

## Unit 2: Local Plan Review – Prerequisites and Planning Process



33

## Prerequisite(s)

*What is the purpose of this portion of the Plan Review Requirements?*

**Prerequisites are intended to confirm the commitment of the state, tribe or local community to follow through with the implementation of the plan.**

**This commitment is confirmed through the approval and adoption of the plan by local officials, and demonstrated by their submittal of formal resolutions of adoption.**



34

## Prerequisite(s) – Single Jurisdiction

IFR Requirement: § 201.6 (c) (5) Adoption by the Local Governing Body (1/3)

- A. Has the **local governing body adopted** the plan?
- B. Is **supporting documentation**, such as a (“signed and sealed”) **resolution**, included?

### Key Words and Issues

“**local governing body**” – i.e., the one that could be an HMGP subgrantee, such as a town’s Board of Selectmen or Town Council, a City Council, County Commissioners, a Tribal Council, etc.



35

## Prerequisite(s) – Single Jurisdiction

IFR Requirement: § 201.6 (c) (5) Adoption by the Local Governing Body (cont'd)

### Key Words and Issues (continued)

“**adopted**” versus “**approved**” – the local governing body must adopt the plan, the approval of the plan by the hazard mitigation team or another appointed body such as a planning commission is not enough

**proof** versus **assertions** – this is one of the few requirements where proof of compliance (i.e., a signed and sealed resolution) must be provided



36

## Prerequisite(s) – Multi-Jurisdictional

IFR Requirement: § 201.6 (c) (5) Multi-Jurisdictional Plan Adoption (2/3)

- A. *Does the plan indicate the specific jurisdictions **represented** in the plan?*
- B. *For **each jurisdiction**, has the local governing body **adopted** the plan?*
- C. *Is **supporting documentation**, such as a (“signed and sealed”) resolution, included for each participating jurisdiction?*

### Key Words and Issues

Multi-Jurisdictional hazard mitigation plans can be pursued in a number of different ways but at the end of the process, each of the individual jurisdictions must adopt the plan to preserve their HMGP eligibility.



37

## Prerequisite(s) – Multi-Jurisdictional

IFR Requirement: § 201.6 (c) (5) Multi-Jurisdictional Plan Adoption (2/3 continued)

### *What if?*

*If a multi-jurisdictional plan identifies that a county and five constituent municipalities are “covered” by the plan but the submittal only includes resolutions of adoption from the county and four of the communities, is this requirement satisfied?*

*What if the fifth community never submits the resolution of adoption?*



38

## Prerequisite(s) – Multi-Jurisdictional

IFR Requirement: § 201.6 (a) (3) Multi-Jurisdictional Planning Participation (3 of 3)

A. *Does the plan describe **how** each jurisdiction participated in the plan's development?*

### Key Words and Issues

“**how**” versus “**how well**” – the former is quantitative (revisions can be required) and the latter is qualitative (revisions can only be recommended)

also note the potential overlap of this requirement with § 201.6 (c) (1) Documentation of Planning Process (slide 41)



39

## Planning Process

*What is the purpose of this portion of the Plan Review Requirements?*

**DMA 2000 is based on the premise that the hazard mitigation planning process needs to be as inclusive as possible.**

**The intent is to ensure that community values are expressed and that available information, expertise and resources are brought to bear on the community's issues to the extent possible.**



40

# Planning Process

IFR Requirement: § 201.6 (c) (1) Documentation of Planning Process (1 / 1)

- A. Does the plan provide a narrative description of **the process followed** to prepare the plan?
- B. Does the plan indicate **who was involved** in the planning process?

## Key Words and Issues

“**the process**” may not always be defined or described in one tidy location in the plan

“**who**” can be satisfied by identifying organizations and/or agencies; names of individuals are not required



41

# Planning Process

IFR Requirement: § 201.6 (c) (1) Documentation of Planning Process (1 / 1 cont'd)

- C. Does the plan indicate **how** the public was involved?
- D. Was there an **opportunity** for neighboring communities, agencies, businesses, academia, nonprofits, **and** other interested parties to be involved in the planning process?

## Key Words and Issues

“**opportunity**” can be broadly interpreted and has both quantitative and qualitative aspects – relative success should be noted for review of Plan Maintenance Process

“**and**” versus “**or**”



42

# Planning Process

IFR Requirement: § 201.6 (c) (1) Documentation of Planning Process (1 / 1 cont'd)

*E. Does the planning process describe the review and incorporation, **if appropriate**, of **existing** plans, studies, reports **and** technical information?*

## Key Words and Issues

“**appropriate**” is in the eyes of the beholder

how will the reviewer know what, if anything is “**existing**”?



43

# Small Group Working Session – Prerequisites and Planning Process

*This session covers pages 3 and 4 of the Crosswalk.*

*The end product is a completed plan review of the Prerequisite and Planning Process for the City of Darwin, Iowa plan.*



44

# Small Group Results

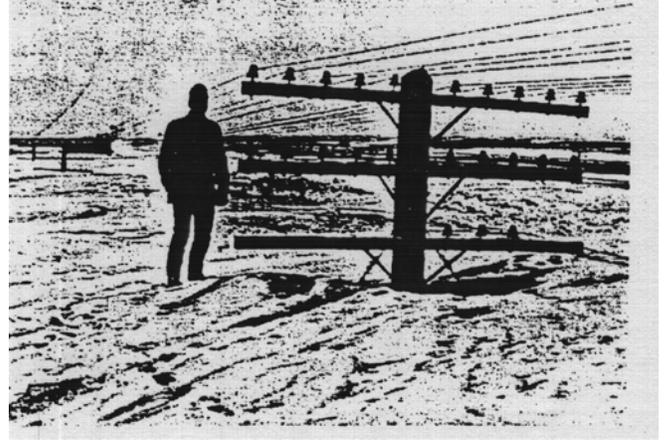
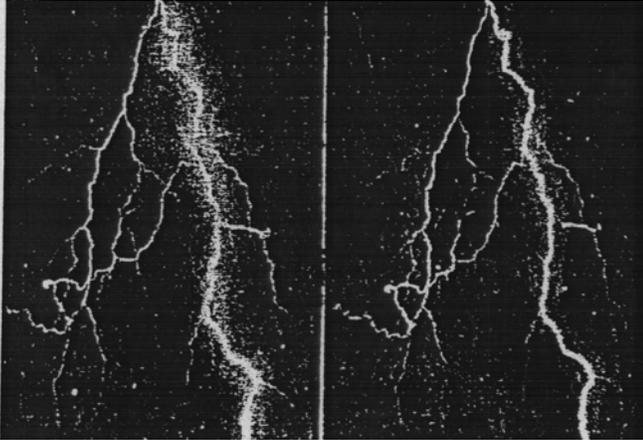
## Prerequisites and Planning Process

Element	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Group 8	Group 9	Group 10
§201.6 (c) (5) Adoption by the Local Governing Body										
A. Adoption										
B. Supporting documentation										
§201.6 (c) (1) Documentation of Planning Process										
A. Description of the process followed to prepare the plan										
B. Who was involved in the planning process										
C. How the public was involved										
D. How neighboring communities, agencies, businesses, academia, nonprofits, other interested parties had the opportunity to be involved in the process										
E. How existing plans, studies, reports and technical information were reviewed and incorporated in the plan (if appropriate)										

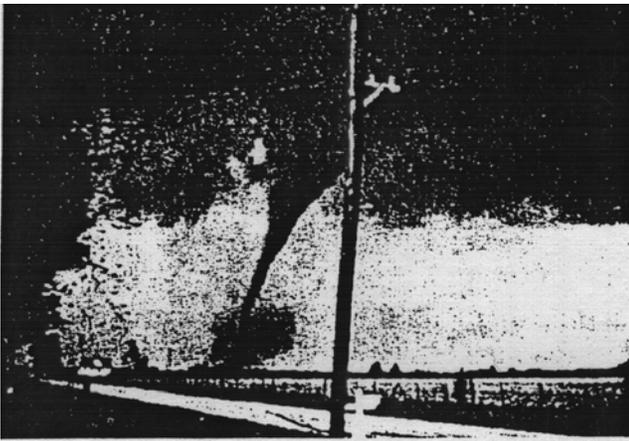


**FEMA**

# DARWIN, IOWA



# HAZARD MITIGATION PLAN



CITY OF DARWIN, IOWA

LOCAL HAZARD MITIGATION PLAN

Table of Contents

Purpose of Hazard Mitigation Plan

The Planning Process

Community Profile

Hazard Analysis and Risk Assessment

Community Hazard Mitigation Goals and Alternatives

Implementation

Evaluation Schedule

Appendices

- A. Community Profile
- B. Flood
- C. Tornado-Extreme Winds
- D. Thunderstorms – Lightning and Hail
- E. Winter Storms
- F. Drought
- G. Earthquake
- H. Hazardous Materials

# HAZARD MITIGATION PLAN

for

**Darwin, Iowa**

## Purpose of Hazard Mitigation Plan

This hazard mitigation plan is being developed to assess the ongoing mitigation activities in the community, to evaluate mitigation measures that should be undertaken, and to outline a strategy for implementation of mitigation projects.

This Local Hazard Mitigation Plan was adopted on January 13, 2003

Authority: City of Darwin, Iowa

Public Meeting Date(s): January 13, 2003

## The Planning Process

In 2002 the Darwin Department of Emergency Services (DES) was awarded a hazard mitigation planning grant by the State Emergency Management Agency (SEMA). After receiving the grant, DES formed the Hazard Mitigation Planning Committee (HMPC) to develop the Darwin Hazard Mitigation Plan.

A Project Initiation Meeting was held September 23, 2002 and was attended by the HMPC, consisting of seven agency representatives and SEMA representatives. The HMPC decided to create several sub-committees to work with the community and ensure they had adequate input into the Hazard Mitigation Plan. These sub-committees are the Risk Assessment Committee, the Agency Coordinating Committee, and the Public Outreach Committee. The HMPC hosted a series of working meetings to educate stakeholders about their risks, involve them in identifying issues, and educate them about alternative mitigation actions.

The HMPC meetings were held on the following days and are summarized as follows:

- September 23, 2002 – Project Initiation Meeting; this meeting was attended by several agency representatives and SEMA Representatives. The planning project was introduced and DMA 2000 requirements were explained. The planning process and project timeline were established.
- February 5, 2003 – Planning Team Workshop; attended by agency representatives and SEMA representatives. The hazard mitigation planning methodology and results for the draft hazard identification and vulnerability assessment were presented. A brief training session was given on involving the public in the planning process.
- February 24, 2003 – Planning Workshop; attended by agency representatives. The results of the draft vulnerability assessment and preliminary hazard mitigation plan were presented. The participants were given materials and instruction on how to best review and provide feedback on the results. Information was also presented on how to select appropriate mitigation actions for the identified vulnerabilities. Preliminary goals and objectives were established.
- March 13, 2003 – HMPC Committee Briefing; attended by members of the HMPC and Sub-committee Chairs. This meeting provided an overview and discussion of the hazard mitigation planning process, a review of the work accomplished to-date, and an outline of next steps.
- April 14, 2003 – Working Meeting; attended by HMPC and agency representatives. The agency representatives brought questions and comments from their constituents on the planning work completed to-date. Corrections to the maps were noted.
- April 15, 2003 – Public Information Meeting; attended by people representing the non-profit, public service, community development, private institutions, and utility sectors. Information on the draft vulnerability assessment, work accomplished to-date, and next steps were presented.
- July 1, 2003 – Working Meeting; attended by agency representatives. Reviewed the work-to-date on their review and field verification of the vulnerability assessment.
- September 15, 2003 – Working Meeting; attended by agency representatives. Draft mitigation recommendations for the identified vulnerabilities were handed out for review.

- October 27, 2003 – Draft Plan Review Meeting; attended by the HMPC and sub-committee representatives. The review comments from the 1<sup>st</sup> draft of the plan were discussed. Revisions to the plan were completed by November 15, 2003, and distributed for final review and comments.
- December 2, 2003 – Final Draft Plan Review Meeting; attended by the HMPC and sub-committee representatives. The review comments from the final draft of the plan were discussed. Final revisions to the plan were completed by December 15, 2003, and distributed for public review.
- January 6, 2004 – A public hearing was held to collect general public feedback. Revisions to the plan were completed by January 19, 2004, and the plan went for final production on January 27, 2004.

The Hazard Mitigation Planning Committee informed participants about these meetings through various means, including newsletters, letters, and newspaper ads.

## COMMUNITY PROFILE CONTENTS

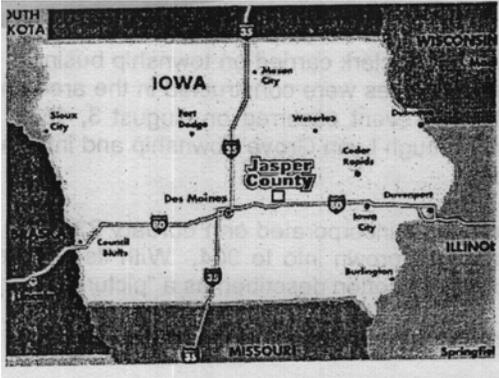
Location	1
Iowa Map	
County Map	
Township Map	
History	2
Transportation	2
Climate	3
Population Profile	3
Housing Profile	4
Housing Occupancy	
Housing Characteristics	
Education	7
Economic Profile	8
Business and Industry Profile	11
Community Services	11
Water System	
Sanitary Sewer System	
Emergency Services	
Utilities	
Medical Services	
Critical Facilities	
Other Plans	
Major Rivers/Watersheds	14

# Community Profile

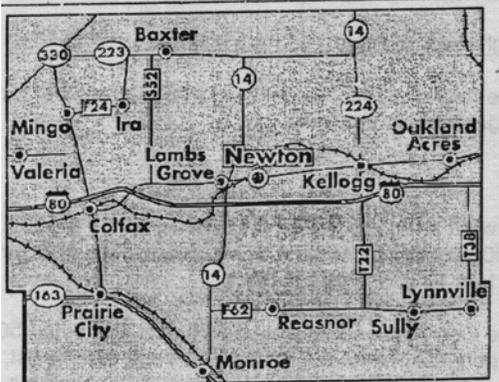
## Location

The City of Darwin is located in southeastern Beagle County. The community is 10 miles from Interstate 80, 18 miles from Newton, and 43 miles from Des Moines.

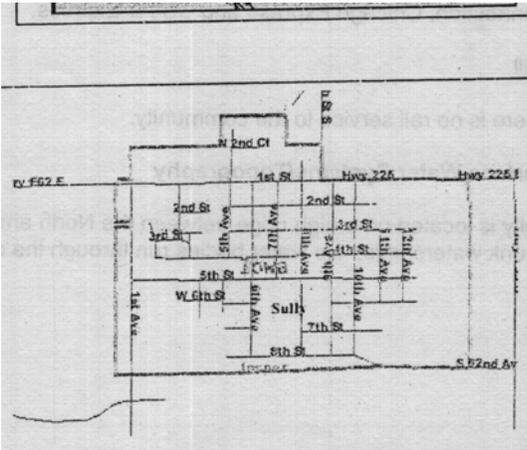
STATE OF IOWA



BEAGLE COUNTY



CITY OF DARWIN



## **History**

Darwin lies along an old wagon train road called "The Diamond Trail." The county commissioners "laid off" Lynn Grove township, where the town of Darwin is located, on May 14, 1846. Lynn Grove was one of the three original townships. The other two were Fairview and Elk Creek. Elk Creek Township adjoins Lynn Grove Township on the west.

Early settlers of the area played an important part in the development of the town. Records show that trustees and a clerk carried on township business as early as 1873. When several businesses and a number of homes were constructed in the area, the residents concluded that a town should be platted. This historic event occurred on August 3, 1882. In 1883, Alfred Darwin, a railroad magnate, built a railroad through Lynn Grove Township and influenced the establishment of a depot that was named in his honor.

The town was incorporated on February 23, 1901. The population at that time was 150. Since then, the town has grown into to 904. With its well-kept houses, yards and flowers, parks and business district, Darwin is often described as a "picture book town."

Source: City Clerk, City of Darwin

## **Transportation**

### Highway/Interstate

The Interstate 80 interchange is 15 minutes north of Darwin. State Highway 223 runs along the northern edge of the community.

### Air

Newton's general aviation airport is located about 20 miles northwest of the City. The airport has a 5,600 ft. runway and full service capability. The airport routinely handles both prop and jet aircraft with up to a 16 passenger capacity.

The Des Moines International Airport is located 50 miles northwest. Airlines serving the Des Moines Airport are American, America West, Northwest, TWA, United, Skyway, Vanguard, Com Air-Delta Connection, Chicago Express and US Air Express.

### Rail

There is no rail service to the community.

## **Surface Water Systems/Topography**

Darwin is located on a high ridge between the North and South Skunk Rivers within the North and South Skunk watersheds. No water bodies run through the community.

## Climate

### Average Monthly Temperatures

Month	Avg. High	Avg. Low	Mean	Avg. Precip.	Record High	Record Low
Jan	27°F	8°F	17°F	1.20 in.	60°F (1956)	-34°F (1974)
Feb	33°F	13°F	23°F	1.28 in.	74°F (1930)	-35°F (1996)
Mar	46°F	24°F	35°F	2.40 in.	90°F (1910)	-17°F (1962)
Apr	59°F	34°F	47°F	3.58 in.	92°F (1980)	1°F (1982)
May	70°F	45°F	58°F	4.31 in.	98°F (1925)	22°F (1907)
Jun	80°F	56°F	68°F	4.64 in.	102°F (1911)	35°F (1993)
Jul	84°F	61°F	73°F	4.09 in.	106°F (1911)	29°F (1920)
Aug	82°F	58°F	70°F	4.41 in.	107°F (1930)	36°F (1950)
Sep	75°F	49°F	62°F	3.55 in.	101°F (1925)	21°F (1984)
Oct	63°F	37°F	50°F	2.73 in.	95°F (1963)	2°F (1925)
Nov	46°F	25°F	36°F	2.41 in.	82°F (1968)	-15°F (1976)
Dec	32°F	14°F	23°F	1.47 in.	69°F (1998)	-32°F (1985)

Source: Weather Channel

## Population/Age

The 2000 census reported a population of 904 compared to a 1990 population of 841 an increase of 7.49%. 28.5% of the population is under 18, 51.5% between 18 and 65, and 20% 64 and over. The median age is 38.7 years. 99.8% of the population identified themselves as “white”, 0.2% identified themselves as “Asian.”

### Darwin Iowa, Population Characteristics

Subject	Number	Percent
<b>Total Population</b>	<b>904</b>	<b>100.0</b>
<b>SEX AND AGE</b>		
Male	439	48.6
Female	465	51.4
Under 5 years	62	6.9
5 to 19 years	219	24.3
20 to 34 years	121	13.4
35 to 54 years	238	26.3
55 to 74 years	175	19.4
75 and over	89	9.8
Median age (years)	38.7	(X)

<b>Subject</b>	<b>Number</b>	<b>Percent</b>
18 years and over	646	71.5
Male	312	34.5
Female	334	36.9
65 years and over	181	20.0
Male	75	8.3
Female	106	11.7
<b>RACE</b>		
One race	904	100.0
White	902	99.8
Asian	2	0.2
Korean	2	0.2
<b>RELATIONSHIP</b>		
<b>Total population</b>	<b>904</b>	<b>100.0</b>
In households	904	100.0
In group quarters	0	0.0
<b>HOUSEHOLDS</b>		
<b>Total households</b>	<b>348</b>	<b>100.0</b>
Family households (families)	271	77.9
Nonfamily households	77	22.1
Households with individuals under 18 years	126	36.2
Households with individuals 65 years and over	121	34.8
Average household size	2.6	(X)
Average family size	3.03	(X)

(x) Not Applicable

Source: U.S. Bureau of the Census, Census 2000

### **Housing Occupancy**

The total number of housing units identified in the 2000 census Housing Occupancy/Tenure category was 360. The occupancy rate was 96.7% (348 unites). The number of owner-occupied housing units was 294 (84.5%) and the number of renter-occupied housing units 54 (15.5%). The average household size of owner-occupied units was reported as 2.76 and the average household size of renter-occupied units was 1.74.

## Housing Characteristics

The City has experienced growth in new residential real estate and projects continued growth. The 2000 Census reported 33 units (9.1 %) were built between 1990 and March 2000. No new housing permits have been issued since 2000. North Slope Addition is the most recent housing development with the final plat approved October 1995. All eight (8) lots in this addition are sold with two (2) remaining vacant at this time.

In the category Selected Housing Characteristics, the 2000 Census reported 362 total housing units. 4 (1.1 %) housing units were built between January 1999 and March 2000. 20 (5.5%) were built between 1995 and 1998. 9 (2.5%) were built between 1990 and 1995. 50 (13.8%) units were built during the 1980s, 82 (22.7) during the 1970s, and 43 (11.9) during the 1960s. 67 (42.5%) units were built between 1940 and 1959 and 87 units (24.0%) in 1939 or earlier. The median room size was reported as 6 rooms. The median value of owner-occupied houses was reported as \$81,800. The following table displays Selected Housing Characteristics reported in the 2000 Census.

Profile of Selected Housing Characteristics: 2000

<b>Subject</b>	<b>Number</b>	<b>Percent</b>
<b>Total housing units</b>	<b>362</b>	<b>100.0</b>
<b>UNITS IN STRUCTURE</b>		
1-unit, detached	315	87.0
1-unit, attached	9	2.5
2 units	12	3.3
3 or 4 units	16	4.4
5 to 9 units	10	2.8
<b>YEAR STRUCTURE BUILT</b>		
1999 to March 2000	4	1.1
1995 to 1998	20	5.5
1990 to 1994	9	2.5
1980 to 1989	50	13.8
1970 to 1979	82	22.7
1960 to 1969	43	11.9
1940 to 1959	67	18.5
1939 to earlier	87	24.0
<b>ROOMS</b>		
1 room	2	0.6
2 rooms	2	0.6
3 rooms	9	2.5
4 rooms	49	13.5
5 rooms	82	22.7
6 rooms	73	20.2
7 rooms	64	17.7
8 rooms	43	11.9
9 or more rooms	38	10.5

<b>Subject</b>	<b>Number</b>	<b>Percent</b>
Median (rooms)	6.0	(X)
<b>HOUSE HEATING FUEL</b>		
Utility gas	175	50.3
Bottled, tank, or LP gas	30	8.6
Electricity	105	30.2
Fuel oil, kerosene, etc.	34	9.8
No fuel used	2	0.6
<b>Specified owner-occupied units</b>		
	<b>275</b>	<b>100.0</b>
<b>VALUE</b>		
Less than \$50,000	22	8.0
\$50,000 to \$99,999	166	60.4
\$100,000 to \$149,999	73	26.5
\$150,000 to \$199,999	12	4.4
\$200,000 to \$299,999	2	0.7
Median (dollars)	81,800	(X)
<b>MORTGAGE STATUS AND SELECTED MONTHLY OWNER COSTS</b>		
With a mortgage	131	47.6
Less than \$300	0	0.0
\$300 to \$499	8	2.9
\$500 to \$699	32	11.6
\$700 to \$999	48	17.5
\$1,000 to \$1,499	38	13.8
\$1,500 to \$1,999	5	1.8
Median (dollars)	844	(X)
Not mortgaged	144	52.4
Median (dollars)	278	(X)
<b>Specified renter-occupied units</b>		
	<b>46</b>	<b>100.0</b>
<b>GROSS RENT</b>		
Less than \$200	6	13.0
\$200 to \$299	6	13.0
\$300 to \$499	13	28.3
\$500 to \$749	17	37.0
\$750 to \$999	2	4.3
No cash rent	2	4.3
Median (dollars)	442	(X)

<b>Subject</b>	<b>Number</b>	<b>Percent</b>
<b>GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME IN 1999</b>		
Less than 15 percent	13	28.3
15 to 19 percent	11	23.9
20 to 24 percent	4	8.7
25 to 29 percent	2	4.3
30 to 34 percent	11	23.9
35 percent or more	3	6.5
Not computed	2	4.3

(x) Not Applicable

Source: U.S. Bureau of the Census, Census 2000

## Education

Darwin is part of the Lynnville-Darwin Community School District, which includes Darwin and Lynnville. The district serves appropriately 541 students. The Elementary, Middle, and High School are located at 12476 Highway 225E.

The Darwin Christian School is a K-8 school that is run by the Christian School Society. The school has a total of 150 students.

### School Enrollment – Population 3 Years and Over

<b>Subject</b>	<b>Number</b>	<b>Percent</b>
<b>Population 3 years and over enrolled in school</b>	<b>341</b>	<b>100.0</b>
Nursery school, preschool	17	21
Kindergarten	18	7.5
Elementary school (grades 1-8)	129	53.5
High school (grades 9-12)	61	25.3
College or graduate school	16	6.6

Source: U.S. Bureau of the Census, Census 2000

Education Attainment.

Of the 580 residents over 25, 77.1% have attained a high school diploma or higher and 12.9% have attained a bachelor's degree or higher. The following summarized the 2000 census data:

Education Attainment

Subject	Number	Percent
<b>Population 25 years and over</b>	<b>580</b>	<b>100.0</b>
Less than 9th grade	115	19.8
9th to 12th grade, no diploma	18	3.1
High school graduate (includes equivalency)	274	47.2
Some college, no degree	65	11.2
Associate degree	33	5.7
Bachelor's degree	51	8.6
Graduate or professional degree	24	4.1
Percent high school graduate or higher	77.1	(X)
Percent bachelor's degree or higher	12.9	(X)

Source: U.S. Bureau of the Census, Census 2000

**Economic Characteristics**

The following table provides a summary of the 2000 Census Profile of Selected Economic Characteristics:

Subject	Number	Percent
<b>EMPLOYMENT STATUS</b>		
<b>Population 16 years and over</b>	<b>674</b>	<b>100.0</b>
In labor force	455	67.5
Civilian labor force	455	67.5
Employed	441	65.4
Unemployed	14	2.1
Percent of civilian labor force	3.1	(X)
Not in labor force	219	32.5
<b>Females 16 years and over</b>	<b>344</b>	<b>100.0</b>
In labor force	200	58.1
Civilian labor force	200	58.1
Employed	190	55.2
<b>Own children under 6 years</b>	<b>80</b>	<b>100.0</b>
All parents in family in labor force	63	78.8

<b>Subject</b>	<b>Number</b>	<b>Percent</b>
<b>COMMUTING TO WORK</b>		
<b>Workers 16 years and over</b>	<b>440</b>	<b>100.0</b>
Car, truck, or van -- drove alone	336	76.4
Car, truck, or van -- carpooled	27	6.1
Walked	45	10.2
Other means	5	1.1
Worked at home	27	6.1
Mean travel time to work (minutes)	17.0	(X)
<b>Employed civilian population 16 years and over</b>	<b>441</b>	<b>100.0</b>
<b>OCCUPATION</b>		
Management, professional, and related occupations	108	24.5
Service occupations	44	10.0
Sales and office occupations	125	28.3
Farming, fishing, and forestry occupations	2	0.5
Construction, extraction, and maintenance occupations	64	14.5
Production, transportation, and material moving occupations	98	22.2
<b>INDUSTRY</b>		
Agriculture, forestry, fishing and hunting, and mining	23	5.2
Construction	40	9.1
Manufacturing	116	26.3
Wholesale trade	11	2.5
Retail trade	38	8.6
Transportation and warehousing, and utilities	30	6.8
Information	9	2.0
Finance, insurance, real estate, and rental and leasing	22	5.0
Professional, scientific, management, administrative, and waste management services	18	4.1
Educational, health and social services	70	15.9
Arts, entertainment, recreation, accommodation and food services	14	3.2
Other services (except public administration)	39	8.8
Public administration	11	2.5
<b>CLASS OF WORKER</b>		
Private wage and salary workers	371	84.1
Government workers	39	8.8
Self-employed workers in own not incorporated business	31	7.0

<b>Subject</b>	<b>Number</b>	<b>Percent</b>
<b>INCOME IN 1999</b>		
<b>Households</b>	<b>338</b>	<b>100.0</b>
Less than \$10,000	15	4.4
\$10,000 to \$14,999	6	1.8
\$15,000 to \$24,999	23	6.8
\$25,000 to \$34,999	58	17.2
\$35,000 to \$49,999	78	23.1
\$50,000 to \$74,999	95	28.1
\$75,000 to \$99,999	43	12.7
\$100,000 to \$149,999	16	4.7
\$150,000 to \$199,999	2	0.6
\$200,000 or more	2	0.6
Median household income (dollars)	47,344	(X)
With earnings	262	77.5
Mean earnings (dollars)	50,963	(X)
With Social Security income	123	36.4
Mean Social Security income (dollars)	12,854	(X)
With Supplemental Security Income	10	3.0
Mean Supplemental Security Income (dollars)	5,910	(X)
With public assistance income	6	1.8
Mean public assistance income (dollars)	300	(X)
With retirement income	45	13.3
Mean retirement income (dollars)	10,913	(X)
<b>Families</b>	<b>267</b>	<b>100.0</b>
Median family income (dollars)	54,018	(X)
Per capita income (dollars)	19,506	(X)
<b>Median earnings (dollars):</b>		
Male full-time, year-round workers	36,563	(X)
Female full-time, year-round workers	25,446	(X)

Subject	Number	Percent
<b>POVERTY STATUS IN 1999 (below poverty level)</b>		
<b>Families</b>	<b>3</b>	<b>(X)</b>
Percent below poverty level	(X)	1.1
<b>Families with female householder, no husband present</b>	<b>2</b>	<b>(X)</b>
Percent below poverty level	(X)	14.3
<b>Individuals</b>	<b>17</b>	<b>(X)</b>
Percent below poverty level	(X)	1.9
18 years and over	15	(X)
Percent below poverty level	(X)	2.4
65 years and over	4	(X)
Percent below poverty level	(X)	2.2

Source: U.S. Census Bureau, Census 2000

### Business and Industry

Darwin's business community includes over 60 businesses within one square mile. Basic services are provided by such businesses as the grocery store, service stations, bank, restaurants, insurance office, flower store, hardware and lumber stores, barber and hair stylists, and satellite offices of doctors, dentist, lawyers, and accountants. Several businesses provide supplies and services specifically for the agricultural community. There are also several trucking firms in and around the area that transport livestock, fuel, fertilizer, feed and grain.

The Darwin Co-op Exchange is the largest single employer. The cooperative is divided into three units. The elevator department provides seed, feed, fertilizer, grain storage and marketing. The oil department provides fuel, lubricant, tires, propane and a full service shop for cars, pickups, trucks, and tractors. The lumber department provides lumber and related products and provides planning and construction for farm, light commercial, and residential buildings.

Source: City of Darwin

### Community Services, Facilities and Infrastructure

#### Water System

The municipal well and water treatment plant use reverse osmosis for water purification. The Capacity of the water plant is 215,000 gallons. Average consumption is 75,000 gallons per day and peak consumption is 125,000 gallons per day.

#### Wastewater Treatment

The municipal wastewater treatment plant has been upgraded to provide the City with a state of the art facility that meets State requirements.

## Sanitary Sewer System

In the past the City experienced stormwater infiltration resulting in damage to the sanitary sewer system and back-up into basements. The City conducted smoke and camera testing throughout the system and instituted a repair/replacement program. In addition, the City passed and enforces a city ordinance prohibiting residential property owners from connecting their residential drainage systems (sump pumps, gutters) into the sanitary sewer system.

## Emergency Services

### Law Enforcement:

The Darwin police chief is available 24-hour a day. The community has a contract with the county to provide back-up officers and coverage when the full time staff is not available. In addition, the community participates in the Beagle County Selective Enforcement Response Team (SERT) and the Beagle/Poweshiek County Drug Task Force. Jail and dispatcher services are provided by the County Sheriff's office located in Newton. The E-911 system is countywide.

### Fire-Ambulance

The Darwin Rural Fire and Ambulance Department provide fire and ambulance services. 19 volunteers staff the department. 15 are certified as EMT -D's and 2 as EMT -A's. The department is housed in a fire station that was completed in 1992. The station includes parking for the vehicles, wash bays, storage room, offices, bathrooms, and a training and meeting room.

Equipment used by the fire department includes two pumpers, one tanker, quick attack unit, equipment van and a well equipped ambulance.

The fire and ambulance services are tax supported and also receive contributions for equipment purchased.

### Emergency Management

The Beagle County Emergency Management Coordinator, in coordination with a local emergency manager, provides emergency management system (mitigation, preparedness, response, and recovery) services for the community.

## Utilities

- Telephone Darwin Telephone Company
- Natural Gas Alliant Energy
- Water City
- Sanitation City
- Electricity Alliant Energy

## Medical Services

The nearest hospital is the Skiff Medical Center. Skiff Medical Center is a 68-bed primary care hospital located in Newton. The Center provides 24-hour emergency medical services, kidney dialysis, home care, surgery, obstetrics, intensive care, acute care, rehabilitation therapies, women's health services, and alternative health services. In addition, a wide range of medical services are available in Des Moines, Grinnell, and Pella.

The Darwin Family Health Center provides medical services for Darwin.

The Family Dentistry group provides dental services.

### Other Plans

Darwin Strategic Plan, November 1992

### Critical Facilities

Critical facilities are structures and infrastructure that the community places a priority on protecting. Damage to these facilities can impact the delivery of vital services, cause greater damages to other sections of the community, or can put special, vulnerable populations at risk. The Planning Committee identified the following critical facilities: (See Appendix A for Critical Facilities Map)

Facilities essential to the health and welfare of the entire population, especially following a hazard event:

- o City Hall/Emergency Operations Center
- o Fire Station
- o Medical Clinics
- o City Maintenance Building
- o Emergency Shelters (School/Churches)

Transportation systems:

- o State Highway 225

Lifeline Utility systems:

- o Wastewater Treatment Plant
- o Water Plant
- o City Wells

Vulnerable Population Centers:

- o School
- o Retirement Home

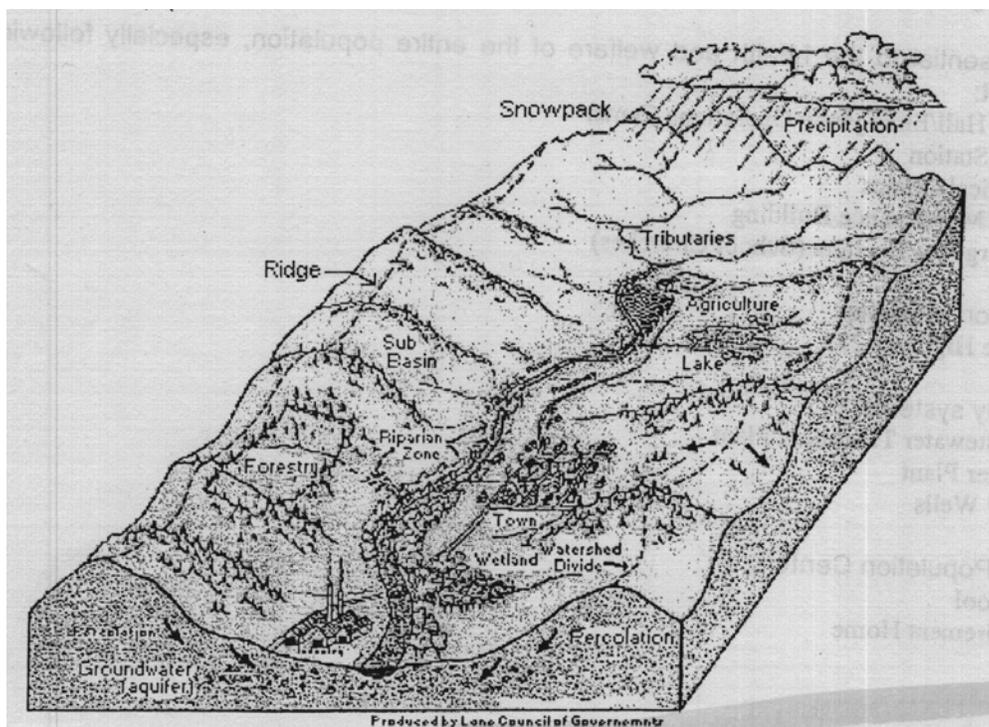
## Major Rivers/Watersheds

A watershed is the area of land where all of the water that is under it or drains off of it goes into the same place. John Wesley Powell, scientist geographer, put it best when he said that a watershed is:

"that area of land, a bounded hydrologic system, within which all living things are inextricably linked by their common water course and where, as humans settled, simple logic demanded that they become part of a community."

Watersheds come in all shapes and sizes. They cross county, state, and national boundaries. No matter a community is located it is in a watershed. The EPA's Office of Water, along with many local groups and State agencies, has been emphasizing the importance of organizing water quality improvement efforts on a watershed basis.

### Watershed Components



Source: <http://www.epa.gov>

Because watersheds are defined by natural hydrology, they represent the most logical basis for managing water resources. The resource becomes the focal point and managers are able to gain a more complete understanding of overall conditions in an area and the stresses that affect those conditions.

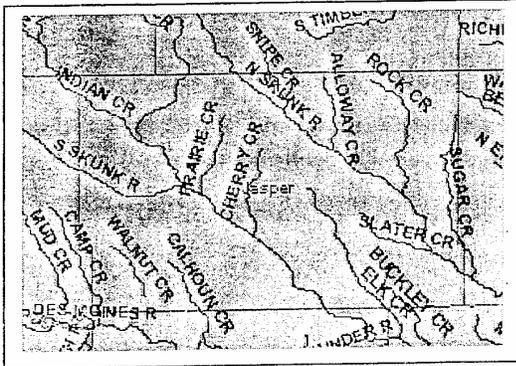
Traditionally, water quality improvements have focused on specific sources of pollution, such as sewage discharges, or specific water resources, such as a river segment or wetland. While this approach may be successful in addressing specific problems, it often fails to address the more subtle and chronic problems that contribute to a watershed's decline. For example, pollution from a sewage treatment plant might be reduced significantly after a new technology is installed and yet the local river may still suffer if other factors in the watershed, such as habitat destruction or polluted runoff, go unaddressed.

Watershed management can offer a stronger foundation for uncovering the many stresses that affect a watershed. The result is management better equipped to determine what actions are needed to protect or restore the resource. Major features of a Watershed Protection Approach are: targeting priority problems, promoting a high level of stakeholder involvement, integrated solutions that make use of the expertise and authority of multiple agencies, and measuring success through monitoring and other data gathering.

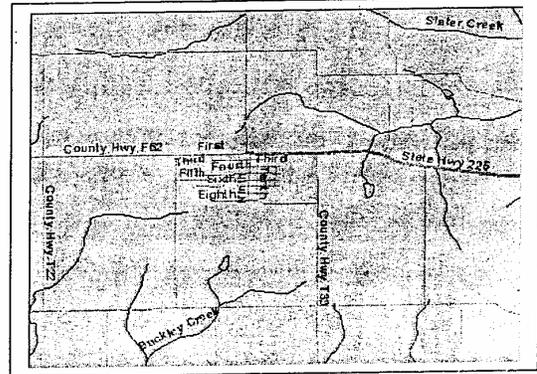
### Darwin Watershed

Darwin is located in the South Skunk and North Skunk Watersheds. There is no surface water in the City of Darwin.

Beagle County Waterways



Darwin

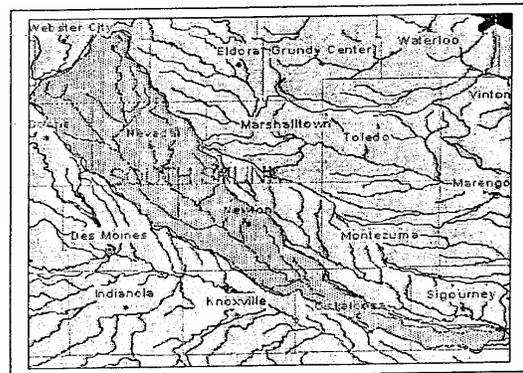


Source: EnviroMapper

### South Skunk Watershed

Rivers and Streams in this Watershed: 16  
 Lakes in the watershed: 213 Total  
 Number of watershed acres: 1838.3  
 River and stream miles:

- 2319.5 total river miles
- 982.1 perennial river miles
- No data available: % of total rivers and streams have been surveyed
- No data available: miles meet all designated uses

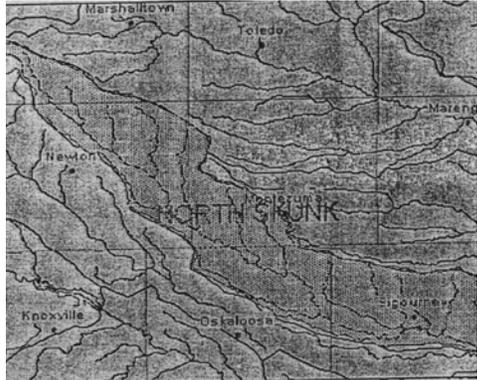


Aquifer	Sq. Miles	Rock Type
Mississippian aquifers	619	Sandstone and carbonate-rock aquifers
No Principal Aquifer	1245	N/A

**North Skunk Watershed**

Rivers and Streams in this Watershed: 13  
 (provided by EPA's first River Reach File)  
 Lakes in the watershed: 113  
 Total number of watershed acres: 1561.9  
 River and stream miles:

- 1292 total river miles
- 553.3 perennial river miles
- No data available: % of total rivers and streams have been surveyed
- No data available: miles meet all designated uses



Aquifer	Square Miles	Rock Type
Mississippian aquifers	542	Sandstone and carbonate-rock aquifers
No Principal Aquifer	321	N/A