

Jackson Township
Sargent County

Comprehensive Plan

1995

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INTRODUCTIONS

Jackson Township is located in Sargent County. It is situated on the rolling plains of ancient Lake Agassiz (see Map #1). As a result of this, the surface soil of Jackson Township is ~~entirely rich clay and silt that produces high crop yields.~~ ^{entirely rich clay and silt that produces high crop yields. Pastureland production.} ^{OK}

This plan examines the physical and social characteristics of Jackson Township. It presents this information in the form of text, tables, and maps. The plan is designed to help guide responsible land use planning and control. In an effort to keep this document a useful and applied tool, it is being kept to a limited size. Additional information is available through Lake Agassiz Regional Council in Fargo, N.D.

GOALS AND OBJECTIVES

The Jackson Township Comprehensive Plan is to be used as a guide on which the development policies and regulations will be based. The plan was used to help develop goals, objectives and policies. As conditions change, so should the plan. Being a flexible document, this plan will reflect the changing goals of the citizens of the Township. For clarification, a "goal" is a broad, general concept that the Township wishes to attain in the future. An "objective" is a more specific, measurable step to be taken toward achieving a goal. A "policy" is a general principle that guides the actions taken to meet the goals and objectives.

Four goals have been established. Each addresses a particular subject. They all work together towards providing guidelines to ensure desired land use in the Township. The goals, objectives and policies are:

GOALS

GOAL #1

Preserve the Township's agricultural integrity and heritage.

OBJECTIVES:

- A. Preserve prime farmland by using the land use controls provided in this comprehensive plan and its corresponding zoning ordinance when making all land use decisions.
- B. Support family farms by being active in legislation affecting agriculture; send letters from the Township Officers to state and federal officials involved in the decision.
- C. Identify, preserve and enhance historic sites by contacting people willing to collect and document local history.

POLICIES:

1. Support agriculture and appropriate farms programs.
2. Support an equitable agricultural land taxation system.

3. Discourage and control non-farm developments which interfere with farming and harm agricultural land values.
4. Encourage siting public facilities and utility easements in locations which would minimize interference with farming.

GOAL #2

Protect public health, safety and welfare by deterring incompatible land uses from harming conforming land uses.

OBJECTIVES:

- A. Refer to this plan to determine if land use requests are consistent with the natural resources.
- B. Adopt a zoning ordinance consistent with this plan.
- C. Use the zoning ordinance provisions to prevent incompatible land uses.
- D. Acquire soil surveys from the soil conservancy offices.

POLICIES:

1. Discourage nonagricultural development on fertile soils.
2. Prevent undesirable, incompatible land uses from locating in the Township unless they meet appropriate conditions.
3. Make land use decisions in accordance with this plan.
4. Deter offensive and incompatible land uses (such as hog barns), from locating near dwellings and communities.

GOAL #3

Provide an adequate, safe, and efficient system for the transportation of people, goods and services.

OBJECTIVES:

- A. Provide well maintained gravel roads for all mail routes, school bus routes, and other routes deemed "high priority" by the Township's elected officers.
- B. Appoint a "Road Overseer" who periodically inspects and maintains a record of the conditions of all Township roads, bridges and signs.

POLICIES:

1. Discourage developments which would create congestion and/or road hazards, or damage Township roads without compensation.
2. Encourage development to locate in areas served by adequate transportation facilities.
3. Downgrade priority, abandon, or close township roads and bridges when appropriate.

4. Use erosion/sediment control standards in road construction.
5. The "Road Overseer" shall promptly notify appropriate governmental units when their transportation facilities within the Township require repair.

GOAL #4

Ensure and maintain the public participation in land use decisions affecting the Township.

OBJECTIVES:

- A. Maintain dialogue between citizens and elected officials by posting notices and by publishing public notices for all public hearings.
- B. Create public awareness of planning goals and objectives by making this document available to the public upon request, and publishing a statement to that effect.

POLICIES:

1. Give timely notice of all meetings and hearings.
2. Actively solicit public opinion about land use decisions.
3. Consider using citizen input when making public decisions.
4. Inform citizens of decisions and actions taken by officials.
5. Make public documents available for review.
6. Encourage education for officials and general public.

POPULATION

The population of Jackson Township is declining. The 1990 population estimate for the Township is 42 (Bureau of the Census, 1990). This is less than the 1980 Census (see Table #1).

TABLE #1: Population of Jackson Township
1970-1980 - 1990

1990:	42 42
1980:	65
1970:	110

Source: U.S. Census of Population, 1980 - 1990

There is a large non-farm population in Jackson Township. About 40 percent of the people living in the township are nonfarmers (see Table #2).

TABLE #2: Rural Farm and Nonfarm
Population of Jackson Township

	<u>Rural Farm</u>	<u>Rural Nonfarm</u>
Population:	15 1/2%	10 1/2%

Source: U.S. Census of Population

HOUSING

The housing stock of Jackson Township is decreasing, as Table 3 illustrates.

Table #3: Number of Families, Households & Housing
Units in Jackson Township, 1980, 1990

1980	1990
<u>Housing Units</u>	<u>Housing Units</u>
32	26

Source: U.S. Census of Population, 1980, 1990

ECONOMY

EMPLOYMENT

Sargent County's unemployment rate has remained low for many years. The average 1993 unemployment rate was only 1.8% (see Table #4). Sargent County's major employer is Melroe, and Jackson Township's major employer is the farming industry.

Table #4: Sargent County Annual Average 1993 Labor Force & Employment

<u>Labor Force</u>	<u>Employment</u>	<u>Unemployed</u>	
		<u>Number</u>	<u>Percentage</u>
2,605	2,557	48	1.8%

Source: Job Service North Dakota December, 1993

TOWNSHIP TAX VALUATION AND MILL LEVY

Jackson Township's total taxable valuation is \$ 278,594. The Township's total mill tax levy is \$302.07 to \$329.53.

Table #5: Jackson Township Mill Levy

Mill Levies:	
State and County	119.39
Mowing / Snow	0.00
Fire District	0.00
Township	18.87
School district	<u>191.27</u>
Total Mill Levy:	329.53

INCOME

Per capita income for Sargent County increased 50% from 5761 in 1979 to 8661 in 1985 and 52.8% in Jackson Township.

TABLE #6: Comparison of Sargent County & Jackson Township Estimated Per Capita Money Income

	1979	1985	% Change
	Income	Income	
Twp.	\$ 3,614	\$ 5,523	52.8%
Cty.	\$ 5,761	\$ 8,661	50%

Source: Current Population Reports
U.S. Bureau of the Census, 1986

CLIMATE

The area has long, cold winters. Temperatures are usually below freezing, with an average of only six days per month having above freezing temperatures during the winter. Due to frequent blasts of cold arctic air, about half of the winter days have temperatures below zero.

Snowfall in the area averages 35 inches annually. However, strong winds frequently cause blizzard conditions even with light snowfalls, especially in open areas. Snow

blowing and drifting is common. In an average year, there are 55 days where there is at least one inch of snow on the ground.

The frost free growing season in the Township generally lasts between 117 and 147 days. The last freeze in the spring usually occurs around the third week of May and the first freeze in the fall usually occurs around the third week of September.

Average monthly temperatures vary from 5.9 degrees in January to 70.7 degrees in July. Recorded temperatures in the county have been as high as 107 degrees and as low as -36 degrees. Monthly temperature data is presented in Table #7.

Table #7
Average Monthly Temperatures

	Daily High	Daily Low	Monthly Mean
January	15.4	-3.6	5.9
February	20.6	0.8	10.7
March	33.5	14.9	24.2
April	52.6	31.9	42.3
May	66.8	42.3	54.6
June	75.9	53.4	64.7
July	82.8	58.6	70.7
August	81.6	56.8	69.2
September	69.6	46.2	57.9
October	58.4	35.5	47.0
November	37.2	20.0	28.6
December	21.9	4.1	13.0

A summary of the county's climate characteristics is presented in Table #8. It can be seen in this table that the area has a relatively dry, windy climate with widely varying temperatures.

Table #8: Climate Characteristics
Sargent County, North Dakota

YEARLY AVERAGES

- Rainfall: 20 inches
- Snowfall: 35 inches
- Windspeed: 12.7 mph
- Relative Humidity: 71%
- Clear Days: 87
- Partly Sunny Days: 112
- Cloudy Days: 166

Precipitation Days: 102
Storm Days: 33
Subzero Temperature Days: 54
Subfreezing Temperature Days: 181
Above 90 Degrees Temperature Days:
15
Prevailing Winds:
January to May: Northerly
June to December: Southerly

NATURAL RESOURCES

The key physical characteristics of the Township include clay and silt soils, an underlying sand formation, and a shallow aquifer. These natural resources were formed by the geological forces of the past. The geology, surface materials and soils, aquifers, and rivers are discussed below.

GEOLOGY

The regional slope in eastern North Dakota is to the northeast. Consequently, the retreating ice sheets of the last ice age blocked the flow of water to the north, creating Glacial Lake Agassiz. The eastern half of the County is part of a flat plain formed from the sedimentation of glacial activity. Ridges and deltas are the principal relief features of the ancient lake bed. Map #1 shows the Township's physical features.

SURFACE MATERIALS AND SOILS

The most important characteristic of Sargent County's natural resources is its soils. The surface soils of the Township are illustrated in Map # 1.

AQUIFERS

There are three types of aquifers in Sargent County. Type I aquifers can produce large quantities of water, and probably can produce over a long period of time regardless of climatic conditions. Wells drilled into them reliably produce water. Type II aquifers produce moderate amounts of water, and are sensitive to short-term climatically controlled water-level variations. Water supplies fluctuate due to local variations. Type III aquifers produce small amounts of water, or large amounts for short periods. They are very sensitive to climatic changes. Wells only produce water in some areas because they are too thin in many locations. Sargent County has numerous small undifferentiated sand and gravel aquifers (see Map #2).

PUBLIC FACILITIES AND SERVICES

Table # 10 shows the mileage of the various types roads systems in the Township. Jackson Township is serviced by a State Highway. These highways are important for the transportation of agricultural equipment, services, and produce. Map # 3 illustrates the county road system.

There are about 15 miles of township roads in the Township. Most of these miles are rated by the Township as "high priority." This means they are well maintained gravel roads that are cleared soon after snow falls. They are generally mail and school bus routes. "Low priority" are generally dirt roads that are not cleared in the winter. Map #6 shows the Township road system.

Table # 10: Jackson Township Road System

Road Category	Miles in Township
State	0
County	12
Township: High Priority	10
Low Priority	5

THE PUBLIC SCHOOL DISTRICT

Jackson Township is located in Sargent Central and Oakes school districts. (See Map #4).

FIRE DISTRICTS AND DEPARTMENTS

Fire districts are taxation districts to raise revenue for fire protection. Every fire district has a fire department, but not every fire department has a fire district. Some fire departments are funded through the general tax funds instead of a special fire district. All fire departments receive some money back from the fire insurance paid by property owners. The state collects the money from the insurance companies and distributes it back down to the local fire departments. Map #5 illustrates the Sargent County Fire District.

EXISTING LAND USE

The existing land use in Jackson Township is primarily intensive agricultural. More specifically, the land is used for crop production. This is in keeping with the long-term

goals of township residents, who wish to retain the township's agricultural integrity. The existing ownership and road system are illustrated on Map #6.

Table # 11: Nonagricultural Land Uses, Jackson Township, 1990

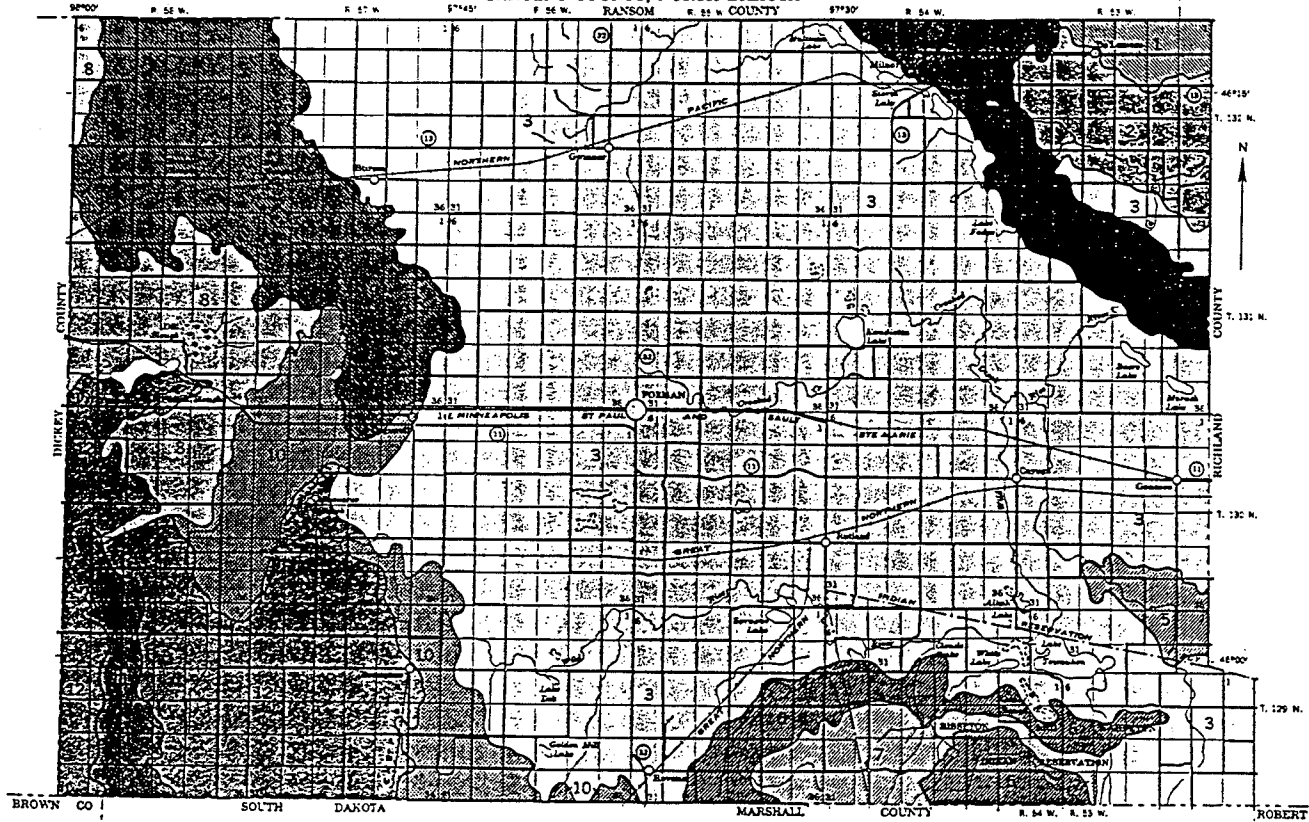
Type of Land use	Number in Township
Nonfarm Dwellings	3
Public & Semi-Public	0
Transportation, Communication & Utilities	1
Commercial Uses	1

Map #1

Soils

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
NORTH DAKOTA AGRICULTURAL EXPERIMENT STATION

GENERAL SOIL MAP SARGENT COUNTY, NORTH DAKOTA

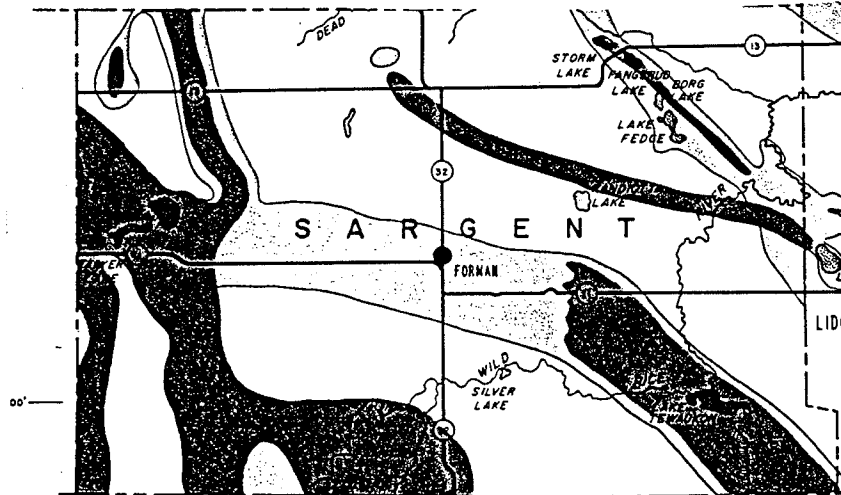


SOIL ASSOCIATIONS

- | | | | |
|--|---|--|--|
| Exline-Aberdeen association: Spodosol soils in old, clayey lake sediments | meca-Fertman association: Well-drained sandy and loamy soils underlain by gravel and sand | Forman-Buse association: Well-drained to excessively drained, undulating and rolling soils in loamy glacial till | Gardena-Glyndon association: Moderately well drained soils in old, silty lake sediments |
| Gardena-Owens association: Well-drained soils in old, silty and clayey lake sediments | megru-Fargo association: Poorly drained and somewhat poorly drained soils in old, clayey lake sediments | Earnest-Svea association: Well-drained, undulating soils in loamy glacial till; prismatic-blocky subsoil | Valentine association: Sandy soils in a choppy area where differences in elevation are 20 to 40 feet |
| Forman-Aastad association: Well drained and moderately well drained, nearly level and undulating soils in loamy glacial till; prismatic-blocky subsoil | Owen-Fargo association: Moderately well drained to poorly drained soils in old, silty and clayey lake sediments | Gardena-Spottswood-Wessington association: Well-drained loamy soils underlain by sand and gravel | Valentine-mecis association: Sandy soils in a choppy area where differences in elevation are generally less than 20 feet |

Source: Soil Survey, Sargent County, U.S. Dept. of Ag. Series 1958 #75, January 1964.

MAP #2
AQUIFERS - SARGENT COUNTY

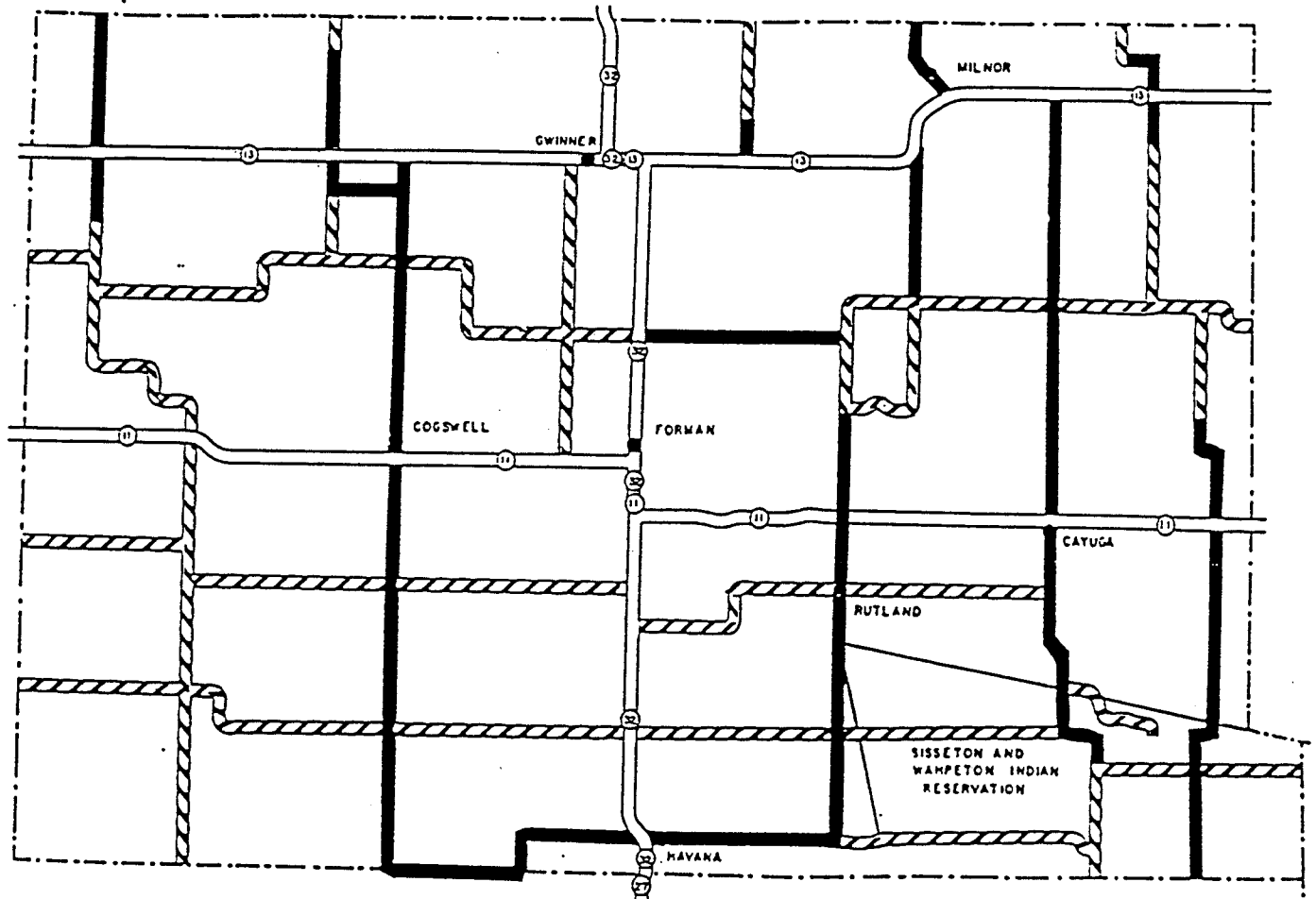


Light 50 to 500 GPM
Dark More than 500 GPM

Source: RC&D Plan, Fargo, ND 1980

MAP #3

SARGENT COUNTY ROAD SYSTEM



COUNTY PAVED ROADS **————**
COUNTY GRAVEL ROADS **//////**

MILNOR SCHOOL DISTRICT

WILEY M LNOR HALL

WHITNEY W STONE HILL

WILSON WILSON

WILSON WILSON

WILSON WILSON

WILSON WILSON

WILSON WILSON

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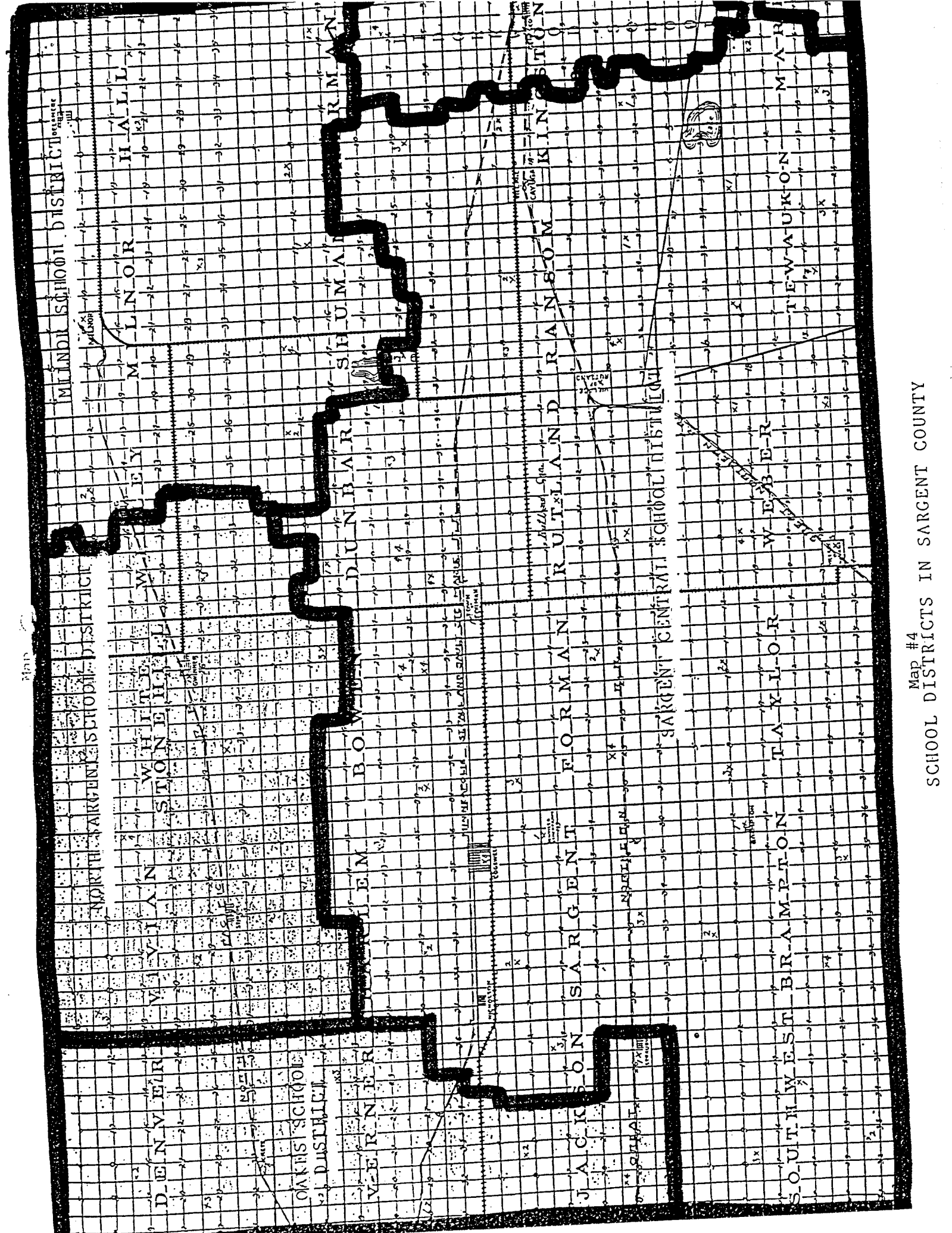
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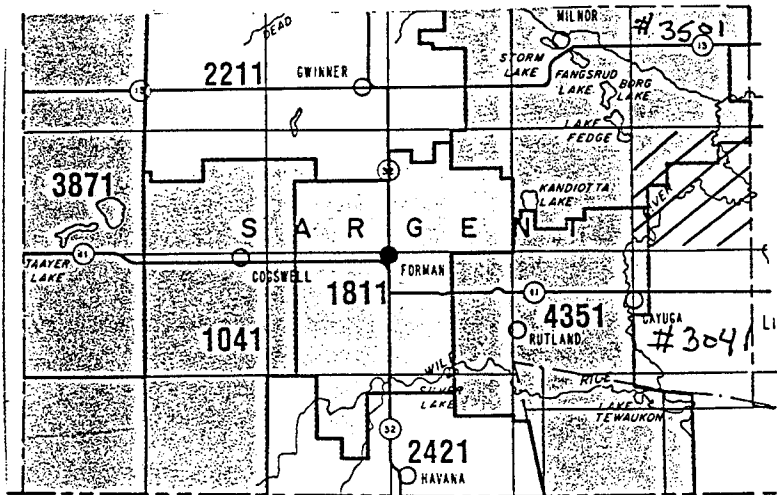
WILSON WILSON



Map #4
SCHOOL DISTRICTS IN SARGENT COUNTY

Map #5

SARGENT COUNTY FIRE DISTRICTS



Source: RC&D Plan, Fargo, ND 1980.



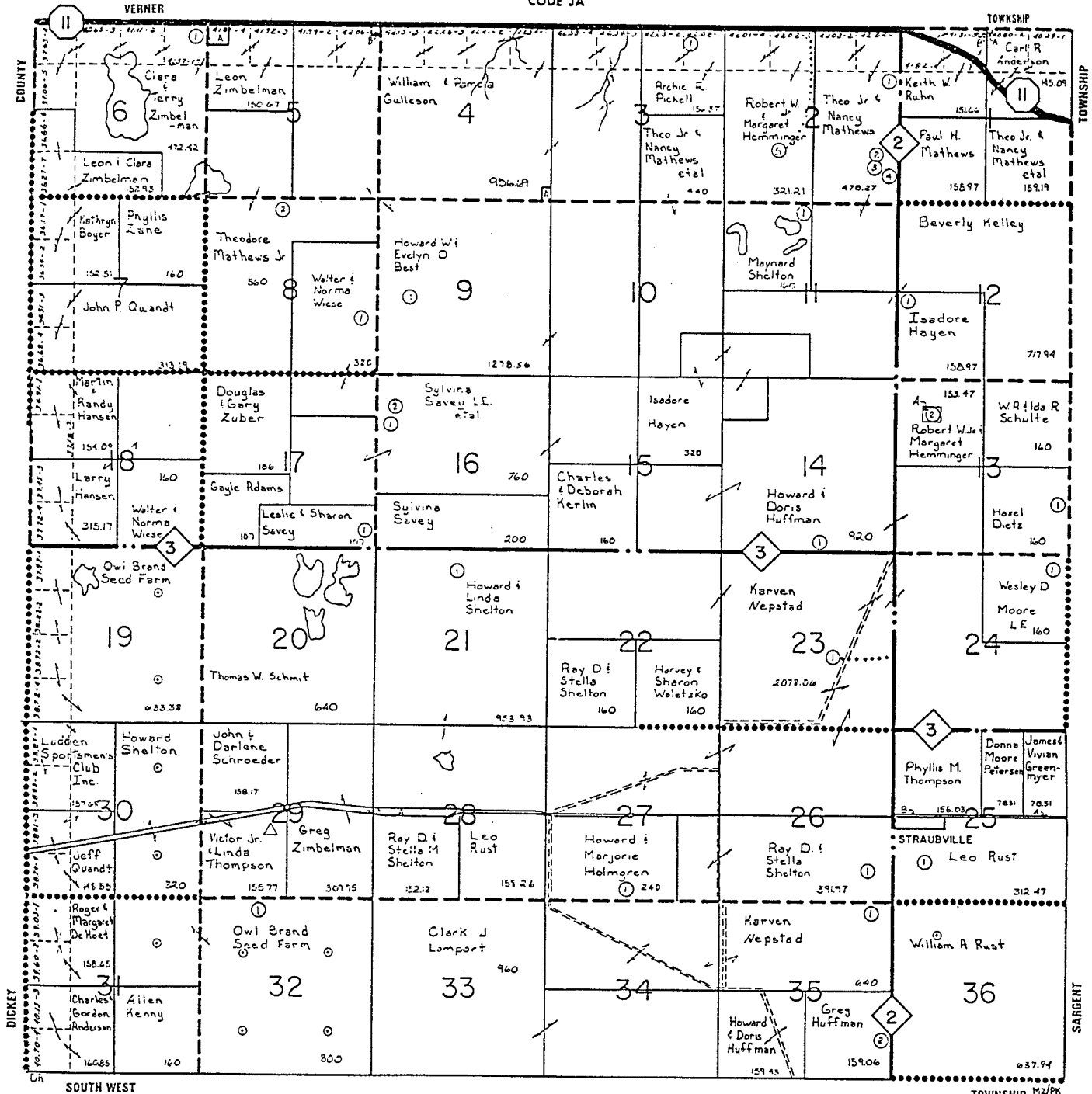
MAP OF JACKSON



TOWNSHIP 130 N

RANGE 58 W

CODE JA



SEE SMALL TRACT OWNERS FOLLOWING TOWNSHIP MAPS

DENVER	VIVIAN	WHITE STONE HILL	WELLEY	WILSON	WILE
VERNER	WADSWORTH	BOWEN	BURBANK	SHUPAR	HELMAN
WILSON	SARGENT	FORBANK	BUTLAND	FRANKSON	WILSON
SOUTH WEST	BRAMPTON	TAYLOR	NEER	TEWARIAN	WADSWORTH