAL	23.16	940	WOODLANDS	27830.85
426	TRUCK TERMINAL	79.74	950	LAKES RIVERS AND STREAMS	16907.53
430	OFF STREET PARKING-GEN	71.73	360	EXTRACTIVE	3252.01
431	OFF STREET PARKING-RES	115.19		SUBTOTAL	106942.20
432	OFF STREET PARKING-COM	710.44			
433	OFF STREET PARKING-IND	385.71		RURAL TOTAL	280167.59
434	OFF STREET PARKING-TRAIN	12.22			
435	OFF STREET PARKING-COM/UT	15.30		TOTAL	371563.58
436	OFF STREET PARKING-BOV	461.85			
437	OFF STREET PARKING-REC	138.13			
441	RAILROAD TRACK ROW	1760.62			
443	RAILROAD SWITCHING YARD	4.51			
445	RAILROAD STATION & DEPOTS	.50			
463	AIR FIELDS	392.61			
485	AIR TERMINAL & HANGER	33.37			
499	TRANSPORTATION UNDER DEV	56.33			
	SUBTOTAL	21726.27			
510	COMMUNICATION & UTILITIES	2334.19			
599	COMM & UTIL UNDER DEVELOP	.42			
	SUBTOTAL	2334.61			
611	LOC ADMIN SAFETY-ASSEMBLY	511.23			
612	REG ADMIN SAFETY-ASSEMBLY	75.53			
641	LOCAL EDUCATION	1073.96			
642	REGIONAL EDUCATIONAL	872.74			
661	LOCAL - HEALTH RELATED	20.53			
662	REGIONAL - HEALTH RELATED	374.05			
681	LOCAL CEMETERIES	96.01			
682	REGIONAL CEMETERIES	435.32			
699	JOINT & INSTIT UNDER DEV	54.71			
	SUBTOTAL	3514.13			
711	PUB CULTURAL SPECIAL REC	18.03			
712	PRIV CULTURAL SPECIAL REC	4.94			
731	PUBLIC LAND RELATED REC	1983.28			
732	PRIVATE LAND RELATED REC	3091.94			
781	PUBLIC WATER RELATED REC	19.34			
782	PRIVATE WATER RELATED REC	31.96			
799	RECREATION UNDER DEVELOP	50.89			
	SUBTOTAL	5200.38			
	URBAN TOTAL	91395.59			

Eagle T5N R17E

5791-03 1975 LAND USE BY DETAIL CATEGORY BY QUARTER SECTION 3/24/81  
0517

LU CODE	URBAN LAND USE DESC	1975 ACRES	LU CODE	RURAL LAND USE DESC	1975 ACRES
111	SING FAM RES 0.1 ~ 4.9 AC	485.92	811	ROW CROPS	6981.32
113	SING FAM RES - FARM	69.80	812	GRAIN CROPS	367.30
120	TWO FAMILY RES	2.12	813	VEGETABLE CROPS	234.63
199	RES LAND UNDR DEVELOPMNT	84.63	814	HAY CROPS	1954.42
	SUBTOTAL	642.47	815	PASTURE AND OTHER AGRI	3033.54
			820	ORCHARDS AND NURSERIES	4.97
210	RETAIL SALES AND SERVICE	23.07	841	SOD FARM	23.30
220	RET/SERVICE NON-INTENSIVE	1.56	871	FARM BLDGS - NO ANIMAL HUSB	122.11
	SUBTOTAL	24.63	872	FARM BLDGS - BEEF CATTLE	6.34
			873	FARM BLDGS - DAIRY CATTLE	54.81
340	WHOLESALE	10.50	875	FARM BLDGS - FOWL	4.16
380	STORAGE	1.81	877	FARM BLDGS - HOGS	1.84
	SUBTOTAL	12.31		SUBTOTAL	12786.94
414	ARTERIALS AND EXPRESSWAYS	182.06	910	WETLANDS	4285.31
418	LOCAL & COLLECTOR STREETS	299.04	921	UNUSED URBAN LAND	15.68
430	OFF STREET PARKING-GLN	2.26	922	UNUSED RURAL LAND	241.18
432	OFF STREET PARKING-CDM	.77	930	LAND FILL AND DUMPS	5.36
436	OFF STREET PARKING-GOV	1.45	940	WETLANDS	4041.03
437	OFF STREET PARKING-REC	3.02	950	LAKES RIVERS AND STREAMS	297.80
441	RAILROAD TRACK ROW	83.13	360	EXTRACTIVE	21.04
	SUBTOTAL	571.73		SUBTOTAL	8907.40
510	COMMUNICATION & UTILITIES	44.96		RURAL TOTAL	21696.34
	SUBTOTAL	44.96		TOTAL	23196.67
611	LJC ADMIN SAFETY-ASSEMBLY	3.72			
641	LOCAL EDUCATION	9.68			
661	LOCAL CEMETERIES	10.45			
682	REGIONAL CEMETERIES	5.62			
	SUBTOTAL	29.47			
731	PUBLIC LAND RELATED REC	57.00			
732	PRIVATE LAND RELATED REC	116.65			
761	PUBLIC WATER RELATED REC	1.11			
	SUBTOTAL	174.76			
	URBAN TOTAL	1500.33			

Ottawa T6N R17E

5791-03 1975 LAND USE BY DETAIL CATEGORY BY QUARTER SECTION 3/24/81  
0617

LU CODE	URBAN LAND USE DESC	1975 ACRES	LU CODE	RURAL LAND USE DESC	1975 ACRES
111	SING FAM RES 0.1 - 4.9 AC	922.06	811	ROW CROPS	4549.96
113	SING FAM RES - FARM	64.80	812	GRAIN CROPS	113.17
120	TWO FAMILY RES	2.77	813	VEGETABLE CROPS	831.81
141	MULTI-FAM RES 1-3 FLOORS	3.63	814	HAY CROPS	2140.24
199	RES LAND UNDER DEVELOPMNT	566.54	815	PASTURE AND OTHER AGRI	2621.45
	SUBTOTAL	1559.80	820	ORCHARDS AND NURSERIES	119.73
			841	SOD FARM	.57
210	RETAIL SALES AND SERVICE	12.70	871	FARM BLDGS NO ANIMAL HUSB	99.56
220	RET/SERVICE NON-INTENSIVE	38.83	872	FARM BLDGS - BEEF CATTLE	4.65
	SUBTOTAL	51.53	873	FARM BLDGS - DAIRY CATTLE	20.94
			874	FARM BLDGS - HORSES	1.02
310	MANUFACTURING	1.40	875	FARM BLDGS - FOWL	1.95
340	WHOLESALING	4.21		SUBTOTAL	10505.09
380	STORAGE	21.63			
	SUBTOTAL	27.24	910	WETLANDS	5228.99
414	ARTERIALS AND EXPRESSWAYS	116.23	921	UNUSED URBAN LAND	23.94
418	LOCAL & COLLECTOR STREETS	356.49	922	UNUSED RURAL LAND	300.26
432	OFF STREET PARKING-COM	2.16	940	WOODLANDS	4107.07
433	OFF STREET PARKING-IND	.96	950	LAKES RIVERS AND STREAMS	482.26
436	OFF STREET PARKING-GOV	4.52	360	EXTRACTIVE	161.38
437	OFF STREET PARKING-REC	10.47		SUBTOTAL	10303.90
441	RAILROAD TRACK ROW	67.66			
443	RAILROAD SWITCHING YARD	.16			
	SUBTOTAL	558.65		RURAL TOTAL	20808.99
510	COMMUNICATION & UTILITIES	.83		TOTAL	23276.52
	SUBTOTAL	.83			
611	LUC ADMIN SAFETY-ASSEMBLY	9.52			
612	REG ADMIN SAFETY-ASSEMBLY	5.22			
641	LOCAL EDUCATION	26.78			
642	REGIONAL EDUCATIONAL	.96			
662	REGIONAL - HEALTH RELATED	1.37			
682	REGIONAL CEMETERIES	10.64			
	SUBTOTAL	54.99			
731	PUBLIC LAND RELATED REC	110.55			
732	PRIVATE LAND RELATED REC	102.80			
781	PUBLIC WATER RELATED REC	1.15			
	SUBTOTAL	214.50			
	URBAN TOTAL	2467.54			

Summit T7N R17E

5791-03 1975 LAND USE BY DETAIL CATEGORY BY QUARTER SECTION 3/24/81  
0717

LU CODE	URBAN LAND USE DESC	1975 ACRES	LU CODE	RURAL LAND USE DESC	1975 ACRES
111	SING FAM RES 0.1 - 4.9 AC	1871.91	311	ROW CROPS	5223.40
113	SING FAM RES - FARM	70.80	312	GRAIN CROPS	741.95
120	TWO FAMILY RES	5.69	313	VEGETABLE CROPS	655.86
141	MULTI-FAM RES 1-3 FLOORS	27.27	314	HAY CROPS	1385.93
199	RES LAND UNDER DEVELOPMNT	345.91	315	PASTURE AND OTHER AGRI	1876.54
	SUBTOTAL	2321.58	320	ORCHARDS AND NURSERIES	57.08
210	RETAIL SALES AND SERVICE	67.38	371	FARM BLDGS NO ANIMAL HUSB	112.16
220	RET/SERVICE NON-INTENSIVE	10.89	372	FARM BLDGS - BEEF CATTLE	10.49
	SUBTOTAL	78.27	373	FARM BLDGS - DAIRY CATTLE	5.35
			374	FARM BLDGS - HORSES	2.15
				SUBTOTAL	10270.96
310	MANUFACTURING	18.99	910	WETLANDS	3966.74
340	WHOLESALE	2.53	921	UNUSED URBAN LAND	147.18
380	STORAGE	16.15	922	UNUSED RURAL LAND	350.43
	SUBTOTAL	37.67	930	LAND FILL AND DUMPS	10.95
411	FREEWAY	214.62	940	WOODLANDS	1502.81
414	ARTERIALS AND EXPRESSWAYS	304.96	950	LAKES RIVERS AND STREAMS	2694.18
418	LOCAL & COLLECTOR STREETS	478.84	360	EXTRACTIVE	72.70
430	OFF STREET PARKING-GEN	4.24			
431	OFF STREET PARKING-RES	3.21			
432	OFF STREET PARKING-COM	36.86			
433	OFF STREET PARKING-IND	9.42			
436	OFF STREET PARKING-GOV	22.06			
437	OFF STREET PARKING-REC	4.77			
441	RAILROAD TRACK ROW	11.75			
463	AIR FIELDS	5.66			
	SUBTOTAL	1096.39			
510	COMMUNICATION & UTILITIES	103.98			
	SUBTOTAL	103.98			
611	LOC ADMIN SAFETY-ASSEMBLY	13.23			
612	REG ADMIN SAFETY-ASSEMBLY	.84			
641	LOCAL EDUCATIONAL	18.34			
642	REGIONAL EDUCATIONAL	50.54			
661	LOCAL - HEALTH RELATED	1.54			
662	REGIONAL - HEALTH RELATED	99.19			
681	LOCAL CEMETERIES	6.32			
682	REGIONAL CEMETERIES	16.43			
	SUBTOTAL	206.43			
731	PUBLIC LAND RELATED REC	31.01			
732	PRIVATE LAND RELATED REC	401.98			
782	PRIVATE WATER RELATED REC	4.46			
	SUBTOTAL	437.45			
	URBAN TOTAL	4281.77			
				RURAL TOTAL	19015.95
				TOTAL	23297.72

Oconomowoc T8N R17E

5791-03 1975 LAND USE BY DETAIL CATEGORY BY QUARTER SECTION  
0817

3/24/81

LU CODE	URBAN LAND USE DESC	1975 ACRES	LU CODE	RURAL LAND USE DESC	1975 ACRES
111	SING FAM RES 0.1 - 4.9 AC	1889.80	811	ROW CROPS	6324.36
113	SING FAM RES - FARM	76.06	812	GRAIN CROPS	859.35
120	TWO FAMILY RES	11.89	813	VEGETABLE CROPS	529.67
141	MULTI-FAM RES 1-3 FLOORS	6.66	814	HAY CROPS	2796.95
150	MOBILE HOMES	5.31	815	PASTURE AND OTHER AGRI	2103.05
199	RES LAND UNDER DEVELOPMNT	322.44	820	ORCHARDS AND NURSERIES	11.13
	SUBTOTAL	2312.16	871	FARM BLDGS NO ANIMAL HUSB	103.96
210	RETAIL SALES AND SERVICE	103.73	872	FARM BLDGS - BEEF CATTLE	6.51
220	RET/SERVICE NON-INTENSIVE	2.59	873	FARM BLDGS - DAIRY CATTLE	57.29
	SUBTOTAL	106.32	878	FARM BLDGS - SHEEP	.67
				SUBTOTAL	12792.94
310	MANUFACTURING	34.65	910	WETLANDS	2969.44
340	WHOLESALE	7.15	921	UNUSED URBAN LAND	64.67
380	STORAGE	26.55	922	UNUSED RURAL LAND	249.81
399	INDUSTRIAL LAND UNDER DEV	24.45	930	LAND FILL AND DUMPS	73.40
	SUBTOTAL	92.80	940	WOODLANDS	592.66
414	ARTERIALS AND EXPRESSWAYS	276.43	950	LAKES RIVERS AND STREAMS	2535.48
418	LOCAL & COLLECTOR STREETS	560.31	360	EXTRACTIVE	61.05
426	TRUCK TERMINAL	1.19		SUBTOTAL	6566.51
430	OFF STREET PARKING-GEN	2.99			
431	OFF STREET PARKING-RES	.99		RURAL TOTAL	19359.45
432	OFF STREET PARKING-COM	25.66			
433	OFF STREET PARKING-IND	11.47		TOTAL	23387.95
436	OFF STREET PARKING-GOV	10.07			
437	OFF STREET PARKING-REC	4.40			
441	RAILROAD TRACK ROW	109.50			
463	AIR FIELDS	18.42			
465	AIR TERMINAL & HANGAR	.52			
499	TRANSPORTATION UNDER DEV	4.37			
	SUBTOTAL	1026.32			
510	COMMUNICATION & UTILITIES	25.00			
	SUBTOTAL	25.00			
611	LOC ADMIN SAFETY-ASSEMBLY	21.56			
641	LOCAL EDUCATION	52.09			
661	LOCAL - HEALTH RELATED	.82			
662	REGIONAL - HEALTH RELATED	28.15			
681	LOCAL CEMETERIES	2.09			
682	REGIONAL CEMETERIES	22.40			
	SUBTOTAL	127.11			
731	PUBLIC LAND RELATED REC	43.47			
732	PRIVATE LAND RELATED REC	291.27			
781	PUBLIC WATER RELATED REC	.87			
782	PRIVATE WATER RELATED REC	3.18			
	SUBTOTAL	338.79			
	URBAN TOTAL	4028.50			

Mukwonago T5N R18E

5791-03 1975 LAND USE BY DETAIL CATEGORY BY QUARTER SECTION 3/24/81  
0518

LU CODE	URBAN LAND USE DESC	1975 ACRES	LU CODE	RURAL LAND USE DESC	1975 ACRES
111	SING FAM RES 0.1 - 4.9 AC	1016.53	811	ROW CROPS	4971.41
113	SING FAM RES - FARM	85.67	812	GRAIN CROPS	415.69
120	TWO FAMILY RES	21.88	813	VEGETABLE CROPS	132.73
141	MULTI-FAM RES 1-3 FLOORS	3.39	814	HAY CROPS	3202.80
199	RES LAND UNDER DEVELOPMNT	615.14	815	PASTURE AND OTHER AGRIC	3512.25
	SUBTOTAL	1742.51	820	ORCHARDS AND NURSERIES	32.07
210	RETAIL SALES AND SERVICE	35.24	871	FARM BLDGS ND ANIMAL HUSB	121.17
220	RET/SERVICE NON-INTENSIVE	20.61	872	FARM BLDGS - BEEF CATTLE	24.11
	SUBTOTAL	55.85	873	FARM BLDGS - DAIRY CATTLE	40.20
310	MANUFACTURING	12.69	874	FARM BLDGS - HORSES	.17
340	WHOLESALE	11.02	875	FARM BLDGS - FOWL	5.68
380	STORAGE	17.28	876	FARM BLDGS - FUR	1.94
	SUBTOTAL	40.99	877	FARM BLDGS - HUGS	1.75
				SUBTOTAL	12461.97
411	FREEWAY	97.82	910	WETLANDS	3804.14
414	ARTERIALS AND EXPRESSWAYS	177.83	921	UNUSED URBAN LAND	46.91
418	LOCAL & COLLECTOR STREETS	416.04	922	UNUSED RURAL LAND	284.62
430	OFF STREET PARKING-GEN	2.31	930	LAND FILL AND DUMPS	3.99
431	OFF STREET PARKING-RES	1.62	940	WOODLANDS	2405.89
432	OFF STREET PARKING-COM	18.06	950	LAKES RIVERS AND STREAMS	765.12
433	OFF STREET PARKING-IND	2.60	380	EXTRACTIVE	31.34
436	OFF STREET PARKING-GOV	12.07		SUBTOTAL	7342.01
437	OFF STREET PARKING-REC	6.64			
441	RAILROAD TRACK ROW	77.05		RURAL TOTAL	19803.96
443	RAILROAD SWITCHING YARD	.75		TOTAL	23114.93
445	RAILROAD STATION & DEPOTS	.50			
483	AIR FIELDS	5.11			
499	TRANSPORTATION UNDER DEV	6.96			
	SUBTOTAL	825.36			
510	COMMUNICATION & UTILITIES	105.13			
	SUBTOTAL	105.18			
611	LOC ADMIN SAFETY-ASSEMBLY	4.81			
641	LOCAL EDUCATION	46.95			
642	REGIONAL EDUCATIONAL	28.36			
662	REGIONAL - HEALTH RELATED	.11			
681	LOCAL CEMETERIES	.12			
682	REGIONAL CEMETERIES	6.89			
699	GOVT & INSTIT UNDER DEV	18.95			
	SUBTOTAL	106.19			
731	PUBLIC LAND RELATED REC	169.05			
732	PRIVATE LAND RELATED REC	262.01			
781	PUBLIC WATER RELATED REC	1.70			
782	PRIVATE WATER RELATED REC	2.01			
	SUBTOTAL	434.77			
	URBAN TOTAL	3310.95			

Genesee T6N R18E

5791-03 1975 LAND USE BY DETAIL CATEGORY BY QUARTER SECTION 3/24/81  
0618

LU CODE	URBAN LAND USE DESC	1975 ACRES	LU CODE	RURAL LAND USE DESC	1975 ACRES
111	SING FAM RES 0.1 - 4.9 AC	1755.69	811	ROW CROPS	6076.48
113	SING FAM RES - FARM	80.87	813	VEGETABLE CROPS	16.25
120	TWO FAMILY RES	5.29	814	HAY CROPS	2362.96
141	MULTI-FAM RES 1-3 FLOORS	6.94	815	PASTURE AND OTHER AGRI	4139.81
199	RES LAND UNDER DEVELOPMNT	1242.41	820	ORCHARDS AND NURSERIES	61.04
	SUBTOTAL	3091.20	841	SOD FARM	170.12
			871	FARM BLDGS NO ANIMAL HUSB	103.81
210	RETAIL SALES AND SERVICE	44.55	872	FARM BLDGS - BEEF CATTLE	9.68
220	RET/SERVICE NON-INTENSIVE	24.00	873	FARM BLDGS - DAIRY CATTLE	48.48
	SUBTOTAL	68.55	875	FARM BLDGS - FOWL	9.76
			878	FARM BLDGS - SHEEP	1.40
310	MANUFACTURING	26.35		SUBTOTAL	12999.79
340	WHOLESALE	4.08	910	WETLANDS	3239.30
360	STORAGE	30.22	921	UNUSED URBAN LAND	9.77
399	INDUSTRIAL LAND UNDER DEV	6.16	922	UNUSED RURAL LAND	249.68
	SUBTOTAL	66.81	930	LAND FILL AND DUMPS	4.92
414	ARTERIALS AND EXPRESSWAYS	260.51	940	WOODLANDS	1841.66
418	LOCAL & COLLECTOR STREETS	483.41	950	LAKES RIVERS AND STREAMS	116.81
426	TRUCK TERMINAL	.96	360	EXTRACTIVE	221.85
430	OFF STREET PARKING-GEN	3.24		SUBTOTAL	5683.99
431	OFF STREET PARKING-RES	.82			
432	OFF STREET PARKING-COM	9.56			
433	OFF STREET PARKING-IND	8.02			
436	OFF STREET PARKING-GOV	10.21			
441	RAILROAD TRACK ROW	164.48			
499	TRANSPORTATION UNDER DEV	.95			
	SUBTOTAL	947.16			
510	COMMUNICATION & UTILITIES	50.65			
	SUBTOTAL	50.65			
611	LOC ADMIN SAFETY-ASSEMBLY	11.22			
641	LOCAL EDUCATION	24.80			
642	REGIONAL EDUCATIONAL	46.38			
662	REGIONAL - HEALTH RELATED	1.07			
681	LOCAL CEMETERIES	14.21			
682	REGIONAL CEMETERIES	5.70			
	SUBTOTAL	103.38			
712	PRIV CULTURAL SPECIAL REC	4.54			
731	PUBLIC LAND RELATED REC	48.86			
732	PRIVATE LAND RELATED REC	6.84			
	SUBTOTAL	60.64			
	URBAN TOTAL	4388.39			
				RURAL TOTAL	18683.78
				TOTAL	23072.17

Delafield T7N R18E

5791-03 1975 LAND USE BY DETAIL CATEGORY BY QUARTER SECTION 3/24/81  
0718

LU CODE	URBAN LAND USE DESC	1975 ACRES	LU CODE	RURAL LAND USE DESC	1975 ACRES
111	SING FAM RES 0.1 - 4.9 AC	2126.83	811	ROW CROPS	4439.34
113	SING FAM RES - FARM	63.91	812	GRAIN CROPS	134.17
120	TWO FAMILY RES	4.71	813	VEGETABLE CROPS	15.02
141	MULTI-FAM RES 1-3 FLOORS	26.77	814	HAY CROPS	2027.04
150	MOBILE HOMES	.97	815	PASTURE AND OTHER AGRI	3304.06
199	RES LAND UNDER DEVELOPMNT	1042.04	820	ORCHARDS AND NURSERIES	23.88
	SUBTOTAL	3265.23	871	FARM BLDGS NO ANIMAL HUSB	66.00
210	RETAIL SALES AND SERVICE	91.24	872	FARM BLDGS - BEEF CATTLE	12.61
220	REI/SERVICE NON-INTENSIVE	1.08	873	FARM BLDGS - DAIRY CATTLE	25.63
	SUBTOTAL	92.32	874	FARM BLDGS - HORSES	2.06
310	MANUFACTURING	19.65	875	FARM BLDGS - FOWL	2.65
340	WHOLESALE	3.08	876	FARM BLDGS - FUR	3.48
380	STORAGE	25.36	877	FARM BLDGS - HOGS	4.38
399	INDUSTRIAL LAND UNDER DEV	96.63		SUBTOTAL	10060.17
	SUBTOTAL	146.72	910	WETLANDS	1486.14
411	FREEWAY	222.92	921	UNUSED URBAN LAND	37.32
414	ARTERIALS AND EXPRESSWAYS	286.87	922	UNUSED RURAL LAND	399.34
416	LOCAL & COLLECTOR STREETS	609.77	930	LAND FILL AND DUMPS	30.58
425	BUS TERMINAL	3.44	940	WOODLANDS	3023.26
426	TRUCK TERMINAL	.69	950	LAKES RIVERS AND STREAMS	2476.38
430	OFF STREET PARKING-CEN	6.19	360	EXTRACTIVE	173.72
431	OFF STREET PARKING-RES	4.37		SUBTOTAL	7626.74
432	OFF STREET PARKING-COM	15.08		RURAL TOTAL	17686.91
433	OFF STREET PARKING-IND	3.84		TOTAL	23290.71
436	OFF STREET PARKING-GOV	10.77			
437	OFF STREET PARKING-REC	14.03			
441	RAILROAD TRACK ROW	51.73			
463	AIR FIELDS	7.51			
499	TRANSPORTATION UNDER DEV	12.78			
	SUBTOTAL	1249.99			
510	COMMUNICATION & UTILITIES	100.23			
	SUBTOTAL	100.23			
611	LUC ADMIN SAFETY-ASSEMBLY	23.25			
612	RLG ADMIN SAFETY-ASSEMBLY	37.16			
641	LOCAL EDUCATION	28.61			
642	REGIONAL EDUCATIONAL	58.11			
662	REGIONAL - HEALTH RELATED	17.65			
661	LOCAL CEMETERIES	8.04			
682	REGIONAL CEMETERIES	14.88			
	SUBTOTAL	187.70			
731	PUBLIC LAND RELATED REC	270.86			
732	PRIVATE LAND RELATED REC	285.00			
781	PUBLIC WATER RELATED REC	3.27			
782	PRIVATE WATER RELATED REC	2.48			
	SUBTOTAL	561.61			
	URBAN TOTAL	5603.80			

Merton T8N R18E

5791-03 1975 LAND USE BY DETAIL CATEGORY BY QUARTER SECTION 3/24/81  
0318

LU CODE	URBAN LAND USE DESC	1975 ACRES	LU CODE	RURAL LAND USE DESC	1975 ACRES
111	SING FAM RES 0.1 - 4.9 AC	2333.16	811	ROW CROPS	4929.16
113	SING FAM RES - FARM	97.42	812	GRAIN CROPS	1255.90
120	TWO FAMILY RES	2.23	813	VEGETABLE CROPS	256.83
141	MULTI-FAM RES 1-3 FLOORS	16.95	814	HAY CROPS	2976.11
150	MOBILE HOMES	4.92	815	PASTURE AND OTHER AGRIC	2273.86
199	RES LAND UNDER DEVELOPMNT	632.34	820	ORCHARDS AND NURSERIES	77.33
	SUBTOTAL	3087.03	841	SOD FARM	61.26
			842	BERRY FIELDS	5.52
210	RETAIL SALES AND SERVICE	51.76	871	FARM BLDGS NO ANIMAL HUSB	97.18
299	SALES & SERV UNDER DEV	9.13	872	FARM BLDGS - BEEF CATTLE	11.63
	SUBTOTAL	60.89	873	FARM BLDGS - DAIRY CATTLE	74.57
			874	FARM BLDGS - HORSES	2.54
310	MANUFACTURING	4.82	877	FARM BLDGS - HOGS	4.21
340	WHOLESALE	33.07		SUBTOTAL	12026.10
360	STORAGE	10.41			
	SUBTOTAL	48.30	910	WETLANDS	1292.02
411	FREEWAY	42.81	921	UNUSED URBAN LAND	27.22
414	ARTERIALS AND EXPRESSWAYS	288.86	922	UNUSED RURAL LAND	292.00
416	LOCAL & COLLECTOR STREETS	555.86	930	LAND FILL AND DUMPS	3.25
430	OFF STREET PARKING-GEN	1.24	940	WOODLANDS	2350.89
431	OFF STREET PARKING-RES	7.24	950	LAKES RIVERS AND STREAMS	2395.73
432	OFF STREET PARKING-COM	12.62	360	EXTRACTIVE	93.61
433	OFF STREET PARKING-IND	.50		SUBTOTAL	6454.72
436	OFF STREET PARKING-GOV	16.45			
437	OFF STREET PARKING-REC	2.49		RURAL TOTAL	18480.82
441	RAILROAD TRACK ROW	123.80		TOTAL	23209.88
	SUBTOTAL	1051.87			
510	COMMUNICATION & UTILITIES	50.17			
	SUBTOTAL	50.17			
611	LOCAL ADMIN SAFETY-ASSEMBLY	19.66			
641	LOCAL EDUCATION	49.99			
642	REGIONAL EDUCATIONAL	113.20			
681	LOCAL CEMETERIES	11.93			
	SUBTOTAL	194.78			
731	PUBLIC LAND RELATED REC	30.52			
732	PRIVATE LAND RELATED REC	205.50			
	SUBTOTAL	236.02			
	URBAN TOTAL	4729.06			

Vernon T5N R19E

5791-03 1975 LAND USE BY DETAIL CATEGORY BY QUARTER SECTION 3/24/81  
0519

LU CODE	URBAN LAND USE DESC	1975 ACRES	LU CODE	RURAL LAND USE DESC	1975 ACRES
111	SING FAM RES 0.1 - 4.9 AC	1347.40	811	ROW CROPS	5567.66
113	SING FAM RES - FARM	101.43	812	GRAIN CROPS	250.30
120	TWO FAMILY RES	.54	813	VEGETABLE CROPS	135.70
141	MULTI-FAM RES 1-3 FLOORS	3.22	814	HAY CROPS	2785.82
199	RES LAND UNDER DEVELOPMNT	901.41	815	PASTURE AND OTHER AGRI	3091.16
	SUBTOTAL	2354.00	820	ORCHARDS AND NURSERIES	77.55
			841	SOD FARM	37.67
210	RETAIL SALES AND SERVICE	32.90	871	FARM BLDGS NO ANIMAL HUSB	120.95
220	RET/SERVICE NON-INTENSIVE	4.35	872	FARM BLDGS - BEEF CATTLE	21.60
	SUBTOTAL	37.25	873	FARM BLDGS - DAIRY CATTLE	41.18
			874	FARM BLDGS - HORSES	.99
310	MANUFACTURING	13.03	875	FARM BLDGS - FOWL	9.10
340	WHOLESALE	4.36	876	FARM BLDGS - FUR	2.30
380	STORAGE	13.46		SUBTOTAL	12141.36
399	INDUSTRIAL LAND UNDER DEV	28.37			
	SUBTOTAL	59.22	910	WETLANDS	4955.51
			921	UNUSED URBAN LAND	49.63
411	FREEWAY	340.00	922	UNUSED RURAL LAND	167.11
414	ARTERIALS AND EXPRESSWAYS	195.80	930	LAND FILL AND DUMPS	5.60
418	LOCAL & COLLECTOR STREETS	441.00	940	WOODLANDS	1340.48
430	OFF STREET PARKING-GEN	1.24	950	LAKES RIVERS AND STREAMS	439.45
432	OFF STREET PARKING-COM	7.21	360	EXTRACTIVE	136.57
433	OFF STREET PARKING-IND	.82		SUBTOTAL	7054.35
434	OFF STREET PARKING-TRAN	.50			
436	OFF STREET PARKING-COV	5.50			
437	OFF STREET PARKING-REC	2.43		RURAL TOTAL	19235.73
441	RAILROAD TRACK ROW	45.35			
	SUBTOTAL	1039.85		TOTAL	23197.09
510	COMMUNICATION & UTILITIES	212.67			
	SUBTOTAL	212.67			
611	LOC ADMIN SAFETY-ASSEMBLY	16.24			
641	LOCAL EDUCATION	42.07			
681	LOCAL CEMETERIES	6.63			
	SUBTOTAL	64.94			
701	PUBLIC LAND RELATED REC	16.43			
732	PRIVATE LAND RELATED REC	175.83			
782	PRIVATE WATER RELATED REC	1.12			
	SUBTOTAL	193.43			
	URBAN TOTAL	3961.36			

Waukesha T6N R19E

5791-03 1975 LAND USE BY DETAIL CATEGORY BY QUARTER SECTION 3/24/81  
0619

LU CODE	URBAN LAND USE DESC	1975 ACRES	LU CODE	RURAL LAND USE DESC	1975 ACRES
111	SING FAM RES 0.1 - 4.9 AC	3068.53	811	ROW CROPS	4581.25
113	SING FAM RES - FARM	88.35	812	GRAIN CROPS	92.92
120	TWO FAMILY RES	168.49	813	VEGETABLE CROPS	182.52
141	MULTI-FAM RES 1-3 FLOORS	109.85	314	HAY CROPS	2318.23
142	MULTI-FAM RES 4+ FLOORS	.72	815	PASTURE AND OTHER AGR	2161.46
199	RES LAND UNDER DEVELOPMT	699.94	820	ORCHARDS AND NURSERIES	57.27
	SUBTOTAL	4335.88	871	FARM BLDGS NO ANIMAL HUSB	99.33
210	RETAIL SALES AND SERVICE	178.51	872	FARM BLDGS - BEEF CATTLE	36.64
220	RET/SERVICE NON-INTENSIVE	43.47	873	FARM BLDGS - DAIRY CATTLE	25.08
299	SALES & SERV UNDER DEV	16.80	874	FARM BLDGS - HORSES	3.16
	SUBTOTAL	238.78	876	FARM BLDGS - FUR	1.02
				SUBTOTAL	9558.88
310	MANUFACTURING	192.71	910	WETLANDS	3660.13
340	WHOLESALE	84.06	921	UNUSED URBAN LAND	365.44
380	STORAGE	81.53	922	UNUSED RURAL LAND	268.66
399	INDUSTRIAL LAND UNDER DEV	22.66	930	LAND FILL AND DUMPS	21.13
	SUBTOTAL	300.96	940	WOODLANDS	1303.41
414	ARTERIALS AND EXPRESSWAYS	502.61	950	LAKES RIVERS AND STREAMS	182.10
418	LOCAL & COLLECTOR STREETS	833.44	360	EXTRACTIVE	32.70
425	BUS TERMINAL	.51			
426	TRUCK TERMINAL	11.42			
430	OFF STREET PARKING-GEN	15.75			
431	OFF STREET PARKING-RES	32.31			
432	OFF STREET PARKING-COM	54.01			
433	OFF STREET PARKING-IND	62.59			
434	OFF STREET PARKING-TRAN	.94			
435	OFF STREET PARKING-COM/UT	2.76			
436	OFF STREET PARKING-GOV	50.85			
437	OFF STREET PARKING-REC	9.09			
441	RAILROAD TRACK ROW	194.20			
443	RAILROAD SWITCHING YARD	2.90			
499	TRANSPORTATION UNDER DEV	6.23			
	SUBTOTAL	1779.61			
510	COMMUNICATION & UTILITIES	200.73			
	SUBTOTAL	200.73			
611	LOC ADMIN SAFETY-ASSEMBLY	61.28			
612	REG ADMIN SAFETY-ASSEMBLY	4.28			
641	LOCAL EDUCATION	76.64			
642	REGIONAL EDUCATIONAL	77.03			
662	REGIONAL - HEALTH RELATED	18.05			
682	REGIONAL CEMETERIES	75.18			
699	GOVT & INSTIT UNDER DEV	1.80			
	SUBTOTAL	314.26			
731	PUBLIC LAND RELATED REC	249.15			
732	PRIVATE LAND RELATED REC	192.66			
781	PUBLIC WATER RELATED REC	3.65			
782	PRIVATE WATER RELATED REC	14.55			
	SUBTOTAL	460.01			
	URBAN TOTAL	7710.23			
				RURAL TOTAL	15412.45
				TOTAL	23122.68

Pewaukee T7N R19E

5791-03 1975 LAND USE BY DETAIL CATEGORY BY QUARTER SECTION 3/24/81  
0719

LU CODE	URBAN LAND USE DESC	1975 ACRES	LU CODE	RURAL LAND USE DESC	1975 ACRES
111	SING FAM RES 0.1 - 4.9 AC	2876.80	811	ROW CROPS	4537.79
113	SING FAM RES - FARM	62.54	812	GRAIN CROPS	129.96
120	TWO FAMILY RES	42.33	813	VEGETABLE CROPS	103.77
141	MULTI-FAM RES 1-5 FLOORS	57.39	814	HAY CROPS	1020.00
150	MOBILE HOMES	7.96	815	PASTURE AND OTHER AGRI	3559.81
199	RES LAND UNDER DEVELOPMNT	591.93	820	ORCHARDS AND NURSERIES	61.71
	SUBTOTAL	3638.95	841	SOO FARM	51.39
210	RETAIL SALES AND SERVICE	152.90	871	FARM BLDGS NO ANIMAL HUSB	96.25
220	RET/SERVICE NON-INTENSIVE	31.47	872	FARM BLDGS - BEEF CATTLE	8.31
299	SALES & SERV UNDER DEV	55.62	873	FARM BLDGS - DAIRY CATTLE	13.33
	SUBTOTAL	239.99	874	FARM BLDGS - HORSES	.59
310	MANUFACTURING	234.85	875	FARM BLDGS - FOWL	1.18
340	WHOLESALE	70.94	876	FARM BLDGS - FUR	12.92
380	STORAGE	133.59		SUBTOTAL	9597.01
399	INDUSTRIAL LAND UNDER DEV	27.05	910	WETLANDS	2848.50
	SUBTOTAL	466.43	921	UNUSED URBAN LAND	109.59
411	FREEWAY	469.97	922	UNUSED RURAL LAND	344.60
414	ARTERIALS AND EXPRESSWAYS	544.20	930	LAND FILL AND DUMPS	8.41
418	LOCAL & COLLECTOR STREETS	733.18	940	WOODLANDS	701.41
425	BUS TERMINAL	6.65	950	LAKES RIVERS AND STREAMS	1276.31
426	TRUCK TERMINAL	19.73	360	EXTRACTIVE	409.37
430	OFF STREET PARKING-GEN	3.33		SUBTOTAL	5698.19
431	OFF STREET PARKING-RES	18.84		RURAL TOTAL	15295.20
432	OFF STREET PARKING-COM	54.55		TOTAL	23090.15
433	OFF STREET PARKING-IND	58.22			
434	OFF STREET PARKING-TRAN	2.73			
435	OFF STREET PARKING-COM/UT	3.88			
436	OFF STREET PARKING-GOV	59.39			
437	OFF STREET PARKING-REC	33.03			
441	RAILROAD TRACK ROW	168.35			
443	RAILROAD SWITCHING YARD	.70			
463	AIR FIELDS	247.66			
465	AIR TERMINAL & HANGER	29.72			
499	TRANSPORTATION UNDER DEV	1.05			
	SUBTOTAL	2455.18			
510	COMMUNICATION & UTILITIES	177.93			
	SUBTOTAL	177.98			
611	LOC ADMIN SAFETY-ASSEMBLY	54.95			
612	REG ADMIN SAFETY-ASSEMBLY	24.06			
641	LOCAL EDUCATION	89.38			
642	REGIONAL EDUCATIONAL	187.13			
661	LOCAL - HEALTH RELATED	1.96			
662	REGIONAL - HEALTH RELATED	86.71			
681	LOCAL CEMETERIES	5.83			
682	REGIONAL CEMETERIES	8.69			
	SUBTOTAL	458.91			
711	PUB CULTURAL SPECIAL REC	18.03			
731	PUBLIC LAND RELATED REC	141.07			
732	PRIVATE LAND RELATED REC	196.30			
781	PUBLIC WATER RELATED REC	1.02			
782	PRIVATE WATER RELATED REC	1.09			
	SUBTOTAL	357.51			
	URBAN TOTAL	7794.95			

Lisbon T8N R19E

5791-03 1975 LAND USE BY DETAIL CATEGORY BY QUARTER SECTION 3/24/81  
0819

LU CODE	URBAN LAND USE DESC	1975 ACRES	LU CODE	RURAL LAND USE DESC	1975 ACRES
111	SING FAM RES 0.1 - 4.9 AC	1739.90	811	ROW CROPS	6784.39
113	SING FAM RES - FARM	111.50	812	GRAIN CROPS	1223.43
120	TWO FAMILY RES	1.90	813	VEGETABLE CROPS	265.32
141	MULTI-FAM RES 1-3 FLOORS	8.94	814	HAY CROPS	3007.87
150	MOBILE HOMES	57.57	815	PASTURE AND OTHER AGRI	2788.20
199	RES LAND UNDER DEVELOPMNT	658.83	820	ORCHARDS AND NURSERIES	84.22
	SUBTOTAL	2578.64	871	FARM BLDGS ND ANIMAL HUSB	172.93
210	RETAIL SALES AND SERVICE	34.07	872	FARM BLDGS - BEEF CATTLE	12.40
	SUBTOTAL	34.07	873	FARM BLDGS - DAIRY CATTLE	47.47
310	MANUFACTURING	16.75	875	FARM BLDGS - FOWL	12.75
340	WHOLESALE	7.63	877	FARM BLDGS - HOGS	.45
380	STORAGE	25.37		SUBTOTAL	14399.43
	SUBTOTAL	49.75	910	WETLANDS	2515.92
414	ARTERIALS AND EXPRESSWAYS	265.26	921	UNUSED URBAN LAND	107.63
418	LOCAL & COLLECTOR STREETS	555.67	922	UNUSED RURAL LAND	197.65
426	TRUCK TERMINAL	1.51	930	LAND FILL AND DUMPS	14.70
430	OFF STREET PARKING-GEN	1.38	940	WOODLANDS	1120.76
431	OFF STREET PARKING-RES	3.90	950	LAKES RIVERS AND STREAMS	82.17
432	OFF STREET PARKING-COM	14.46	260	EXTRACTIVE	752.77
433	OFF STREET PARKING-IND	3.37		SUBTOTAL	4791.00
436	OFF STREET PARKING-GOV	17.50		RURAL TOTAL	19191.03
437	OFF STREET PARKING-REC	1.47		TOTAL	23218.36
441	RAILROAD TRACK ROW	256.15			
499	TRANSPORTATION UNDER DEV	.44			
	SUBTOTAL	1121.11			
510	COMMUNICATION & UTILITIES	5.00			
	SUBTOTAL	5.00			
611	LOC ADMIN SAFETY-ASSEMBLY	21.37			
641	LOCAL EDUCATION	64.61			
642	REGIONAL EDUCATIONAL	47.70			
661	LOCAL CEMETERIES	6.38			
	SUBTOTAL	140.06			
731	PUBLIC LAND RELATED REC	56.26			
732	PRIVATE LAND RELATED REC	42.44			
	SUBTOTAL	98.70			
	URBAN TOTAL	4027.33			

Muskego T5N R20E

5791-03 1975 LAND USE BY DETAIL CATEGORY BY QUARTER SECTION 3/24/81  
052C

LU CODE	URBAN LAND USE DESC	1975 ACRES	LJ CODE	RURAL LAND USE DESC	1975 ACRES
111	SING FAM RES 0.1 - 4.9 AC	2311.95	811	ROW CROPS	5435.73
113	SING FAM RES - FARM	95.38	812	GRAIN CROPS	732.76
120	TWO FAMILY RES	8.45	814	HAY CROPS	2155.43
141	MULTI-FAM RES 1-3 FLOORS	15.21	815	PASTURE AND OTHER AGRI	2523.69
199	RES LANU UNDER DEVELOPMNT	343.67	820	ORCHARDS AND NURSERIES	100.25
	SUBTOTAL	2774.66	841	SOO FARM	123.26
210	RETAIL SALES AND SERVICE	52.53	871	FARM BLDGS NO ANIMAL HUSB	161.65
220	RET/SERVICE NON-INTENSIVE	21.73	872	FARM BLDGS - BEEF CATTLE	5.42
	SUBTOTAL	74.26	873	FARM BLDGS - DAIRY CATTLE	37.14
310	MANUFACTURING	18.98	874	FARM BLDGS - HORSES	.75
340	WHOLESALE	2.17	875	FARM BLDGS - FOWL	.88
380	STORAGE	17.78	877	FARM BLDGS - HOGS	4.00
399	INDUSTRIAL LAND UNDER DEV	55.45		SUBTOTAL	11280.98
	SUBTOTAL	94.38	910	WETLANDS	2499.07
411	FREEWAY	47.69	921	UNUSED URBAN LAND	50.91
414	ARTERIALS AND EXPRESSWAYS	218.60	922	UNUSED RURAL LAND	276.67
418	LOCAL & COLLECTOR STREETS	624.97	930	LAND FILL AND DUMPS	70.79
425	BUS TERMINAL	2.22	940	WOODLANDS	1082.92
430	OFF STREET PARKING-GEN	.33	950	LAKES RIVERS AND STREAMS	2879.63
432	OFF STREET PARKING-COM	34.55	360	EXTRACTIVE	211.74
433	OFF STREET PARKING-IND	3.43		SUBTOTAL	7071.73
436	OFF STREET PARKING-GOV	20.26		RURAL TOTAL	18352.71
437	OFF STREET PARKING-REC	14.92		TOTAL	23198.18
499	TRANSPORTATION UNDER DEV	8.85			
	SUBTOTAL	975.82			
510	COMMUNICATION & UTILITILS	447.62			
	SUBTOTAL	447.62			
611	LOC ADMIN SAFETY-ASSEMBLY	31.65			
641	LOCAL EDUCATION	45.93			
642	REGIONAL EDUCATIONAL	43.31			
662	REGIONAL - HEALTH RLLATED	.84			
681	LOCAL CEMETERIES	4.36			
699	GOVT & INSTIIT UNDER DEV	21.43			
	SUBTOTAL	147.52			
731	PUBLIC LAND RELATED REC	102.75			
732	PRIVATE LAND RELATED REC	221.01			
781	PUBLIC WATER RELATED REC	4.38			
782	PRIVATE WATER RELATED REC	3.07			
	SUBTOTAL	331.21			
	URBAN TOTAL	4845.47			

New Berlin T6N R20E

5791-03 1975 LAND USE BY DETAIL CATEGORY BY QUARTER SECTION 3/24/81  
0620

LU CODE	URBAN LAND USE DESC	1975 ACRES	LU CODE	RURAL LAND USE DESC	1975 ACRES
111	SING FAM RES 0.1 - 4.9 AC	4857.49	811	ROW CROPS	3120.35
113	SING FAM RES - FARM	78.89	812	GRAIN CROPS	278.82
120	TWO FAMILY RES	6.07	813	VEGETABLE CROPS	795.40
141	MULTI-FAM RES 1-3 FLOORS	53.07	814	HAY CROPS	818.97
199	RES LAND UNDER DEVELOPMNT	874.15	815	PASTURE AND OTHER AGRI	3593.41
	SUBTOTAL	5869.67	820	ORCHARDS AND NUKSERIES	240.77
210	RETAIL SALES AND SERVICE	182.93	841	SOD FARM	342.03
220	RET/SERVICE NON-INTENSIVE	48.77	871	FARM BLDGS NO ANIMAL HUSB	104.19
299	SALES & SERV UNDER DEV	.49	872	FARM BLDGS - BEEF CATTLE	2.43
	SUBTOTAL	232.19	873	FARM BLDGS - DAIRY CATTLE	7.31
310	MANUFACTURING	219.05	875	FARM BLDGS - FOWL	4.45
340	WHOLESALE	45.44	876	FARM BLDGS - FUR	4.97
380	STORAGE	118.93	878	FARM BLDGS - SHEEP	.97
399	INDUSTRIAL LAND UNDER DEV	177.75		SUBTOTAL	9314.07
	SUBTOTAL	561.22	910	WETLANDS	2065.55
411	FREEWAY	273.31	921	UNUSED URBAN LAND	192.93
414	ARTERIALS AND EXPRESSWAYS	402.21	922	UNUSED RURAL LAND	367.25
418	LOCAL & COLLECTOR STREETS	873.55	930	LAND FILL AND DUMPS	27.28
426	TRUCK TERMINAL	5.77	940	WOODLANDS	1153.06
430	OFF STREET PARKING-GEN	8.78	950	LAKES RIVERS AND STREAMS	103.00
431	OFF STREET PARKING-RES	18.61	360	EXTRACTIVE	362.35
432	OFF STREET PARKING-COM	62.93		SUBTOTAL	4292.02
433	OFF STREET PARKING-IND	95.54		RURAL TOTAL	13606.09
435	OFF STREET PARKING-COM/UT	.94		TOTAL	23163.94
436	OFF STREET PARKING-GOV	36.77			
437	OFF STREET PARKING-REC	3.69			
441	RAILROAD TRACK ROW	86.57			
499	TRANSPORTATION UNDER DEV	5.60			
	SUBTOTAL	1934.27			
510	COMMUNICATION & UTILITIES	311.40			
	SUBTOTAL	311.40			
611	LOC ADMIN SAFETY-ASSEMBLY	54.10			
612	REG ADMIN SAFETY-ASSEMBLY	2.10			
641	LOCAL EDUCATION	101.13			
642	REGIONAL EDUCATIONAL	89.08			
662	REGIONAL - HEALTH RELATED	24.29			
661	LOCAL CEMETERIES	4.59			
662	REGIONAL CEMETERIES	81.98			
	SUBTOTAL	357.27			
731	PUBLIC LAND RELATED REC	52.52			
732	PRIVATE LAND RELATED REC	188.42			
799	RECREATION UNDER DEVELOP	50.89			
	SUBTOTAL	291.83			
	URBAN TOTAL	9557.85			

Brookfield T7N R20E

5791-03 1975 LAND USE BY DETAIL CATEGORY BY QUARTER SECTION 3/24/61  
0720

LU CODE	URBAN LAND USE DESC	1975 ACRES	LU CODE	RURAL LAND USE DESC	1975 ACRES
111	SING FAM RES 0.1 - 4.9 AC	7865.98	811	ROW CROPS	1097.05
113	SING FAM RES - FARM	40.56	812	GRAIN CROPS	57.21
120	TWO FAMILY RES	24.37	813	VEGETABLE CROPS	287.81
141	MULTI-FAM RES 1-3 FLOORS	86.06	814	HAY CROPS	399.34
199	RES LAND UNDER DEVELOPMNT	882.78	815	PASTURE AND OTHER AGRI	1518.03
	SUBTOTAL	8899.75	820	ORCHARDS AND NURSERIES	54.26
210	RETAIL SALES AND SERVICE	349.22	841	SOD FARM	175.22
220	RET/SERVICE NON-INTENSIVE	63.83	871	FARM BLDGS NO ANIMAL HUSB	60.22
299	SALES & SERV UNDER DEV	91.27	873	FARM BLDGS - DAIRY CATTLE	2.58
	SUBTOTAL	504.32		SUBTOTAL	3651.72
310	MANUFACTURING	148.10	910	WETLANDS	3682.34
340	WHOLESALE	43.67	921	UNUSED URBAN LAND	681.57
360	STORAGE	47.07	922	UNUSED RURAL LAND	417.35
399	INDUSTRIAL LAND UNDER DEV	92.71	930	LAND FILL AND DUMPS	75.51
	SUBTOTAL	331.55	940	WOODLANDS	496.36
411	FREEWAY	310.43	950	LAKES RIVERS AND STREAMS	124.51
414	ARTERIALS AND EXPRESSWAYS	638.54	360	EXTRACTIVE	90.50
418	LOCAL & COLLECTOR STREETS	1422.37		SUBTOTAL	5568.14
425	BUS TERMINAL	5.57		RURAL TOTAL	9219.86
426	TRUCK TERMINAL	24.60		TOTAL	23414.49
430	OFF STREET PARKING-GEN	3.50			
431	OFF STREET PARKING-RES	12.79			
432	OFF STREET PARKING-COM	264.58			
433	OFF STREET PARKING-IND	64.60			
434	OFF STREET PARKING-TRAN	8.05			
435	OFF STREET PARKING-COM/UT	5.70			
436	OFF STREET PARKING-GOV	113.36			
437	OFF STREET PARKING-REC	12.26			
441	RAILROAD TRACK ROW	157.24			
463	AIR FIELDS	48.50			
465	AIR TERMINAL & HANGER	3.13			
499	TRANSPORTATION UNDER DEV	5.90			
	SUBTOTAL	3101.12			
510	COMMUNICATION & UTILITIES	212.38			
	SUBTOTAL	212.36			
611	LOC ADMIN SAFETY-ASSEMBLY	103.38			
612	REG ADMIN SAFETY-ASSEMBLY	1.87			
641	LOCAL EDUCATION	279.40			
642	REGIONAL EDUCATIONAL	77.34			
661	LOCAL - HEALTH RELATED	10.36			
662	REGIONAL - HEALTH RELATED	66.57			
681	LOCAL CEMETERIES	10.52			
682	REGIONAL CEMETERIES	165.93			
699	GOVT & INSTIT UNDER DEV	11.80			
	SUBTOTAL	727.17			
731	PUBLIC LAND RELATED REC	151.31			
732	PRIVATE LAND RELATED REC	267.03			
	SUBTOTAL	418.34			
	URBAN TOTAL	14194.63			

Menomonee T8N R20E

5791-03 1975 LAND USE BY DETAIL CATEGORY BY QUARTER SECTION 3/24/81  
082G

LU CODE	URBAN LAND USE DESC	1975 ACRES	LU CODE	RURAL LAND USE DESC	1975 ACRES
111	SING FAM RES 0.1 - 4.9 AC	4183.71	811	ROW CROPS	2098.84
113	SING FAM RES - FARM	89.07	812	GRAIN CROPS	574.79
120	TRD FAMILY RES	36.82	813	VEGETABLE CROPS	1234.42
141	MULTI-FAM RES 1-3 FLDGRS	53.92	814	HAY CROPS	1409.39
150	MOBILE HOMES	10.93	815	PASTURE AND OTHER AGRI	3648.50
199	RES LAND UNDER DEVELOPMNT	436.39	820	ORCHARDS AND NURSERIES	235.26
	SUBTOTAL	4810.87	849	APIARIES	1.01
210	RETAIL SALES AND SERVICE	248.41	871	FARM BLDGS NO ANIMAL HUS3	166.93
220	RET/SERVICE NON-INTENSIVE	72.04	872	FARM BLDGS -- BEEF CATTLE	3.97
299	SALES & SERV UNDER DEV	18.26	873	FARM BLDGS -- DAIRY CATTLE	.69
	SUBTOTAL	338.71	875	FARM BLDGS -- FOWL	2.56
				SUBTOTAL	9376.36
310	MANUFACTURING	213.72	910	WETLANDS	2054.06
340	WHOLESALE	64.87	921	UNUSED URBAN LAND	185.15
380	STORAGE	115.81	922	UNUSED RURAL LAND	499.21
399	INDUSTRIAL LAND UNDER DEV	287.02	930	LAND FILL AND DUMPS	121.42
	SUBTOTAL	661.42	940	WOODLANDS	766.58
411	FREEWAY	135.77	950	LAKES RIVERS AND STREAMS	136.60
414	ARTERIALS AND EXPRESSWAYS	599.58	360	EXTRACTIVE	379.32
418	LOCAL & COLLECTOR STREETS	740.00		SUBTOTAL	4942.34
425	JOB TERMINAL	4.79			
426	TRUCK TERMINAL	13.87		RURAL TOTAL	14318.70
430	OFF STREET PARKING-GEN	14.95			
431	OFF STREET PARKING-RES	10.49		TOTAL	23312.13
432	OFF STREET PARKING-COM	97.36			
433	OFF STREET PARKING-IND	60.33			
435	OFF STREET PARKING-COM/UT	2.02			
436	OFF STREET PARKING-GOV	70.63			
437	OFF STREET PARKING-REC	15.42			
441	RAILROAD TRACK ROW	163.66			
463	AIR FIELDS	59.75			
499	TRANSPORTATION UNDER DEV	3.20			
	SUBTOTAL	1991.84			
510	COMMUNICATION & UTILITIES	285.41			
599	COMM & UTIL UNDER DEVELOP	.42			
	SUBTOTAL	285.83			
611	LOC ADMIN SAFETY-ASSEMBLY	61.29			
641	LOCAL EDUCATION	117.56			
642	REGIONAL EDUCATIONAL	53.60			
661	LOCAL - HEALTH RELATED	5.90			
662	REGIONAL - HEALTH RELATED	29.35			
681	LOCAL CEMETERIES	4.54			
682	REGIONAL CEMETERIES	20.93			
699	GOVT & INSTIE UNDER DEV	.73			
	SUBTOTAL	293.45			
731	PUBLIC LAND RELATED REC	452.47			
732	PRIVATE LAND RELATED REC	136.15			
781	PUBLIC WATER RELATED REC	2.19			
	SUBTOTAL	590.81			
	URBAN TOTAL	8993.43			

# 1978 CENSUS OF AGRICULTURE PRELIMINARY REPORT WAUKESHA COUNTY, WIS.

Complimentary Copy  
Bureau of the Census  
Data Users Services  
Kansas City, KS 66101

AC78-P-55-133

Issued March 1980 ✓

The preliminary reports are being published on a flow basis for all counties in the United States with 10 farms or more and for each State, geographic region, and the United States. This series is intended to provide, at the earliest date, information on major data items. These items are standard for each State and county except in Table 3, Crops Harvested, where the items will vary by State according to their relative importance in the State in 1978. The 1978 data are subject to revision. Final data will be published in Volume 1, State and County Data.

Inventories of livestock and poultry and other specified items are as of December 31 of the census year. Crop and livestock production and sales data are for calendar year 1978, except for a few crops (such as citrus) for which the production year overlaps the calendar year. The volume 1 appendix will provide a more detailed description of how the census was taken along with pertinent definitions and explanations.

In the county reports, data for farms reporting, acreages, and inventories for 1978 and 1974 are directly comparable. In keeping with prior practice, the dollar figures shown in this report have not been adjusted for changes in price levels between census years.

The 1978 census data collection program included an area segment sample to provide reliable estimates, for States, of the number and the characteristics of any farms not represented in the mail portion of the census. The preliminary report for each State will include tables to show the part of each State total representing farms not found on the mailing list and not included in county totals.

**Definition of farm**--In accordance with a joint agreement between the U.S. Department of Agriculture, the Office of Management and Budget, and the Bureau of the Census, announced on August 12, 1975, a farm, for statistical purposes, is any place from which \$1,000 or more of agricultural products were sold, or normally would have been sold, during the census year. The previous definition (used for the 1959, 1964, 1969 censuses, and for the 1974 preliminary county reports) counted as a farm any place with less than 10 acres from which \$250 or more of agricultural products were sold or normally would have been sold during the census year, or any place of 10 acres or more from which \$50 or more of agricultural products were sold or normally would have been sold during the census year.

The effect of the change in definition on 1978 and 1974 data is shown for selected items in the appendix on page 4.

**Sampling**--Data collected from only a sample of farms are subject to sampling error. The appendix in volume 1 will contain a detailed discussion.

Special tribute is paid to the millions of farm and ranch operators and other agriculture-associated people who furnished the individual reports from which these statistical summaries were compiled. Also acknowledged with gratitude is the contributory effort of U.S. Department of Agriculture and other county-level government and private officials who offered their support and willingly assisted individuals requesting help in completing their 1978 census reports.

The following symbols are used throughout the tables:  
- Zero. (D) Data withheld to avoid disclosing information for individual farms.  
(X) Not applicable. (Z) Less than half of the unit reported. (NA) Not available.

**Table 1. Selected Summary Items: 1978 and 1974**

	All farms		Farms with sales of \$2,500 or more	
	1978	1974	1978	1974
<b>Farms and land in farms:</b>				
Farms.....number..	1 063	1 035	814	808
Land in farms.....acres..	160 148	157 419	148 924	145 167
Average size of farm.....acres..	151	152	183	180
<b>Value of land and buildings:</b>				
Average per farm.....dollars..	247 921	142 651	295 024	165 160
Average per acre.....dollars..	1 664	938	1 603	919
<b>Farms by size</b>				
Less than 10 acres.....number..	80	52	40	27
10 to 49 acres.....number..	270	214	133	99
50 to 179 acres.....number..	447	501	381	418
180 to 499 acres.....number..	218	225	212	222
500 to 999 acres.....number..	41	35	41	34
1,000 to 1,999 acres.....number..	4	8	4	8
2,000 acres or more.....number..	3	-	3	-
<b>Land according to use:</b>				
Total cropland.....farms..	1 024	1 008	795	791
.....acres..	126 263	119 973	119 740	112 334
Harvested cropland.....farms..	990	986	773	780
.....acres..	103 960	100 287	100 281	95 611
Cropland used only for pasture.....farms..	374	419	295	324
.....acres..	10 009	10 457	8 831	8 973
Other cropland.....farms..	441	320	349	257
.....acres..	12 294	9 229	10 628	7 750
Woodland including woodland pastured.....farms..	431	456	358	362
.....acres..	13 591	13 448	11 718	11 736
Other pastureland and rangeland.....farms..	165	866	142	171
.....acres..	4 725	23 998	4 433	7 844
Land in house lots, ponds, roads, wasteland, etc.....farms..	814	(?)	631	658
.....acres..	15 569	(?)	13 033	13 253
Irrigated land.....farms..	41	22	38	22
.....acres..	6 553	1 535	6 546	1 535

See footnotes at end of table.

Table 1. Selected Summary Items: 1978 and 1974 —Con.

	All farms		Farms with sales of \$2,500 or more	
	1978	1974	1978	1974
<b>Agricultural products sold and farm related income:</b>				
Market value of products sold <sup>1</sup> ..... \$1,000..	38 998	24 278	38 727	23 999
Average per farm..... dollars..	38 687	23 457	47 576	29 702
Crops..... \$1,000..	21 209	9 582	21 043	9 390
Livestock and livestock products..... \$1,000..	17 089	13 137	16 995	13 065
Poultry and poultry products..... \$1,000..	701	1 539	689	1 524
<b>Farms by value of sales:</b>				
Sales of \$20,000 or more..... number..	373	342	373	342
\$100,000 or more..... number..	72	38	72	38
\$40,000 to \$99,999..... number..	157	127	157	127
\$20,000 to \$39,999..... number..	144	177	144	177
Sales of less than \$20,000..... number..	690	693	441	466
\$10,000 to \$19,999..... number..	137	174	137	174
\$5,000 to \$9,999..... number..	146	144	146	143
\$2,500 to \$4,999..... number..	159	149	158	149
Less than \$2,500..... number..	248	226	(X)	(X)
<b>Value of agricultural products sold directly to individuals for human consumption:</b>				
..... farms..	159	(NA)	113	(NA)
..... \$1,000..	652	(NA)	620	(NA)
<b>Income from machine work, customwork, and other agricultural services provided for others:</b>				
..... farms..	109	116	99	101
..... \$1,000..	353	369	344	300
<b>Farms by type of organization:</b>				
Individual or family..... number..	900	(NA)	664	708
Partnership..... number..	132	(NA)	121	73
Corporation..... number..	26	(NA)	26	23
Family held..... number..	22	(NA)	22	(NA)
Other than family held..... number..	4	(NA)	4	(NA)
Other—cooperatives, estates or trusts, institutional, etc..... number..	5	(NA)	3	4
<b>Operator characteristics:</b>				
<b>Tenure of operator:</b>				
Full owner..... farms..	563	585	371	399
Part owner..... farms..	360	326	324	302
Tenant..... farms..	140	124	119	107
<b>Principal occupation and residence: <sup>2</sup></b>				
Farming..... farms..	561	637	510	563
Residence on farm operated..... farms..	464	(NA)	419	(NA)
Residence not on farm operated..... farms..	61	(NA)	56	(NA)
Other than farming..... farms..	502	370	304	218
Residence on farm operated..... farms..	364	(NA)	209	(NA)
Residence not on farm operated..... farms..	96	(NA)	76	(NA)
Average age of operator <sup>3</sup> ..... years..	51.7	54.2	51.8	53.8
Sex of operator..... male..	1 003	(NA)	779	(NA)
..... female..	60	(NA)	35	(NA)
<b>Operators reporting days of work off farm: <sup>4</sup></b>				
Any..... farms..	573	443	387	294
100 days or more..... farms..	479	362	310	235
<b>Selected production expenses: <sup>5</sup></b>				
Livestock and poultry purchased..... \$1,000..	2 064	1 281	2 011	1 246
Feed purchased for livestock and poultry..... \$1,000..	2 866	3 024	2 754	2 972
Commercially mixed formula feeds..... \$1,000..	1 687	1 923	1 666	1 897
Animal health costs..... \$1,000..	365	(NA)	355	200
Seeds, bulbs, plants, and trees..... \$1,000..	1 144	768	1 131	754
Commercial fertilizer..... \$1,000..	2 264	1 506	2 238	1 486
Other agricultural chemicals including lime..... \$1,000..	877	451	867	445
Hired farm labor..... \$1,000..	2 867	1 507	2 849	1 487
Workers working 150 days or more..... farms..	168	(NA)	155	135
..... number..	413	(NA)	388	267
Contract labor..... \$1,000..	58	33	58	32
Customwork and machine hire..... \$1,000..	746	331	718	315
<b>Energy costs - petroleum products, electricity, coal, wood, coke, etc:</b>				
..... \$1,000..	2 118	(NA)	2 043	(NA)
Gasoline and other petroleum products..... \$1,000..	1 489	1 072	1 430	1 024
Gasoline..... \$1,000..	759	(NA)	716	650
Diesel fuel..... \$1,000..	279	(NA)	273	192
<b>Machinery and equipment: <sup>6</sup></b>				
Estimated market value of all machinery and equipment..... \$1,000..	34 413	23 351	31 741	20 927
Average per farm..... dollars..	32 374	22 938	38 993	26 290
Motortrucks including pickups..... farms..	828	863	670	702
..... number..	1 224	1 286	1 040	1 090
Wheel tractors..... farms..	983	962	774	755
..... number..	2 807	2 657	2 349	2 285

<sup>1</sup> 1978 data are based on a sample of farms.  
<sup>2</sup> Data included with Other pastureland and rangeland.  
<sup>3</sup> 1974 data include sales of forest products  
<sup>4</sup> 1974 data exclude corporations and other organizations

Table 2. Livestock and Poultry: 1978 and 1974

	All farms		Farms with sales of \$2,500 or more	
	1978	1974	1978	1974
Cattle and calves inventory.....	farms.. 521	600	446	492
	number.. 26 073	30 383	25 435	29 037
Farms by size of inventory:				
1 to 99.....	farms.. 197	197	130	110
	number.. 1 480	1 729	1 048	1 011
20 to 99.....	farms.. 254	324	246	303
	number.. 13 098	16 558	12 892	15 930
100 to 499.....	farms.. 69	79	69	79
	number.. (D)	12 096	(D)	12 096
500 or more.....	farms.. 1	-	1	-
	number.. (D)	-	(D)	-
Cows and heifers that had calved.....	farms.. 419	488	369	410
	number.. 12 645	15 493	12 417	14 972
Beef cows.....	farms.. 181	201	139	131
	number.. 2 123	2 676	1 945	2 189
Milk cows.....	farms.. 263	333	253	322
	number.. 10 522	12 817	10 472	12 783
Heifers and heifer calves.....	farms.. 402	(NA)	353	369
	number.. 8 797	(NA)	8 630	9 051
Stoers and bulls including calves.....	farms.. 384	(NA)	325	337
	number.. 4 631	(NA)	4 388	5 014
Cattle and calves sold.....	farms.. 473	559	428	477
	number.. 12 443	12 142	12 266	11 798
Cattle fattened on grain and concentrates.....	farms.. 178	(NA)	153	128
	number.. 2 382	(NA)	2 311	2 297
Dairy products sold.....	farms.. 235	(NA)	232	299
	\$1,000.. 11 806	(NA)	11 800	9 769
Hogs and pigs inventory.....	farms.. 94	111	78	90
	number.. 5 834	3 772	5 728	3 601
Farms by size of inventory:				
1 to 99.....	farms.. 81	103	65	82
	number.. 1 390	1 881	1 284	1 710
100 to 499.....	farms.. 11	8	11	8
	number.. (D)	1 891	(D)	1 891
500 or more.....	farms.. 2	-	2	-
	number.. (D)	-	(D)	-
Hogs and pigs used or to be used for breeding.....	farms.. 49	(NA)	41	54
	number.. 428	(NA)	402	441
Hogs and pigs sold.....	farms.. 83	104	75	89
	number.. 6 860	4 793	6 790	4 681
Feeder pigs sold.....	farms.. 18	30	14	23
	number.. 511	647	472	618
Litters farrowed between—				
Dec. 1 of preceding year and Nov. 30.....	farms.. 51	72	43	62
	number.. 495	444	477	431
Dec. 1 of preceding year and May 31.....	farms.. 37	54	31	53
	number.. 197	208	189	(D)
June 1 and Nov. 30.....	farms.. 42	61	37	51
	number.. 298	236	288	225
Sheep and lamba inventory.....	farms.. 34	31	22	21
	number.. 741	1 108	556	1 025
Ewes 1 year old or older.....	farms.. 38	(NA)	20	20
	number.. 535	(NA)	411	716
Sheep and lambs sold.....	farms.. 31	24	21	18
	number.. 517	619	442	585
Sheep and lambs shorn.....	farms.. 31	(NA)	21	19
	number.. 764	(NA)	633	927
pounds of wool.....	6 982	(NA)	5 950	7 999
Horses and ponies inventory.....	farms.. 241	160	160	111
	number.. 2 007	1 156	1 318	996
Chickens 3 months old or older inventory.....	farms.. 142	188	95	144
	number.. (D)	97 148	(D)	94 055
Hens and pullets of laying age inventory.....	farms.. 137	178	93	136
	number.. (D)	95 529	(D)	93 092
Farms by size of inventory:				
1 to 1,599.....	farms.. 135	174	91	132
	number.. 11 857	17 916	9 735	15 479
1,600 to 9,999.....	farms.. -	1	-	1
	number.. -	(D)	-	(D)
10,000 or more.....	farms.. 2	3	2	3
	number.. (D)	(D)	(D)	(D)
Broilers sold.....	farms.. 21	15	12	13
	number.. 2 774	2 108	1 774	(D)
Turkeys sold.....	farms.. 5	(NA)	4	3
	number.. (D)	(NA)	(D)	3 181

**Table 3. Crops Harvested: 1978 and 1974**

	All farms		Farms with sales of \$2,500 or more	
	1978	1974	1978	1974
Corn for grain or seed.....farms..	668	679	573	587
acres..	48 042	34 598	47 053	33 736
bu..	4 171 623	2 321 449	4 115 316	2 274 864
Corn for silage or green chop (green).....farms..	275	(NA)	270	341
acres..	6 571	(NA)	6 549	10 753
tons..	79 487	(NA)	79 327	116 032
Whoat for grain.....farms..	96	158	82	137
acres..	1 420	2 664	1 267	2 508
bu..	53 336	96 499	47 682	91 339
Oats for grain.....farms..	391	(NA)	348	470
acres..	7 597	(NA)	7 167	9 704
bu..	399 967	(NA)	385 886	565 918
Soybeans for beans.....farms..	133	100	128	98
acros..	5 445	3 523	5 397	(D)
bu..	156 786	81 632	155 586	(D)
Irish potatoes.....farms..	14	21	13	20
acres..	227	1 266	(D)	(D)
cwt..	21 533	298 159	(D)	(D)
Hay, all (dry).....farms..	711	720	575	580
acres..	34 920	34 042	32 897	31 416
tons..	96 315	87 976	92 646	82 000
Alfalfa hay (dry).....farms..	648	(NA)	539	477
acres..	24 328	(NA)	22 822	18 779
tons..	74 485	(NA)	71 517	54 718
Other tame dry hay (dry).....farms..	88	(NA)	67	(NA)
acres..	2 125	(NA)	1 852	(NA)
tons..	4 788	(NA)	4 459	(NA)
Grass silage (green).....farms..	104	(NA)	103	98
acres..	4 979	(NA)	(D)	4 426
tons..	32 967	(NA)	(D)	27 984
Land in orchards.....farms..	46	36	29	23
acres..	318	260	263	227
Vegetablos, sweet corn or melons for sale.....farms..	122	152	95	121
acres..	2 191	(NA)	2 123	3 601
Green peas for sale.....farms..	25	(NA)	24	32
acres..	818	(NA)	(D)	698
Sweet corn for sale.....farms..	79	(NA)	55	79
acres..	681	(NA)	628	1 740

**Appendix. Effect of Definition Change for Selected Items: 1978 and 1974**

	Definition used for 1974 and 1978		Definition used for 1959, 1964, and 1969		Operations excluded by current definition but not by 1959 definition	
	1978	1974	1978	1974	1978	1974
All farms.....number..	1 063	1 035	1 204	1 130	141	95
Farms with sales less than \$2,500.....number..	248	226	389	321	141	95
Land in farms.....acres..	160 148	157 419	164 392	160 187	4 244	2 768
Total cropland.....acres..	126 263	119 973	127 811	121 284	1 546	1 311
Harvested cropland.....acres..	103 960	100 297	104 397	100 542	437	255
Value of agricultural products sold.....\$1,000..	38 998	24 278	39 042	24 306	44	28
Crops.....\$1,000..	21 209	9 582	21 233	9 604	25	22
Livestock, poultry, and their products.....\$1,000..	17 790	14 676	17 809	14 683	19	7
Cattle and calves inventory.....number..	26 073	30 383	26 116	30 431	43	48
Hogs and pigs inventory.....number..	5 834	3 772	5 834	3 785	-	13
Chickens 3 months old or older inventory.....number..	(D)	97 148	(D)	97 302	503	154