

1997 ANNUAL NARRATIVE REPORT*

LITCHFIELD WETLAND MANAGEMENT DISTRICT

LITCHFIELD, MINNESOTA



Tyrone Flats WPA

Photo by Bev Meyer

Litchfield Wetland Management District, just a little south of the mythical Lake Wobegon. Here all the women are strong, all the men are good looking, and all the children are above average.

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Regional Office Approval

April 24, 1998
Date

29 April, 1998
Date

5/11/98
Date

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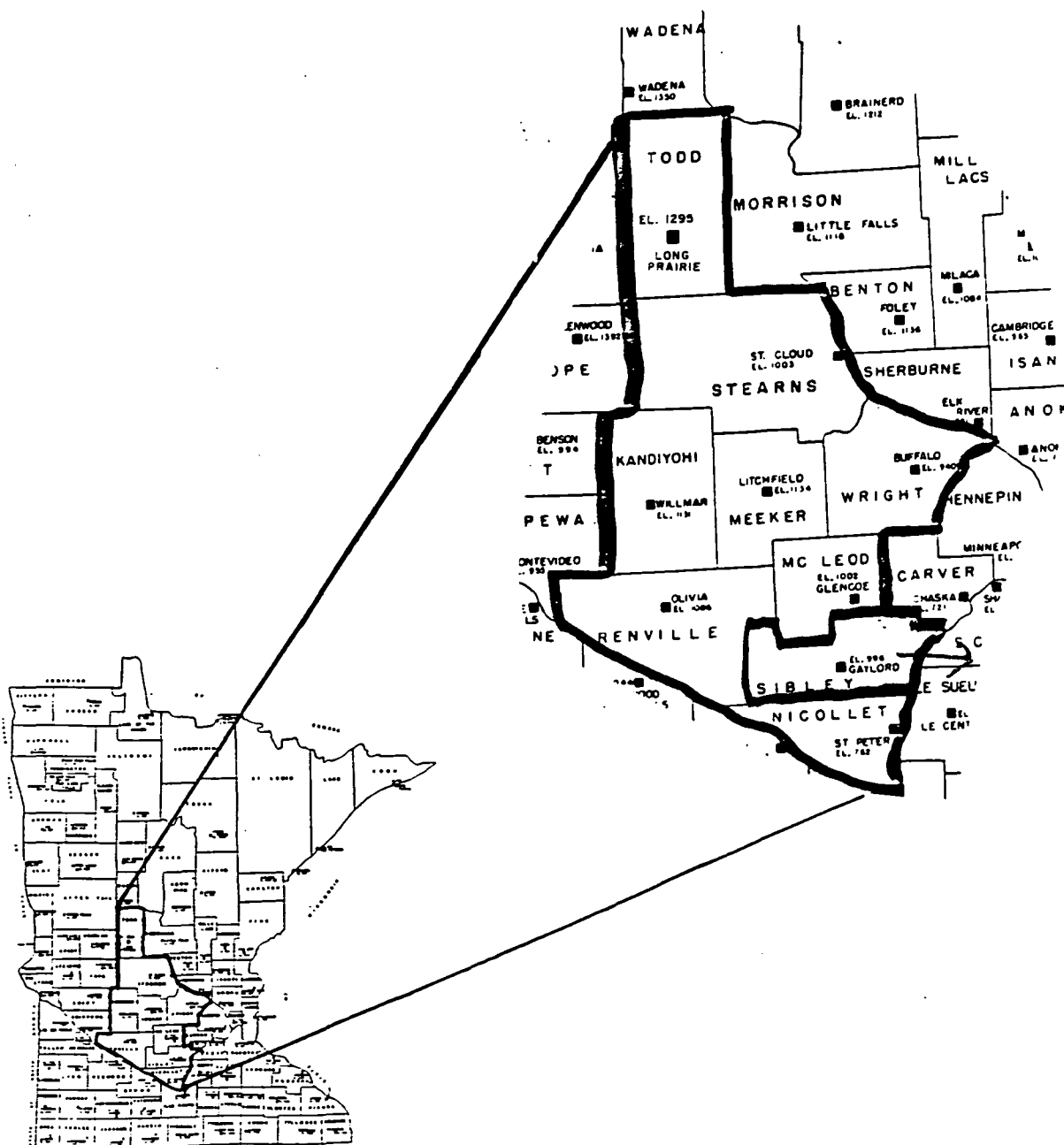
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Narrative reporting periods and formats have been changed. This narrative only reports information for the nine month period between the 1996 calendar year and the 1998 fiscal year so that cumulative totals remain accurate. Some traditional information has been incorporated into the new format to maintain the narratives usefulness to field stations.

Introduction

The Litchfield Wetland Management District (District) was established in 1978 to manage tracts purchased under the Small Wetlands Acquisition Program. The District manages 138 Waterfowl Production Areas (WPAs) covering nearly 31,000 acres of fee title (Table 1) and 391 Easements encompassing over 31,325 acres (Table 2). These tracts are scattered throughout the nine central counties of Minnesota shown below:



Within these counties rolling woodlands to the north and east . . .



Colfax WPA

Photo by Steve Erickson

gradually change to flat, fertile, extensively drained prairie farmlands to the south and west.



Cedar Mills Township

Photo by Rob Bruesewitz

District lands include portions of the Northern Mixed Forest, Eastern Hardwood Forest, Oak Savanna, and Tall Grass Prairie biomes. Soils, precipitation, climate, water quality, and land use vary greatly but essentially all areas have been significantly altered and degraded by the activities of man.

The Litchfield District staff works with the Litchfield Acquisition Office to acquire the best wetland and upland habitat possible from willing sellers. Potential purchases are carefully screened and a mix of fee title and easement purchases are made in an effort to protect wetland complexes.

Once a new tract of land is purchased, restorations of drained wetlands and establishment of permanent nesting cover on the uplands are given top priority and usually completed within two years. These areas provide good habitats for a variety of wildlife but extremely high predation rates continue to hamper waterfowl production.

Table 1.

Fee Lands Managed by Litchfield WMD

<u>Acquisition-FY97</u>			<u>Fee Status as of 9/30/97</u>		
County & Goal Acres	No.	Acres (Wet)	Units	Total Tracts	Total Acres
Kandiyohi 32,660	4	398.48 (109)	57	170	12,666.90
McLeod 5,380	1	167.9 (40)	6	7	961.56
Meeker 15,440	1	123.8 (10)	15	46	4,467.11
Renville 3,000	1	160 (40)	2	2	320.00
Stearns 14,900	2	79.97 (8)	40	107	9323.54
Todd 6,560	0	0	5	8	722.35
Wright 17,140	0	0	13	32	2,347.95
TOTAL 85,540	9	930.15 (207)	138	372	30,809.41

Table 2.

Wetland Easement Lands Managed by Litchfield WMD

County & Goal Acres	<u>Acquisition-FY97</u>			<u>Fee Status as of 9/30/97</u>		
	No.	Acres	Wet Acres	No.	Acres	Wet Acres
Kandiyohi (32,660)	0	0	0	0.00	14,552.64	4,071
McLeod (5,093)	0	0	0	35	1,983.78	617
Meeker (14,700)	0	0	0	120	8,200.66	2,157
Morrison (4,900)	0	0	0	0	0	0
Stearns (15,810)	4	122.95	29	58	4,836.44	1,137
Todd (4,800)	0	0	0	1	112.00	16
Wright (7,515)	3	276	50	37	2,039.01	447
TOTAL (85,478)	7	398.95	79	391	31,724.53	8,455

A. HIGHLIGHTS

More than 457 acres of wetlands in 133 basins were restored.

Three hundred thirty-four acres of uplands on WPAs were seeded to native prairie nesting cover.



Harvey WPA

Photo by Rob Bruesewitz

Monitoring and Studies

1a. Surveys and Census

Six surveys were conducted. Additional information is provided below:

Survey of Deformed Frogs and Toads on NWRs and WMDs

USFWS; Region 3; Jim Mattson, Coordinator Litchfield WMD; ROS Craig Lee, Coordinator

Deformed frogs have been increasingly documented in northern US and Canada in recent years for reasons unknown. To gather data on the problem, the USFWS collected and examined frogs from federally owned wetlands. In July, the District collected 100 Northern Leopard frogs (*Rana pipiens*) from a wetland on the Yarmon WPA (T118N, R34W, Sec. 14, Kandiyohi Co.) and from a wetland on the Tyrone Flats WPA (T121N, R31W, Sec. 14, Meeker Co.). Although frogs with deformities have been seen in the District, no gross deformities were found in this sample. Three frogs were found on Tyrone Flats with tiny "warts" on their lower lips, so data sheets were filled out and submitted to Jim Mattson.

Results: 37 field stations sampled a total 6478 amphibians, 5986 (92%) were frogs (13 sp.) and 492 (8%) were toads (3 sp.). Leopard frogs (4250) comprised 66% of the total sample. A total of 101 individuals (1.62%) were reported having 284 deformities.

Point Count Surveys on Grassland Habitats

R3 MBO; Steve Lewis, Coordinator Litchfield WMD; ROS Craig Lee, Coordinator

Results: 375 counts were completed and a total of 105 species recorded. Six state and federal listed species and 16 species considered out of or near the edge of their ranges were documented. Native prairie points generally had nearly twice the number of species. The number of woodland species was higher than expected.

Predator Scent Station Surveys

MN DNR; Bill Berg, Coordinator Litchfield WMD; ROS Craig Lee, Coordinator

For 22 years, the MN DNR has conducted autumn predator scent station surveys to assess abundance, distribution, and population trends of mammalian species throughout the forest, transition and farm zones of the state. The District has participated since 1984, running eleven roadside routes (110 stations) in Meeker and Kandiyohi counties again in 1997. Over a dozen species' tracks were keyed out by district staff and volunteers. Statewide, raccoon increased in the farm zone and decreased in the forest and transition zones, the fox index was the lowest in 12 years in the transition zone (mange?), coyote increased in the farm and transition zones, wolf, bobcat and bear increased in the forest zone, opossum increased in the farm zone and dogs and cats decreased everywhere.

Four Square Mile Breeding Waterbird Surveys

HAPET; Tony Rondeau, Coordinator Litchfield WMD; Bev Meyer, Coordinator

The District began doing waterfowl breeding bird surveys in 1979, counting waterfowl on all the wetlands in 160-acre random plots to gather data on local populations. In the late 80's, we began assessing water levels and vegetation as well as counting birds in wetlands on 2,560 acre (4 sq.mi.) plots, twice each spring. In recent years, the counts expanded to gather data on other water birds as well. In 1997, eight plots in Kandiyohi and Stearns were counted.

Minnesota County Biological Survey; Stearns County
MN DNR; Carmen Converse, Coordinator

Robel Pole Transects Surveys of Prescribed Burned and Grazed Uplands
Litchfield WMD; ROS Bev Meyer, Coordinator

1b. Studies and Investigations

Five studies were conducted. Subjects and project coordinators are given below.

Effectiveness of Biological Control of Leafy Spurge
USDA, APHIS; Pam Deerwood, Coordinator

Tallgrass Prairie Ecoregion Species Inventory
TNC; Kim Hiller and John Haferman, Coordinators

WMD Listed Species Updating
Litchfield WMD; Craig Lee, Coordinator

Histories of Land Management Activities on WPAs
Litchfield WMD; Craig Lee, Coordinator

Plant and Animal Species of the WMD
Litchfield WMD; Craig Lee, Coordinator

Habitat Restoration

2a. Wetland restoration

One hundred thirty-three wetlands covering over four hundred fifty acres were restored. Tables 3 and 4 provide additional information.



Privately-owned restored wetland

Photo by Steve Erickson

Table 3. **LITCHFIELD WMD YEARLY WETLAND RESTORATION TOTALS**

Year	Basins	Approximate Acres
1987	119	358.2
1988	375	1128.8
1989	719	2169.9
1990	740	2073.9
1991	634	2060.3
1992	641	2238.3
1993	572	1859.6
1994	420	1371.1
1995	176	707.5
1996	233	622.6
1997	133	457.9
Total	4,762	15,048.1

Table 4. **LITCHFIELD WMD WETLAND RESTORATION LOCATIONS**

Year	WPA		RECD		CRP/Private	
	Basins	Approx Acres	Basins	Approx Acres	Basins	Approx Acres
1987	38	114.4	14	42.1	67	201.7
1988	43	129.4	86	258.9	246	740.5
1989	120	775.8	83	136.6	516	1,257.5
1990	154	326.0	79	345.5	507	1,402.4
1991	209	717.8	13	22.2	412	1,320.3
1992	183	596.0	2	10.3	456	1,632.5
1993	238	504.8	6	15.5	328	1,339.3
1994	198	501.8	9	10.0	213	859.3
1995	63	139.0	0	0.0	113	568.0
1996	19	78.2	0	0.0	214	544.4
1997	39	150.1	0	0.0	94	307.8
Total	1304	4033.3	292	841.1	3166	10,173.7

2b. Upland restoration

A total of 334 acres were seeded to a diverse mix of native warm season grasses, cool season grasses, and native forbes. The seeding was done by District personnel using Truax drills with trash plows. Dates, locations, and composition of the seedings are given in Tables 5 and 6.

Table 5.

Litchfield WMD 1997 Seeding Activities

WPA	Date	Acres	Comments
Pelican Lake East (north field)	4/22-25	83	bean stubble, ideal conditions
Harvey East (north corner)	5/12	10	interseed after burn, front rows received ~10lbs/acre timothy
Meeker (west/ strips along road)	5/14	17	Interseeded after burn, Hellickson prairie seed, low germ. but lots of forbes, should have been mowed after seeding
Cedar Mills (north & west)	5/13-21	108	bean stubble, wet, sticky, surface seeded & dragged
Bakers Lake	5/27-6/3	60	mainly bean stubble, some corn stubble, wet, sticky, surface seeded & dragged
Hardin Lake	6/11	10	brome/thistle, disced several times, Round-up after green up, timely rains, great catch initially
Greenwald (back field, north west corner)	9/11	6	"go-back", disced several times, Round-up after green up,
Pelican Lake East (south field)	9/12	20	oat stubble, Round-up before seeding
Bakers Lake	10/1	20	re-seed along road
Total		334	

Table 6.

1997 Seed Mix

<i>Species</i>	<i>PLS/acre</i>
Big Bluestem*	4.8
Swichgrass*	2.7
Indiangrass*	0.5
Other (20+ species of grasses and forbes)*	0.1
Tall Wheatgrass (Alkar)	2.5
Intermediate Wheatgrass (Oahe)	1.5
Slender Wheatgrass (Revenue)	1.0
Tall Fescue (Fawn)	1.7
Perennial Ryegrass (Linn)	0.9
Timothy (Climax)	0.9
Orchard Grass (Paiute)	2.2

*Seed obtained from BigStone NWR: 1994, 1995, & 1996 harvests. **Thanks Big Stone!**

3. Habitat Management

3c. Graze/mow/hay

A total of 316 upland acres were grazed. Bomsta WPA (20A), Robinson WPA (20A), and Grinsted (105A), Rick (37A), and Schwieger (134A) FSA Easements.

3f. Prescribed burning

Eighteen hundred thirty acres were prescribed burned. Burns of seeded and native warm season grasslands are used to increase the vigor of established stands, reduce introduced cool season grass components, set back tree and shrub invasions, and prepare areas for interseeding. Table 7 provides additional information.



Prescribed burn

Photo by Rob Bruesewitz

Table 7.

1997 Prescribed Burns

Date/Fire #	WPA/Plan #	Acres
April 22 3482	Lake Hardin 09309C97	112
April 23 3506	Rosendale 09307A96	238
April 23 3507	Lake Charlotte 06745A96	71
April 24 3511	Tyrone Flats 5 09308D97	33
April 25 3513	Litchfield 09301A94	164
April 28 3514	Harvey 09305A96	120
April 29 3515	Eagle Lake 1 08503A95	2
May 1 3517	Eagle Lake 2 08503A95	61
May 6 3518	Raymond 06750B97	202
May 6 3519	US 71 Median (MNDOT)	40
May 13 3522	Lovell Lake 3 14503G97	61
May 15 3523	Louwagie RECD (MNDNR)	51
May 16 3524	Lovell Lake 4 14503G&F97	108
May 20 3526	Big Kandi L.1 06710A97	478
May 22 3527	Big Kandi L. 2 06710A97	34
September 9 3630	Lake Lillian 06755A	55
Total		1830

3f.1 Wildfires

District staff responded to or investigated eleven wildfires. Additional information about these fires is given in Table 8.

Table 8. *1997 Wildfires*

Date/Fire #	WPA/Plan #	Acres
April 17 3477	Tyrone Flats 1 09308G	216
April 21 3508	Tyrone Flats 2 09308D	01
April 22 3509	Tyrone Flats 3 09308G	01
April 23 3510	Tyrone Flats 4 09308G	01
April 24 3512	Tyrone Flats (Bauman)	25
April 29 3516	Boelter	130
May 6 3520	Lovell Lake 1 14503L	01
May 6 3521	Lovell Lake 2 14503L	142
May 15 3525	Gilberts 06741A	17
May 24 3528	Oak 14526A	06
May 25? unk.	Lake Hardin 09309A	30
Total		552

3g. Control pest plants

Nine hundred fifty-nine acres were treated to control pest plants. Most of this effort was directed at Canada thistle, a state-listed noxious weed. Table 9 summarizes pest plant control measures.

Table 9.

1997 Weed Control

Pesticides Used	Target Pests/Purpose	Treatment Site Type	Acres or Other Unit Treated	Total Amount Used
2,4-D Amine	Canada thistle/control in established stands of perennial grasses	Grassland; warm and cool season grasses	605 ac	569 lbs AI
2,4-D Amine	Leafy spurge/control in established stands of perennial grasses	Grassland; warm and cool season grasses	2 ac	4 lbs AI
2,4-D Amine	Marijuana/control on WPAs	Building site; (abandoned)	6 ac	12 lbs AI
Clopyralid	Canada thistle/control in established stands of perennial grasses	Grassland; warm and cool season grasses	316 ac	57.5 lbs AI
Glyphosate	All vegetation/prepare field for grass seeding	Cropland; idle, corn stubble	30 ac	60 lbs AI
Mow	Canada thistle/control in established stands of perennial grasses	Grassland; warm and cool season grasses	382 ac	NA
Bio-control (spurge beetles)	leafy spurge control in established grasslands	Grassland; warm and cool season grasses	10 ac	NA

4. Fish and Wildlife Management

4d. Nest Structures

Two hundred "hen house" mallard nesting cylinders were maintained. One hundred additional cylinders were fabricated and placed in WPA wetlands.

5. Coordination Activities

5a. Interagency Coordination

We continue to be actively involved in the restoration of Grass Lake in Kandiyohi County. When completed, the project will restore over 1,200 wetland acres and seed at least 250 acres of adjacent uplands to warm season native grasses. The project has received a

\$1,000,000 grant from the North American Wetland Conservation Act committee but problems between the City of Willmar and the County have brought progress to a standstill. The Minnesota Board of Water and Soil Resources (BWSR) is spearheading the effort with numerous other partners from the public and private sectors contributing time and funding.

We assisted USDA field offices with reviewing and ranking over 15,000 acres of land during the fifteenth and sixteenth Conservation Reserve Program sign-up periods. District staff evaluated wetland restoration opportunities, importance to Federal and State listed endangered and threatened species, and proximity to WPAs and other public lands for each tract submitted.

We also served on Soil and Water Conservation District screening committees for the State's Reinvest In Minnesota (RIM) program in four counties. The RIM program purchases easements from landowners who wish to restore natural habitats on their property and have them protected in perpetuity. Wetland restorations with associated grasslands are high priority projects. As a member of the screening committees, we help evaluate and rank the numerous applications. The RIM program is extremely popular and has resulted in hundreds of superb habitat projects that complement nearby WPA tracts.

We participate in several citizen-based Clean Water Partnership/watershed projects that have received funding grants from the Environmental Protection Agency and/or the Minnesota Pollution Control Agency. We provide technical and financial assistance for projects that will restore wetland habitats as well as improved water quality and floodwater storage. Currently, we are actively involved in the Chippewa River Stewardship, the Hawk Creek Watershed, Minnesota River, and Shakopee Creek Headwaters projects. These grassroots initiatives provide exciting opportunities for habitat restoration projects that would not otherwise have been possible.

We are actively involved in the Prairie Woods Environmental Learning Center (PWELC). Although established, PWELC is currently seeking major funding from the state legislature to develop a full environmental learning program for the 500-acre site. Prior to the area being purchased for an ELC (while still in private ownership) our office completed several wetland restoration projects on tract. These wetland areas are highly visible and popular components of the tract. At the request of the PWELC Site Committee, District staff recently completed an evaluation and management plan for all of the tract's wetlands.

5c. Private Land Activities (excluding restoration)

The District assisted 187 private landowners who wished to improve their lands for wildlife or had other wildlife-related questions. Over 500 reprints were distributed to these people on numerous topics including bluebird, bat, woodduck, and mallard structures, plantings for wildlife, and native prairie restoration.

6. Resource Protection

6a. Law Enforcement

Sixty-five minor incidents involving vehicle trespass, storage of personal property, garbage dumping, ag trespass, and destruction of signs were documented. The scattered and remote nature of the WPAs makes apprehensions difficult. Two hundred miles of boundary were checked and maintained.

6b. Permits and Economic Use Management

Forty-five requests for uses were reviewed and fifteen Special Use Permits (SUP) were issued. Firewood cutting was the request which was most frequently denied. Maintenance of drainage facilities that were in place prior to FWS acquisition was the most common SUP issued.



Parasol Mushroom

Photo by Steve Erickson

*6c. Contaminant/Abandoned Well Investigation
and
6d. Contaminant/ Abandoned Well Cleanup*

Twenty investigation were conducted and eleven cleanups completed. Additional information is provided in Table 10.



Photo by Robert M. Bruesewitz

Piles of debris on Bakers Lake WPA were sorted into contaminant types and disposed of in accordance with State and Federal regulations.

Table 10.

Contaminant Investigation and Cleanup

Site Location	Problem Investigated	Action needed?	Cleanup Completed?
Lake Lillian WPA	2 wells	yes	yes
Lake Lillian WPA	building site	yes	yes
Pelican Lake	2 wells	yes	yes
Pelican Lake	building site	yes	no
Silver Creek WPA	well	yes	yes
Albion WPA	well	yes	yes
Litchfield WPA	Round-up leak	yes	yes
Bakers Lake WPA	junk piles	yes	no
Stone Lake WPA	diesel leak	yes	yes
Weseloh tract	4 wells	yes	no
Weseloh	building site	yes	no
Collegeville WPA	well	yes	yes
Collegeville WPA	building site	yes	yes
Winter FSA	building site	yes	no
Brenner Lake	garbage dumped	yes	no

6g. Land Acquisition Support

Ninety tracts of land were reviewed for acquisition potential. The majority of the tracts reviewed were brought to our attention by landowners or real estate agents. Occasionally we initiated contact with landowners of roundouts, parcels to improve access, or parcels containing exceptional natural values such as native prairie or extensive wetland complexes.

The types of acquisition available to us include fee title purchase of WPAs, wetland easement WPAs, four varieties of Habitat Easements WPAs, Conservation Easements obtained through the Farm Service Agency-Ag Credit Division, (FSA), and access easements. In addition to these acquisitions, we also occasionally conduct land exchanges to resolve boundary or access problems.

We were formally offered thirty tracts for fee title purchase. Twenty of the tracts were rejected after field checks revealed insufficient wetlands, drainage problems, poor boundaries, or potential contaminants. The remaining ten tracts were forwarded to the Litchfield Land Acquisition Office resulting in seven purchases, two non-acceptance of offers, and one potential acquisition still pending. Table 11 summarizes new acquisitions.

Table 11.

Land Acquisition Summary

Category	Tracts	Total acres	Cost
Exchanges	2	1.76	\$0.00
Access Easement	1	0.15	\$500.00
Wetland Easement	7	398.95	\$52,400.00
Habitat Easement	3	119.51	\$155,325.00
WPA Fee Title	9	929.63	\$1,063,736.00
TOTAL	22	1,450.00	\$1,271,961.00

Revenue sharing payments continue to be a thorny issue. All acquisitions need to be approved by the State Land Exchange Board and Governor Carlson has been delaying approval or refusing to accept new acquisitions until the Department of Interior makes a better effort to fully fund the Revenue Sharing account. Table 12 provides Revenue Sharing information since 1979.

Table 12.

Refuge Revenue Sharing - Litchfield WMD

Fiscal Year	Kandiyohi	McLeod	Meeker	Renville	Stearns	Todd	Wright	Total Revenue
1967	3147.17	0	0	0	966.03	0	0	\$4,113.20
1968	3430.94	0	0	0	1240.02	0	0	\$4,670.96
1969	3928.62	0	0	0	1240.02	0	0	\$5,168.64
1970	4870.65	0	0	0	1883.71	0	0	\$6,754.36
1971	7121.58	0	0	0	4307.12	0	0	\$11,428.70
1972	7487.58	0	0	0	5116.63	0	0	\$12,604.21
1973	7877.58	0	0	0	5576.03	0	0	\$13,453.61
1974	87711.82	0	0	0	7355.83	0	0	\$16,127.65
1975	10664,.81	0	0	0	7337.22	0	0	\$18,002.03
1976	21281.55	0	0	0	15351.72	0	0	\$36,633.27
1977	18495.00	0	0	0	12723.91	0	0	\$31,218.91
1978*	13600.57	0	0	0	8878.92	0	0	\$22,479.49
1979	21329.00	0	2601.00	0	12996.00	500.00	426.00	\$36,852.00
1980	27638.00	0	5627.00	0	17130.00	1751.00	1851.00	\$53,997.00
1981	24877.00	0	5479.00	0	15035.00	1535.00	1634.00	\$48,560.00
1982	48177.00	0	7660.00	0	31854.00	1587.00	2059.00	\$91,337.00

1983	40296.00	2482.00	7460.00	0	27583.00	1812.00	2221.00	\$81,854.00
1984	38777.00	2388.00	8227.00	0	26452.00	1743.00	2137.00	\$79,724.00
1985	34422.00	2073.00	11241.00	0	24730.00	1688.00	1855.00	\$76,009.00
1986	35683.00	2295.00	11664.00	0	23088.00	1661.00	1731.00	\$76,122.00
1987	15061.00	2253.00	13179.00	0	17834.00	1630.00	1699.00	\$51,656.00
1988	18159.00	766.00	8374.00	0	21657.00	765.00	1011.00	\$50,732.00
1989	20634.00	839.00	10588.00	0	23720.00	1385.00	1925.00	\$59,091.00
1990	25613.00	1008.00	13668.00	0	28702.00	1664.00	5132.00	\$75,787.00
1991	24521.00	1306.00	13085.00	0	28523.00	1593.00	5366.00	\$74,394.00
1992	52442.00	1191.00	11929.00	0	26765.00	1453.00	6393.00	\$100,173.00
1993	50423.00	2451.00	15167.00	0	27164.00	1652.00	8422.00	\$105,279.00
1994	49931.00	2427.00	15019.00	879.00	26883.00	1636.00	8340.00	\$104,515.00
1995	43024.00	2068.00	12799.00	749.00	22910.00	1394.00	7575.00	\$90,519.00
1996	49483.00	2280.00	14113.00	870.00	34787.00	2038.00	9481.00	\$113,052.00

The FSA Conservation Easement Program has been replaced by the much weaker Conservation Contract. Litchfield WMD did receive one Conservation Easement from FSA in Kandiyohi County due to a Debt Restructure process begun some years ago. No one in FSA is able or willing to explain why this 176-acre Conservation Easement was able to slip through the cracks when all other properties, some in inventory for over a decade with surveyed boundaries and habitat practices in place, were pulled back and subjected to the 1996 FAIR Act process. We also have two fee title transfer requests with the FSA Ag Credit Division pending. See Table 13.

Table 13. FSA-Ag Credit Conservation Easement Summary						
County	Tracts Proposed	Acres	Tracts Declined	Acres	Tracts Recorded	Acres
Kandiyohi	7	606.5	2	26.8	4	517.9
McLeod	2	73.9	0	0.0	2	73.9
Meeker	21	1238.1	1	51.0	14	844.3
Nicollet	1	32.6			0	0.0
Renville	13	358.1	1	7.3	5	176.0
Sibley	2	160.3	1	46.0	0	0.0
Stearns	6	533.1	0	0.0	0	0.0
Todd	17	1184.1	3	67.4	9	720.6
Wright	2	175.7	0	0.0	1	135.7
TOTAL	71	4434.9	8	195.8	35	2468.4

7a. Provide Visitor Services

We provide a considerable amount of information to over 2,000 visitors or telephone callers each year even though our small office, located in a strip-mall on the edge of town, has little room for visitors or displays. We distribute photocopies of WPA maps, wildlife construction plans, Service brochures, and lots of information and referrals on a broad variety of issues and concerns.

We maintain a small video tape library for loan to schools and groups. Eight hundred and forty-one people viewed twenty-seven tapes during the nine month reporting period.

7b. Outreach

Prairie Pothole Day, an annual event sponsored by the Minnesota Waterfowl Association in Kandiyohi County, is one of the District's biggest and best opportunities for outreach. This family-oriented outdoor event features numerous activities, seminars, exhibits and contests. Besides being a mechanism to raise funds for MWA's waterfowl/wetlands projects, the event emphasizes environmental education and outdoor recreation. Always an invited guest, the District sets up displays and an informational booth to promote Service programs and projects. Each year this highly popular events draws more and more visitors and in 1997 over 5,000 people attended.

In observance of Earth Day 1997, we set up a display and booth in Litchfield's major grocery store, located in the city's strip mall. District staff attended the set-up and provided environmental education materials as well as information on District programs and projects to the many shoppers/visitors who stopped by.

Heavy snowfall during the winter of 1996-97 resulted in high usage of snowmobiles and prompted many drivers to ignore state laws that prohibit trespassing. And, despite signage that prohibit motorized travel on WPAs, several of our units experienced regular night time snowmobile traffic. We coordinated increased surveillance and enforcement procedures with DNR Conservation Officers and neighboring landowners. In addition, we issued a news release reminding the public that the activity is unlawful and extremely stressful to wintering wildlife.

In August, we assisted a reporter from Minnesota Public Radio who was doing a story on small town-rural life. ROS Erickson briefed the reporter on the Partners for Wildlife program and how we work with rural landowners to restore wildlife habitats on their properties. The reporter "tagged along" for a meeting with an elderly landowner who then signed our Wetland Development Agreement which allowed the restoration of several wetland basins on her property. In turn, the reporter interviewed the landowner and heard from her why she thinks taking care of land, water and wildlife are important.

The District set up the Partners for Wildlife display at the Kandiyohi County Fair and provided literature on Service programs. Our participation was in conjunction with the Kandiyohi Area Conservation Association. Over 6,000 people attended the 1997 fair.

8. Planning and Administration

8a. Comprehensive conservation planning

Litchfield WMD, in conjunction with the other WMDs in Minnesota and the Minnesota Waterfowl and Wetlands Management Complex, initiated Comprehensive Conservation

Planning in FY97. Several internal meetings were held, the University of Minnesota was contracted to conduct a telephone survey of major stakeholders, and an open house was held. The scoping process is over and the Comprehensive Conservation Plan is approximately 30% complete.

8b. General Administration

1. Personnel

Permanent staff:

1. Thomas G. Bell, Refuge Manager, GS-13, PFT
2. Rob M. Bruesewitz, Refuge Operations Specialist, GS-12, PFT
3. Todd Luke, Refuge Operations Specialist, GS-11, PFT
4. Steve M. Erickson, Refuge Operations Specialist, GS-9, PFT
5. Beverly Meyer, Refuge Operations Specialist, GS-9, PFT
6. Craig W. Lee, Refuge Operations Specialist, GS-9, PFT
7. Mortie P. Berg, Biological Science Technician, GS-7, PFT
8. John T. Haffley, Biological Science Technician, GS-7, PFT
9. Elaine Lindquist, Administrative Technician, GS-6, PFT
10. Rick J. Schutz, Tractor Operator, WG-6, PFT

B. Volunteer Program

Seventy volunteers donated 1452 hours of labor to the District. Volunteers from a wildlife class at Willmar Community College spent nearly 60 hours filling out inspection reports and replacing signs on WPA boundaries in Kandiyohi County. The Forest City "Livewires" 4-H club built 26 over-water nesting structures, "hen houses", and placed them in wetlands in their area. Volunteers also assisted with Prairie Pothole Days, predator scent post surveys, leafy spurge bio-control beetle monitoring, breeding bird point count surveys, and prairie seed cleaning.

C. Other Programs

Summer Field Experience Program, Vermilion Community College, Ely, Minnesota, and the University of Minnesota-Duluth. Three students (Justin Evans, Tom Salzer, and John Meyer) worked at the Litchfield WMD under 400-hour work study agreements. The purpose of the work-study program was to provide work related to the student's educational objectives. The students were involved in activities such as enhancement and restoration of wetland habitat, brush removal, fence construction, fence removal, nesting structure surveys, and grounds maintenance.

2. Funding

Historic funding totals and distributions are given in Table 14.

Table 14.

LITCHFIELD WMD YEARLY FUNDING (\$1,000s)

Year	1121	1210/1230	1260	2957	3110	9120	9251	BLHP/ ARMM/	RPRP	Total Funds	FTE
1979			177.7		6.0			334.8		518.5	6.72
1980			245.0		10.0			166.0		421.0	10.93
1981			398.0		10.0			56.6		464.6	9.74
1982			309.5		6.7					316.2	7.25
1983		10.6	330.5		5.0					346.1	7.48
1984		9.7	238.4		5.0			33.0		286.1	8.07
1985		8.9	209.1		5.0			14.0		367.0	8.73
1986		9.8	227.7		5.0			105.0	55.0	402.5	8.98
1987		12.1	275.3		5.0			157.5	24.4	474.3	9.99
1988			532.6		5.0					537.6	9.60
1989	59.6		424.7		4.8					489.0	10.60
1990	63.8	59.9	355.7		5.0	0.4				484.8	9.98
1991	40.9	64.3	411.9		14.8	6.1				538.0	10.29
1992	42.0	126.0	461.4		5.6	12.8				647.8	10.86
1993	39.9	116.0	497.5		5.6	3.2				662.2	10.49
1994	149.0	15.3	427.0		5.6	5.2		<u>4672</u> 300.0	<u>4673</u> 56.0	958.1	10.66
1995	150.0	2.5	453.1		5.0	4.7		<u>4672</u> 277.2	<u>4673</u> 48.0	940.5	10.66
1996	185.3	1.6	459.7		5.0	2.5	20.7			654.1	10.66
1997	146.0	1.0	486.9	95.0	5.0					733.9	10.66

Appendix:

CLIMATIC CONDITIONS

The mean temperature at District Headquarters in 1997 was near normal. Intriguingly, however, the average maximum temperature for the year was significantly lower than normal while the average minimum temperature for the year was significantly higher than normal. This appears to reflect conditions that we have been observing frequently during monthly calculations in recent years. We wonder if our observations are consistent with others' in support of "greenhouse" and global warming theories. Table 1 shows a summary of 1997 climate conditions as compared to long term averages.

Weatherwise, 1997 began the way 1996 ended - very cold and very snowy. In addition, strong winds were common throughout much of the winter and caused considerable hardship to residents - human and wildlife alike. Deep snow and frequent blizzard conditions shut down most District field activities and often disrupted headquarter's normal office hours. Most species of resident wildlife, such as white-tailed deer and numerous birds were severely impacted by harsh conditions. Cover habitats of Waterfowl Production Areas located on the true prairie were essentially obliterated from the landscape by deep, drifted snow. Most WPAs located in the transition (eastern) portion of the District contain timber and/or brush components and were less severely impacted. Winter conditions persisted through March and into early April. Headquarter's coldest temperature of the year, a modest -18 F, occurred on January 25th. A total of 66.8 inches of snow fell over the 1996-'97 winter. Heavy snowfall with no mid-winter thawing set the stage for heavy runoff, high water levels, and flooding when spring's warmer temperatures finally arrived.

Although the District escaped the catastrophic spring flooding that occurred in western Minnesota and the eastern Dakotas, heavy snowmelt conditions affected us as well. Flooding was less severe but heavy, rapid runoff caused damage to many of the District's water control structures - most of them small earthen structures. No collateral damage resulted from these damaged structures, however. Spring temperatures stayed below normal but precipitation was less than half of normal. Drier than normal conditions helped us achieve a record amount of prescribed burning of District grasslands. Frequent windy conditions occasionally hampered burning plans. The last frost of the season occurred on May 12 at headquarters, which is normal.

Dry conditions throughout May and most of June were very conducive to seeding prairie grasses on former croplands of new WPAs. Also, with pothole wetlands in excellent condition, these dry conditions were advantageous to nesting waterfowl and other wildlife.

In late June someone turned on the faucet and forgot to turn it off! Three significant rainfall events occurred during the last week of June and, at 5.5 inches, the month ended almost an inch above average. Wet conditions continued throughout July with a total of 7.6 inches of rain for the month - twice as much as normal. August was wetter than normal as well. Daytime high temperatures for the summer were often cooler than normal. Surprisingly, headquarters recorded only two days with 90-degree temperatures. The warmest day of the year occurred on June 23 when 92 degrees was recorded. These wetter and cooler conditions hampered field activities, including WPA weed control and earthwork associated with our high-priority wetland restoration programs.

Drier than normal conditions returned for the fall and the season's first hard frost did not occur until October 21st, at least two weeks later than normal. These ideal conditions allowed for a busy and productive period of field activities. Mild conditions persisted to the north, as well, and delayed the normal influx of migratory waterfowl to District wetlands.

Like much of the country, the forecasted effects of the 1997-98 El Nino-southern oscillation event became most noticeable in the District in December. December temperatures were considerably warmer than normal while precipitation was less than half of normal. There was only a single day of below zero temperature (-4 degrees on the 30th) and only four inches of snow fell. Mild El Nino conditions were to persist for the remainder of the winter, much to the relief of the survivors of the brutal winter of 1996-97.

Additional weather data for the District's headquarters area are given in Tables 15 and 16.

Table 15. **1997 Weather Summary**

	NORMAL*	1997
AVERAGE MAXIMUM TEMPERATURE °F	55.20	48.20
AVERAGE MINIMUM TEMPERATURE	33.50	32.70
AVERAGE MEAN TEMPERATURE °F	44.40	40.50
PRECIPITATION (INCHES)	27.63	26.57

Table 16.

Litchfield Monthly Weather Data
Normal (N*) versus 1997

	TEMP	AVERAGE	AVERAGE	AVERAGE	PRECIP.
	°F	MAX °F	MIN °F	MEAN °F	INCHES
JAN	N	21.00	0.90	11.00	0.70
	97	13.70	2.20	8.00	1.42
FEB	N	27.10	6.70	16.90	0.72
	97	25.50	12.30	19.00	0.51
MAR	N	39.60	20.40	30.00	1.56
	97	33.70	21.10	27.40	1.17
APR	N	57.50	34.40	46.00	2.41
	97	51.60	33.70	42.60	1.09
MAY	N	71.40	46.40	58.90	3.24
	97	63.30	45.10	54.20	1.41
JUN	N	80.30	56.10	68.20	4.70
	97	81.90	61.50	71.70	5.46
JUL	N	84.70	61.20	73.00	3.79
	97	76.70	61.90	69.30	7.58
AUG	N	81.70	58.40	70.10	3.31
	97	75.00	59.30	67.10	5.47
SEP	N	72.30	48.50	60.40	2.98
	97	71.00	53.90	62.50	1.96
OCT	N	60.50	37.80	49.20	2.18
	97	58.50	41.30	49.90	0.91
NOV	N	40.70	23.40	32.10	1.26
	97	31.30	20.90	26.10	1.25
DEC	N	25.10	7.80	16.50	0.78
	97	31.90	22.70	27.30	0.32

* Normal = 30-year average, 1961-90

COMMENTS

Signature

Date

Good AN Tom & al including
the above average children and
strong women!

Jim H. Young

5/6/98

Excellent AN! ^{not sure about the good looking}
Great photos too !!

Kate M. Fuller

5/11/98