United States Department of the Interior
FISH AND WILDLIFE SERVICE
[redacted]—NORTH DAKOTA
1500 CAPITOL AVENUE
BISMARCK, NORTH DAKOTA 58501

AUG 21 1984

MEMORANDUM

To: Data Users

From: Field Supervisor-Habitat Resources
Bismarck, North Dakota

Subject: Waterfowl Stream Survey - North Dakota

Attached is status information on the subject survey. If you have any questions or require additional information, please contact Allyn J. Sapa at 701-255-4011, ext. 481.

M. J. Zschomler

Attachment

cc: Arrowwood NWR
Long Lake NWR
Valley City WMD
Audubon NWR
Des Lacs NWR
Crosby WMD
Lostwood NWR
Devils Lake WMD
J. Clark Salyer NWR
Kulm WMD
Tewaukon NWR
Upper Souris NWR
ND Game & Fish Dept., Bismarck
ND Natural Heritage Inventory, Bismarck
NPWRC, Jamestown
(Attn: D. Johnson)
HR, Pierre
ARD-HR, Denver
ARD-WR, Denver
(Attn: D. Henry, B. Croft)

1984

WATERFOWL STREAM SURVEY
NORTH DAKOTA
1983-84
STATUS

The use of streams by waterfowl has generally been overshadowed by the existence of prairie potholes. Nevertheless, stream habitats are known to support numerous waterfowl and other wildlife. For example, Hubbard (1979) reported breeding duck densities of 16 pair of breeding dcks per stream mile from three North Dakota streams scheduled for stream channelization. Stewart and Kantrud (1973) estimated that streams and oxbows comprised 5 percent of the acreage of 2 million acres of wetlands in the Prairie Pothole Region in North Dakota. About 6 percent of the breeding ducks in North Dakota's PPR are found on these 100,000 acres of streams and oxbows. Stewart and Kantrud's estimates were an off shoot of the study of waterfowl use on wetlands within the PPR and are based only on a few observations. Other than these very general estimates, little is documented on waterfowl on intermittent streams. However, casual observation during other aerial surveys indicates that "beaded streams" often have a brood on nearly every pool.

Recognizing the need to better describe the values of these habitats, the Bismarck Field Office initiated work on a project entitled, "Waterfowl Stream Survey (WSS)". This project is designed primarily to: (1) delineate and measure streams in North Dakota; (2) group these streams by size (volume); and (3) survey by random sampling waterfowl breeding pairs and other basic ecological data.

The initial base map for this project was the 1978 Stream Evaluation Map, State of North Dakota[1/] (Scale 1:500,000). This map identifies and ranks major streams in the state based primarily on fishery resource values. In addition the map identifies headwater tributaries to the major streams. The WSS includes measurements on all streams on the evaluation map including the headwater tributaries.

The state was divided into 10 major watersheds (each containing several or more subwatersheds). The boundaries of these watersheds and stream delineations were described on the Hydrologic Unit Map - 1974 State of North Dakota (USGS).

Streams were first placed into five groups according to annual volume of flow. Generally, documented flow data (either partial or complete) exists for the first four (1-4) groups. This data is primarily from the U.S. Geological Survey[2/] (USGS) and ND State Water Commission[3/]. All other streams were placed in Group 5 (headwater tributaries), assuming those streams probably did not sustain sufficient annual flows to warrant measurement.

Stream Groups	Example	Volumes
1	Missouri/Red	200,000+ af/yr
2	Sheyenne/Cannonball	100,000+ af/yr
3	James/Spring Creek	20,000+ af/yr
4	Upper Wild Rice/Pipestem	2,000+ af/yr
5	Headwater Tributaries	0+ af/yr

Streams or stream segments were given an identification number on the base map for future reference. Each segment on the base map was than identified on USGS quadrangle sheets (1:24,000) and measured using mechanical and electronic map measurer. Waterfowl breeding pair data was gathered by random sampling stream miles within each group. Based primarily on manpower limitation, a sample size of 1 percent of total miles in each group was set as a desired objective. The size was somewhat arbitrary in groups with relatively few miles.

1/ USFWS, 1500 Capitol Avenue, Bismarck, North Dakota.
2/ USGS Water Resources Data for North Dakota.
3/ ND State Water Plan - 1983.

Literature Cited

Hubbard, D. E. 1979. Breeding waterfowl use on intermittent streams, McHenry County, North Dakota. South Dakota State University, Brookings, M.S. Thesis, 53pp.

Stewart, R. E. and H. A. Kantrud. 1973. Ecological distribution of breeding waterfowl populations in North Dakota. J. Wildl. Management. 37(1):39-50.

Measured Stream Miles*
North Dakota

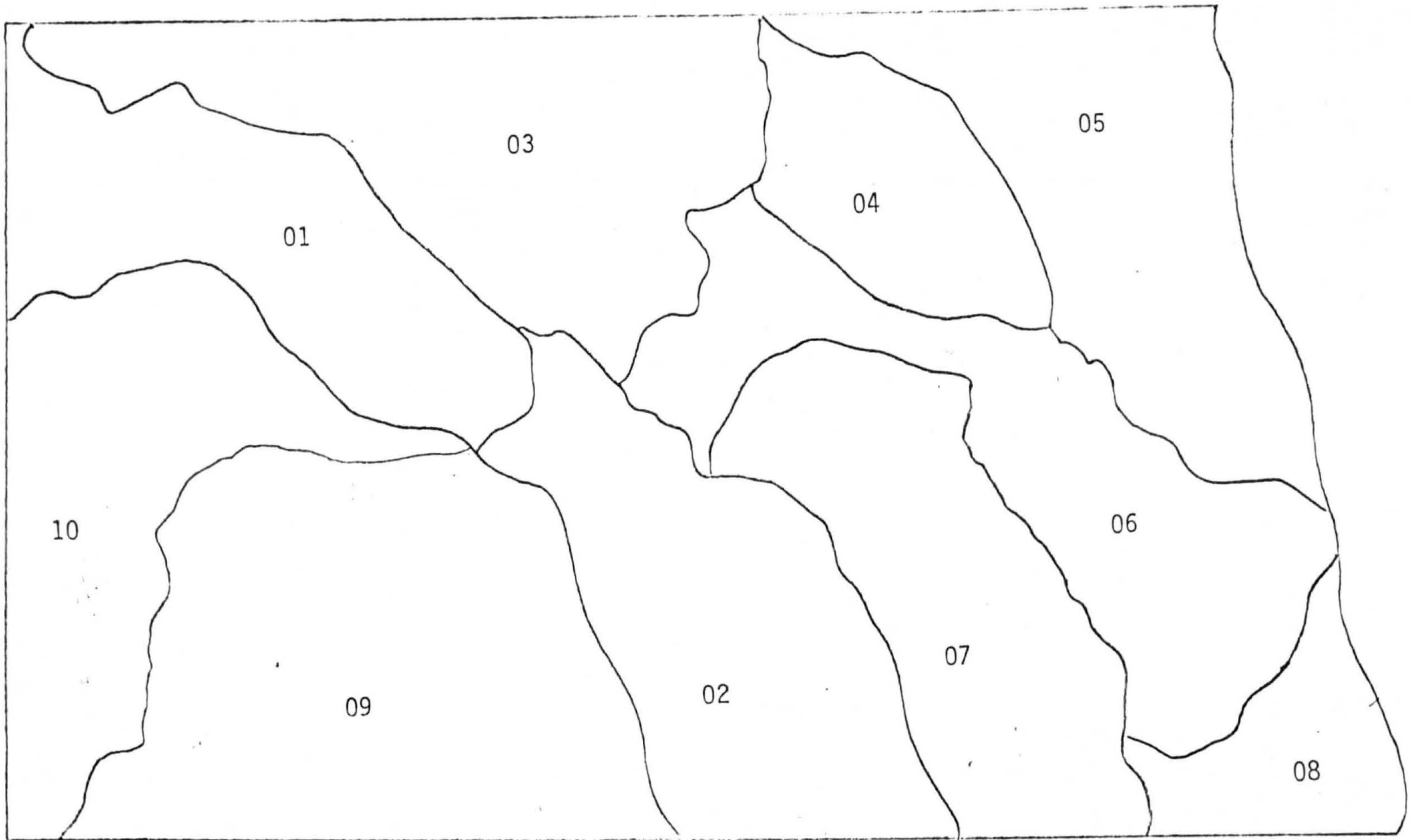
#	Watershed	Stream Groups 1	2	3	4	5	Total
1.	N. Missouri Slope/Coteau	0	0	135.4	161.4	886.8	1183.6
2.	S. Missouri Slope/Coteau	0	0	61.0	127.2	1464.1	1652.3
3.	Souris River	0	338.0	114.5	337.4	1612.2	2402.1
4.	Devils Lake	0	0	18.1	41.0	556.0	625.1
5.	NE Drift/Red River	276.3	71.4	213.6	582.1	1347.9	2491.3
6.	Sheyenne River	0	255	430.4	0	1118.4	1803.8
7.	James River	0	0	164	176.2	1244.2	1584.4
8.	Wild Rice River	119.7	0	122.7	92.5	318.5	653.4
9.	SW Slope	88	0	625.9	569.5	4311.8	5595.2
10.	Little Missouri River	13.4	220	0	131.9	1802.1	2167.4
	Group Totals	497.4	884.4	1885.6	2219.2	14672	
	State Total (all streams)						20158.6

*Based on Hydrologic Unit Map - 1974; State of North Dakota

North Dakota Waterfowl Stream Survey
1984

Total Indicated Pairs/Mile - All Streams
(Based on 1% Sample)

#	Watershed	MAL	GAD	WID	PIN	BWT	GWT	RED	SCA	SHO	WOO	OTH	Combined
1.	N. Missouri Slope/Coteau	3.73	1.07	1.0	1.67	3.13	.33	.13	.2	1.2	0	0	12.46
2.	S. Missouri Slope/Coteau	2.0	.75	.13	.94	2.25	.19	0	0	.63	0	0	6.89
3.	Souris River	2.13	1.3	.26	1.08	5.87	.09	.09	.35	.91	.17	.04	12.29
4.	Devils Lake	.75	.25	0	.13	1.63	0	0	0	.25	0	0	3.00
5.	NE Drift/Red River	.9	0	0	.1	.57	.05	0	0	.1	.57	0	2.29
6.	Sheyenne River	1.53	.47	.29	.35	2.83	0	0	0	.47	.41	.06	6.41
7.	James River	1.69	.31	.31	.75	3.6	.06	.13	.13	.25	.06	0	7.29
8.	Wild Rice River	2.0	1.0	1.0	1.6	13.4	0	0	0	2.4	0	0	21.4
9.	SW Slope	2.6	.62	.30	.94	1.17	.09	.02	.09	.45	.02	0	6.3
10.	Little Missouri River	3.0	.89	1.05	.42	1.42	.05	0	0	.32	0	0	7.15
	State Average	2.18	.66	.37	.79	2.61	.09	.04	.09	.55	.13	.01	7.53



Major Watersheds	(Sq. Miles)
01 Northern Missouri Slope - Coteau	(6694)
02 Southern Missouri Slope - Coteau	(7859)
03 Souris River	(9112)
04 Devils Lake Basin	(3580)
05 NE Drift - Red River Valley	(6520)
06 Sheyenne/Maple River	(7140)
07 James River - Pipestem	(6831)
08 Wild Rice River/Bois de Sioux	(2215)
09 SW/Slope	(15214)

Form 4 (revised 4-84) WATERFOWL STREAM SURVEY

T. ____ N., R. ____ W., Section ____
County: ____________________
USGS Quad Name: ____________________
Stream Name: ____________________

1 Watershed # - ____________________

2 Stream Group ___

3 Sample Number _ _ - _ - _ _

4 Date __________

5 Moisture Condition _____

6 Stream Flow: NFD __ NFP __ F5- __ F5+ __

7 Est. Stream Width: 16 __ 24 __ 32 __

8 Stream Type: UDC __ NCP __ RPB __
WDC __ DAM __ CHA __

9 Manmade Dams: Yes __ No __

10 Land Use: IDL __ PAS __ HAY __ CRP __
OTH __ (Name ____________)

Nesting Cover

11 (a) Adjacent: AG __ AM __ AP __
12 (b) Surrounding: SG __ SM __ SP __

13 Supporting Complex: C1 __ C2 __ C3 __

14 Beaver Dams: T __ P __ N __

15 Brood Potential: G __ M __ P __

16 Predator: Mammalian Yes __ No __
17 Reptilian Yes __ No __

18 Stream Plant Community ____________________

19 Wildlife Observation ____________________

20 Comments ____________________

Observed Waterfowl Pairs (circle group)

Species		Channel	Pool	Dam	Species		Channel	Pool	Dam
Mal	M				Gwt	M			
	F					F			
	P					P			
Gad	M				Red	M			
	F					F			
	P					P			
Wid	M				Can	M			
	F					F			
	P					P			
Pin	M				Sca	M			
	F					F			
	P					P			
Bwt	M				Sho	M			
	F					F			
	P					P			

Observer: ____________________

Waterfowl Stream Survey
Codes and Definitions
For Form 4 (revised 4/84)

1. Watershed
2. Stream Group Completed
3. Sample Number
4. Date - Day waterfowl count was conducted (year/month/day).
5. Moisture Condition - A one digit code: (1) below average; (2) average; (3) above average precipitiation. Average is defined as within ±20% of previous 9-year average pond index, Breeding Waterfowl Population Survey (USFWS). Completed in the office after survey.

   Watersheds 09,10 are measured by Strata 43
   Watersheds 01,03,04 are measured by Strata 45
   Watersheds 02,07,06 are measured by Strata 46
   Watersheds 08,05 are measured by Strata 47

6. Stream Flow - Check one of the following codes:

   NFD - No flow, dry
   NFP - No flow, ponded water
   F5- - Flow 0-5 cfs (est.)
   F5+ - Flow over 5 cfs

7. Estimated Stream Width (average) - Use one only:

   16 - 0-16 feet average width
   24 - 17-24 feet average width
   32 - 25+ average width

8. Stream Type - Categorize stream using one of the following codes:

   UDC - Undefined channel
   NCP - Narrow channel, periodic pool (3 or less)
   RPB - Regular pools (beaded) (4 or more)
   WDC - Well defined channel
   DAM - Dominated by manmade dam(s)
   CHA - Channelized

9. Manmade Dams

   Yes - 1 or more present
   No - 0 present

10. Land Use - Describe the predominate use of lands adjacent to stream. Based on approximately 100 feet outward on both sides of channel or to the first land-use change. Check one of the following codes:

    IDL - Idle
    PAS - Pasture
    HAY - Hayland
    CRP - Cropland
    OTH - Other (Name __________)

Nesting Cover (estimate)

11. a. Adjacent = 200' outward from the channel on both sides (approximately 50 total acres). Write % in each space; total = 100%.

AG = Good (example: DNC, IDLE, ungrazed native or tame grass).

AM = Medium (example: light to medium grazed pasture, hayland).

AP = Poor (example: overgrazed pasture, cropland).

[200' (one side) for 1 mile = 25 acres]

12. b. Surrounding = approximately 1 mile in all directions from channel [includes adjacent cover (11a)]. Write % in space; total = 100%.

SG = Good (example: DNC, IDLE, ungrazed, native or tame grass).

SM = Medium (example: light to medium grazed pasture, hayland).

SP = Poor (example: overgrazed pasture, cropland).

13. Supporting Complex - Describes wetland habitat 1 mile in all directions of stream using one of the following codes:

C1 - 0-5 wetlands basins
C2 - 5-20 wetlands basins
C3 - 21+ wetlands basins

14. Beaver Dams - Check one code

T - Temporary (low level, usually mud/grass)
P - Permanent (moderate to high level, stick construction)
N - None

15. Brood Potential - Stream characteristic only. Write % in each space; total = 100%.

G - Good (excellent protection, cover, water permanence; brood should have a good chance of survival)

M - Medium (adequate proection, cover, water permanence; brood should have a 50/50 chance of survival)

P - Poor (little or no chance of survival without moving)

Predator

16. Mammalian - Yes ____ No ____ (any sign counts)

17. Reptilian - Yes ____ No. ____ (turtles only; any sign counts)

18. Stream Plant Community - Describe narratively

19. Wildlife Observations

20. Comments

WATERFOWL STREAM SURVEY SUMMARY REPORT #/ N. Missouri Slope / Coteau

SAMPLE NUMBER	YR	MOISTURE COND	FLOW	STREAM WIDTH	STREAM TYPE	MAN MADE DAMS	LANDUSE	% GOOD NEST COV ADJ	% MED NEST COV ADJ	% POOR NEST COV ADJ	% GOOD NEST COV SUR	% MED NEST COV SUR	% POOR NEST COV SUR	COMPLEX	BEAVER DAMS	% GOOD BROD POT	% MED BROD POT	% POOR BROD POT	PREDATOR SIGN	MALLARD TIP	GADWALL TIP	WIDGEON TIP	PINTAIL TIP	BWTEAL TIP	G TI PR EDH	REDHEAD TIP	SCAUP TIP	SHOVELER TIP	WOODY TIP	OTHER TIP
01-3-01	83	2	F5+	32	WDC	N	PAS	50	50	0	25	50	25	C1	N	0	25	75	Z	1	1	0	1	1	0	0	0	0	0	0
01-3-02	83	2	F5+	24	WDC	N	PAS	20	40	40	10	20	70	C1	N	0	0	100	Z	4	1	0	1	0	0	0	0	0	0	0
01-4-01	83	2	F5-	16	NCP	N	PAS	0	25	75	0	10	90	C1	N	0	25	75	Z	0	0	0	0	1	0	0	0	0	0	0
01-4-02	83	2	F5+	24	WDC	N	PAS	0	20	80	0	10	90	C2	N	0	10	90	Z	7	2	1	3	1	0	0	0	0	0	0
01-4-03	83	2	F5+	24	WDC	N	PAS	0	0	100	0	0	100	C1	N	0	0	100	Z	3	1	0	0	2	0	0	0	3	0	0
01-5-01	83	2	F5-	32	NCP	N	IDL	90	0	10	5	10	85	C1	N	50	25	25	Z	2	1	0	5	4	0	0	0	5	0	0
01-5-02	83	2	NFP	24	RPB	Y	PAS	0	50	50	0	50	50	C1	N	0	25	75	Z	2	1	1	2	4	0	0	1	3	0	0
01-5-03	83	2	F5-	16	NCP	Y	PAS	0	50	50	0	25	75	C1	N	0	25	75	Z	7	0	1	0	0	0	0	1	0	0	0
01-5-04	83	2	F5-	32	RPB	N	PAS	0	50	50	0	10	90	C1	N	0	20	80	Z	7	1	5	1	16	5	2	1	0	0	0
01-5-05	83	2	F5-	16	NCP	N	PAS	0	25	75	0	10	90	C1	N	0	5	95	Z	4	2	1	3	1	0	0	0	0	0	0
01-5-06	83	2	F5-	16	WDC	N	PAS	0	20	80	0	5	95	C1	P	0	10	90	Z	0	0	0	1	0	0	0	0	1	0	0
01-5-07	83	2	F5-	16	NCP	N	PAS	0	25	75	0	10	90	C1	N	0	0	100	Z	3	0	0	0	2	0	0	0	1	0	0
01-5-08	83	2	F5-	16	RPB	Y	IDL	0	50	50	0	5	95	C1	N	0	10	90	Z	2	1	1	1	4	0	0	0	1	0	0
01-5-09	83	2	F5-	24	DAM	Y	IDL	100	0	0	50	25	25	C1	N	25	50	25	Z	7	2	2	3	7	0	0	0	1	0	0
01-5-10	83	2	F5-	24	RPB	N	PAS	0	50	50	0	25	75	C1	T	0	10	90	Z	7	3	3	4	4	0	0	0	3	0	0
** TOTAL **																				56	16	15	25	47	5	2	3	18	0	0

WATERFOWL STREAM SURVEY SUMMARY REPORT #2 S. Missouri Slope /Coteau

SAMPLE NUMBER	YR	MOISTURE COND	FLOW	STREAM WIDTH	STREAM TYPE	MANMADE DAMS	LANDUSE	% GOOD NEST COV ADJ	% MED NEST COV ADJ	% POOR NEST COV ADJ	% GOOD NEST COV SUR	% MED NEST COV SUR	% POOR NEST COV SUR	COMPLEX	BEAVER DAMS	% GOOD BROD POT	% MED BROD POT	% POOR BROD POT	PREDATOR SIGN	MALLARD TIP	GADWALL TIP	WIDGEON TIP	PINTAIL TIP	BWTEAL TIP	G T I PR E D H	REDHEAD TIP	SCAUP TIP	SHOVELER TIP	WOODY TIP	OTHER TIP
02-3-01	84	3	F5+	24	WDC	N	PAS	0	0	100	0	25	75	C1	N	0	0	100	Y	3	0	0	0	0	0	0	0	0	0	0
02-4-01	84	3	F5+	24	RPB	N	PAS	20	60	20	0	30	70	C1	N	20	40	40	Y	2	4	1	1	3	0	0	0	0	0	0
02-5-01	84	3	NFP	16	RPB	N	IDL	3	10	87	1	5	94	C1	N	0	0	100	N	5	4	0	2	11	0	0	0	4	0	0
02-5-02	84	3	F5-	24	RPB	Y	PAS	0	5	95	0	5	95	C1	N	25	30	45	N	3	1	1	0	5	0	0	0	0	0	0
02-5-03	84	3	F5-	16	WDC	N	PAS	0	5	95	0	5	95	C1	N	0	0	100	N	2	0	0	2	0	0	0	0	0	0	0
02-5-04	84	3	NFD	16	WDC	Y	CRP	0	0	100	0	0	100	C1	N	3	0	97	N	1	0	0	0	0	0	0	0	0	0	0
02-5-05	84	3	NFP	16	UDC	Y	PAS	0	100	0	0	100	0	C1	N	50	50	0	N	2	0	0	4	10	2	0	0	2	0	0
02-5-06	84	3	F5-	16	WDC	N	PAS	30	40	30	20	40	40	C1	N	0	0	100	Y	1	0	0	0	0	0	0	0	0	0	0
02-5-07	84	3	NFD	16	NCP	N	CRP	0	0	100	0	0	100	C1	N	0	0	100	N	0	0	0	0	0	0	0	0	0	0	0
02-5-08	84	3	F5-	24	RPB	Y	IDL	50	20	30	10	5	85	C1	N	3	0	97	N	0	0	0	0	0	0	0	0	0	0	0
02-5-10	84	3	NFP	16	RPB	N	PAS	15	20	65	5	10	85	C2	N	0	0	100	N	0	1	0	3	3	1	0	0	3	0	0
02-5-11	84	3	NFP	16	RPB	N	PAS	0	90	10	0	30	70	C1	N	100	0	0	N	2	1	0	0	2	0	0	0	0	0	0
02-5-12	84	3	NFP	16	NCP	N	PAS	0	90	10	0	50	50	C1	T	0	100	0	N	2	0	0	0	0	0	0	0	0	0	0
02-5-13	84	3	NFP	16	NCP	N	CRP	3	0	97	1	0	99	C2	N	0	0	100	N	0	0	0	0	0	0	0	0	0	0	0
02-5-14	84	3	F5-	16	UDC	Y	PAS	0	50	50	0	50	50	C1	N	0	100	0	N	3	0	0	1	2	0	0	0	1	0	0
02-5-15	84	3	F5+	16	RPB	N	PAS	0	30	70	0	15	85	C1	N	10	30	60	N	6	1	0	2	0	0	0	0	0	0	0
** TOTAL **																				32	12	2	15	36	3	0	0	10	0	0

WATERFOWL STREAM SURVEY SUMMARY REPORT #3 SOURIS RIVER

SAMPLE NUMBER	YR	MOISTURE COND	FLOW	STREAM WIDTH	STREAM TYPE	MAN MADE DAMS	LAND USE	% GOOD NEST COV ADJ	% MED NEST COV ADJ	% POOR NEST COV ADJ	% GOOD NEST COV SUR	% MED NEST COV SUR	% POOR NEST COV SUR	COMPLEX	BEAVER DAMS	% GOOD BROD POT	% MED BROD POT	% POOR BROD POT	PREDATOR SIGN	MALLARD TIP	GADWALL TIP	WIDGEON TIP	PINTAIL TIP	BWTEAL TIP	GTIPR EDH	REDHEAD TIP	SCAUP TIP	SHOVELER TIP	WOODY TIP	OTHER TIP
03-2-01	84	3	F5+	32	WDC	N	PAS	0	10	90	0	10	90	C1	N	0	0	100	Y	2	0	0	0	0	0	0	0	0	1	0
03-2-02	84	3	F5+	32	WDC	N	IDL	0	0	100	0	0	100	C1	N	0	0	100	Y	0	0	0	0	0	0	0	0	0	3	0
03-2-03	84	3	F5+	32	WDC	N	PAS	0	10	90	0	10	90	C1	N	0	0	100	Y	5	1	1	1	5	0	0	0	0	0	0
03-3-01	84	3	F5+	16	WDC	N	IDL	60	30	10	50	30	20	C1	P	60	30	10	Y	1	1	1	0	4	0	0	0	0	0	0
03-4-01	84	3	F5-	24	RPB	N	PAS	10	90	0	10	60	30	C1	N	0	100	0	Y	5	3	0	7	19	1	0	0	5	0	0
03-4-02	84	3	F5+	32	WDC	N	HAY	0	50	50	0	25	75	C1	N	10	20	70	N	3	2	1	2	13	0	0	0	2	0	0
03-4-03	84	3	F5+	32	WDC	N	IDL	50	50	0	40	40	20	C1	N	75	25	0	N	0	6	0	7	31	1	1	6	3	0	0
03-5-01	84	3	F5-	24	UDC	N	CRP	20	20	60	1	9	90	C1	N	0	25	75	Y	1	3	0	2	9	0	0	0	2	0	0
03-5-02	84	3	NFP	16	NCP	N	CRP	30	20	50	20	10	70	C1	N	0	40	60	Y	0	0	0	0	2	0	0	0	0	0	0
03-5-03	84	3	F5+	16	WDC	N	IDL	75	25	0	10	10	80	C1	P	0	0	100	Y	6	1	1	1	8	0	0	0	0	0	0
03-5-04	84	3	NFP	16	UDC	N	HAY	0	40	60	0	30	70	C1	N	0	10	90	N	1	0	0	0	0	0	0	0	1	0	0
03-5-05	84	3	F5-	16	RPB	N	PAS	0	50	50	0	50	50	C2	N	0	100	0	Y	3	0	0	0	7	0	0	0	0	0	0
03-5-06	84	3	F5-	16	RPB	N	HAY	0	10	90	0	10	90	C1	N	0	0	100	Y	1	0	0	0	0	0	0	0	0	0	0
03-5-07	84	3	F5-	16	RPB	N	PAS	25	50	25	10	20	70	C1	N	0	20	80	Y	4	0	1	0	0	0	0	0	0	0	0
03-5-08	84	3	NFD	16	NCP	N	PAS	0	70	30	0	40	60	C1	N	0	0	100	Y	4	1	1	1	0	0	0	0	0	0	0
03-5-09	84	3	F5-	32	UDC	N	IDL	0	40	60	0	25	75	C1	N	10	40	50	N	0	1	0	1	15	0	1	0	3	0	0
03-5-10	84	3	F5+	16	WDC	N	IDL	10	60	30	5	25	70	C1	N	0	25	75	Y	1	2	0	0	12	0	0	0	0	0	0
03-5-11	84	3	F5-	16	NCP	Y	PAS	5	75	20	5	75	20	C2	N	5	30	65	N	9	8	0	3	7	0	0	2	5	0	1
03-5-12	84	3	NFD	16	NCP	N	CRP	0	0	100	0	0	100	C1	N	0	0	100	N	0	0	0	0	0	0	0	0	0	0	0
03-5-13	84	3	NFP	16	UDC	N	HAY	0	25	75	0	5	95	C1	N	0	0	100	N	1	0	0	0	0	0	0	0	0	0	0
03-5-14	84	3	NFP	16	RPB	N	HAY	0	40	60	0	10	90	C1	N	0	0	100	N	1	1	0	0	2	0	0	0	0	0	0
03-5-15	84	3	NFP	16	NCP	N	IDL	20	40	40	5	10	85	C1	N	0	10	90	Y	1	0	0	0	0	0	0	0	0	0	0
03-5-17	84	3	F5-	16	WDC	N	PAS	0	10	90	0	10	90	C1	N	0	0	100	Y	0	0	0	0	1	0	0	0	0	0	0
** TOTAL **																														
																				49	30	6	25	135	2	2	8	21	4	1

#4 Devils Lake

WATERFOWL STREAM SURVEY SUMMARY REPORT

SAMPLE NUMBER	YR	MOISTURE COND	FLOW	STREAM WIDTH	STREAM TYPE	MAN MADE DAMS	LAND USE	% GOOD NEST COV ADJ	% MED NEST COV ADJ	% POOR NEST COV ADJ	% GOOD NEST COV SUR	% MED NEST COV SUR	% POOR NEST COV SUR	COMPLEX	BEAVER DAMS	% GOOD BROD POT	% MED BROD POT	% POOR BROD POT	PREDATOR SIGN	MALLARD TIP	GADWALL TIP	WIDGEON TIP	PINTAIL TIP	BWTEAL TIP	G W TI PR EDH	REDHEA TIP	SCAUP TIP	SHOVELER TIP	WOODY TIP	OTHER TIP
04-3-01	84	3	F5+	32	WDC	N	HAY	50	10	40	30	20	50	C1	N	100	0	0	N	1	2	0	0	5	0	0	0	2	0	0
04-4-01	84	3	F5+	24	WDC	N	CRP	100	0	0	0	0	100	C2	N	100	0	0	Y	0	0	0	0	3	0	0	0	0	0	0
04-5-01	84	3	NFP	16	NCP	N	CRP	0	5	95	0	10	90	C2	N	0	10	90	Y	0	0	0	0	2	0	0	0	0	0	0
04-5-02	84	3	NFP	16	RPB	N	PAS	0	20	80	0	20	80	C2	N	0	20	80	N	3	0	0	1	2	0	0	0	0	0	0
04-5-03	84	3	NFP	16	UDC	N	CRP	0	5	95	0	0	100	C2	N	0	0	100	N	1	0	0	0	0	0	0	0	0	0	0
04-5-04	84	3	NFD	16	CHA	N	CRP	10	0	90	1	0	99	C1	N	0	0	100	N	1	0	0	0	0	0	0	0	0	0	0
04-5-05	84	3	NFD	16	UDC	N	CRP	0	0	100	0	0	100	C1	N	0	0	100	N	0	0	0	0	0	0	0	0	0	0	0
04-5-06	84	3	F5-	16	NCP	N	CRP	5	0	95	0	0	100	C2	N	0	10	90	N	0	0	0	0	1	0	0	0	0	0	0
** TOTAL **																				6	2	0	1	13	0	0	0	2	0	0

WATERFOWL STREAM SURVEY SUMMARY REPORT

#5 NE Drift / RED RIVER

SAMPLE NUMBER	YR	MOISTURE COND	FLOW	STREAM WIDTH	STREAM TYPE	MAN MADE DAMS	LAND USE	% GOOD NEST COV ADJ	% MED NEST COV ADJ	% POOR NEST COV ADJ	% GOOD NEST COV SUR	% MED NEST COV SUR	% POOR NEST COV SUR	COMPLEX	BEAVER DAMS	% GOOD BROD POT	% MED BROD POT	% POOR BROD POT	PREDATOR SIGN	MALLARD TRIP	GADWALL TRIP	WIDGEON TRIP	PINTAIL TRIP	BWTEAL TRIP	GWTI PR EDH	REDHEAD TRIP	SCAUP TRIP	SHOVELER TRIP	WOODY TRIP	OTHER TRIP
05-3-01	84	3	F5-	24	WDC	N	CRP	0	50	50	0	10	90	C1	N	100	0	0	N	0	0	0	0	0	0	0	0	0	1	0
05-3-02	84	3	NCP	32	WDC	N	PAS	0	60	40	0	10	90	C1	N	0	100	0	N	0	0	0	0	2	0	0	0	0	0	0
05-4-01	84	3	NFP	16	UDC	Y	CRP	70	0	30	0	0	100	C2	N	0	100	0	N	0	0	0	0	1	1	0	0	0	0	0
05-4-03	84	3	F5-	32	WDC	N	OTH	0	0	100	0	0	100	C1	N	0	0	100	Y	0	0	0	0	0	0	0	0	0	0	0
05-4-04	84	3	F5+	24	WDC	N	CRP	100	0	0	20	0	80	C1	P	100	0	0	N	4	0	0	1	3	0	0	0	2	0	0
05-4-05	84	3	F5+	16	WDC	N	CRP	50	0	50	40	0	60	C1	N	100	0	0	Y	0	0	0	0	0	0	0	0	0	1	0
05-4-06	84	3	F5-	16	RPB	Y	PAS	0	100	0	0	30	70	C1	N	0	50	0	N	0	0	0	0	0	0	0	0	0	0	0
05-5-01	84	3	F5+	32	WDC	N	IDL	50	0	50	0	0	100	C1	N	100	0	0	Y	4	0	0	0	0	0	0	0	0	7	0
05-5-02	84	3	F5+	32	WDC	N	CRP	80	0	20	30	0	70	C1	N	100	0	0	Y	0	0	0	0	0	0	0	0	0	3	0
05-5-03	84	3	NFD	24	CHA	N	CRP	0	0	100	0	0	100	C1	N	0	0	100	N	0	0	0	0	0	0	0	0	0	0	0
05-5-04	84	3	F5-	16	WDC	Y	CRP	0	100	0	5	0	95	C1	P	0	0	100	Y	1	0	0	0	0	0	0	0	0	0	0
05-5-05	84	3	NFP	24	RPB	N	PAS	50	0	50	0	10	90	C2	T	70	0	30	Y	1	0	0	0	1	0	0	0	0	0	0
05-5-06	84	3	NFD	16	WDC	N	CRP	0	0	100	0	0	100	C1	N	0	0	100	N	0	0	0	0	0	0	0	0	0	0	0
05-5-07	84	3	F5-	16	NCP	Y	CRP	50	50	0	0	30	70	C1	P	0	20	80	N	2	0	0	1	0	0	0	0	0	0	0
05-5-08	84	3	NFP	16	UDC	N	CRP	30	0	70	0	30	70	C2	N	0	20	80	Y	0	0	0	0	1	0	0	0	0	0	0
05-5-09	84	3	NFD	24	CHA	N	CRP	0	1	99	0	0	100	C1	N	0	0	100	N	0	0	0	0	0	0	0	0	0	0	0
05-5-10	84	3	NFP	16	WDC	N	CRP	0	20	80	0	0	100	C1	N	0	0	100	N	2	0	0	0	0	0	0	0	0	0	0
05-5-11	84	3	NFD	32	UDC	Y	CRP	0	100	0	0	0	100	C1	N	0	0	100	N	0	0	0	0	0	0	0	0	0	0	0
05-5-12	84	3	NFD	16	UDC	N	CRP	0	0	100	0	0	100	C1	N	0	0	100	N	0	0	0	0	0	0	0	0	0	0	0
05-5-13	84	3	F5-	24	WDC	Y	CRP	0	100	0	0	0	100	C2	N	0	100	0	N	3	0	0	0	3	0	0	0	0	0	0
05-5-15	84	3	NFP	24	WDC	N	CRP	0	10	90	0	0	100	C1	P	0	0	100	Y	2	0	0	0	1	0	0	0	0	0	0
** TOTAL **																				19	0	0	2	12	1	0	0	2	12	0

WATERFOWL STREAM SURVEY SUMMARY REPORT #6 Sheyenne River

SAMPLE NUMBER	YR	MOISTURE COND	FLOW	STREAM WIDTH	STREAM TYPE	MAN MADE DAMS	LAND USE	% GOOD NEST COV ADJ	% MED NEST COV ADJ	% POOR NEST COV ADJ	% GOOD NEST COV SUR	% MED NEST COV SUR	% POOR NEST COV SUR	COMPLEX	BEAVER DAMS	% GOOD BROD POT	% MED BROD POT	% POOR BROD POT	PREDATOR SIGN	MALLARD TIP	GADWALL TIP	WIDGEON TIP	PINTAIL TIP	BWTEAL TIP	G T I PR EDH	REDHEAD TIP	SCAUP TIP	SHOVELER TIP	WOODY TIP	OTHER TIP
06-2-01	84	3	F5+	32	WDC	N	IDL	0	10	90	0	5	95	C1	N	0	0	100	Y	0	0	0	0	0	0	0	0	0	0	0
06-2-02	84	3	F5+	32	WDC	N	IDL	0	10	90	0	10	90	C1	N	0	25	75	Y	0	0	0	0	0	0	0	0	0	4	0
06-2-03	84	3	F5+	32	WDC	N	IDL	10	20	70	20	30	50	C1	N	60	20	20	N	2	0	0	0	1	0	0	0	0	1	0
06-3-01	84	3	F5+	32	DAM	N	IDL	40	40	20	20	20	60	C1	N	25	50	25	N	6	4	3	0	7	0	0	0	1	0	0
06-3-02	84	3	F5+	32	WDC	N	PAS	0	60	40	10	30	60	C2	N	10	60	30	Y	2	0	0	0	2	0	0	0	0	0	0
06-3-03	84	3	F5+	32	WDC	N	HAY	20	80	0	0	60	40	C2	N	100	0	0	Y	1	0	0	0	1	0	0	0	1	0	0
06-3-04	84	3	F5+	32	WDC	N	PAS	0	0	100	0	0	100	C1	N	0	40	60	N	3	1	1	1	3	0	0	0	0	2	1
06-5-01	84	3	F5-	16	NCP	N	IDL	50	30	20	20	10	70	C1	N	10	10	80	N	0	0	0	0	3	0	0	0	0	0	0
06-5-02	84	3	NFD	16	UDC	N	CRP	0	0	100	0	0	100	C1	N	0	0	100	N	0	0	0	0	0	0	0	0	0	0	0
06-5-03	84	3	F5-	16	RPB	N	PAS	20	30	50	10	30	60	C1	P	10	50	40	Y	1	0	0	0	1	0	0	0	0	0	0
06-5-04	84	3	F5-	16	UDC	N	PAS	75	25	0	50	10	40	C1	N	0	0	100	Y	0	0	0	0	0	0	0	0	0	0	0
06-5-05	84	3	NFP	16	NCP	Y	PAS	0	75	25	0	10	90	C3	N	0	25	75	Y	3	0	0	2	6	0	0	0	0	0	0
06-5-06	84	3	F5-	16	RPB	N	HAY	0	85	15	0	30	70	C1	N	0	100	0	N	2	1	1	1	7	0	0	0	5	0	0
06-5-07	84	3	F5-	16	RPB	N	CRP	10	20	70	10	10	80	C1	N	0	50	50	Y	1	0	0	0	1	0	0	0	0	0	0
06-5-09	84	3	F5-	16	WDC	N	PAS	0	25	75	0	10	90	C1	N	0	5	95	N	0	0	0	1	4	0	0	0	0	0	0
06-5-11	84	3	F5-	16	NCP	Y	PAS	0	10	90	0	90	10	C2	N	0	20	80	Y	4	2	0	0	4	0	0	0	0	0	0
06-5-12	84	3	F5+	24	NCP	N	PAS	0	100	0	0	85	15	C2	N	100	0	0	N	1	0	0	1	8	0	0	0	1	0	0
** TOTAL **																				26	8	5	6	48	0	0	0	8	7	1

WATERFOWL STREAM SURVEY SUMMARY REPORT #7 JAMES RIVER

SAMPLE NUMBER	YR	MOISTURE COND	FLOW	STREAM WIDTH	STREAM TYPE	MAN MADE DAMS	LAND USE	% GOOD NEST COV ADJ	% MED NEST COV ADJ	% POOR NEST COV ADJ	% GOOD NEST COV SUR	% MED NEST COV SUR	% POOR NEST COV SUR	COMPLEX	BEAVER DAMS	% GOOD BROD POT	% MED BROD POT	% POOR BROD POT	PREDATOR SIGN	MALLARD TIP	GADWALL TIP	WIDGEON TIP	PINTAIL TIP	BWTEAL TIP	G T I PR E D H	REDHEAD TIP	SCAUP TIP	SHOVELER TIP	WOODY TIP	OTHER TIP
07-3-01	84	3	F5+	24	WDC	N	PAS	0	50	50	0	50	50	C2	N	0	100	0	N	3	0	0	0	3	0	0	0	0	0	0
07-3-02	84	3	F5+	32	WDC	N	PAS	0	10	90	0	10	90	C1	N	0	20	80	Y	1	0	0	0	0	0	0	0	0	1	0
07-4-01	84	3	F5-	24	RPB	Y	IDL	40	40	30	30	30	40	C1	N	0	30	70	Y	3	1	1	1	13	0	0	0	3	0	0
07-4-02	84	3	NFP	16	RPB	N	IDL	10	20	70	0	20	80	C1	N	0	0	100	N	3	0	2	1	2	0	0	0	0	0	0
07-5-01	84	3	F5-	16	RPB	N	PAS	0	25	75	0	10	90	C1	N	0	10	90	N	3	0	0	3	6	0	0	0	0	0	0
07-5-02	84	3	F5-	16	WDC	Y	IDL	20	40	40	20	40	40	C1	N	0	20	80	N	1	0	0	1	6	0	0	0	0	0	0
07-5-03	84	3	F5-	16	UDC	N	PAS	0	50	50	0	20	80	C1	N	0	0	100	N	0	0	0	1	3	0	0	1	0	0	0
07-5-04	84	3	NFD	16	UDC	Y	PAS	0	10	90	0	10	90	C1	N	0	10	90	N	0	0	0	0	1	0	0	0	0	0	0
07-5-05	84	3	F5-	16	RPB	N	PAS	40	40	20	40	40	20	C1	N	0	10	90	N	3	1	0	2	5	0	0	0	0	0	0
07-5-06	84	3	F5-	24	RPB	N	PAS	10	20	70	5	10	85	C1	N	0	20	80	N	2	0	0	0	3	0	0	0	0	0	0
07-5-07	84	3	F5-	16	UDC	N	IDL	100	0	0	10	0	90	C2	N	0	100	0	Y	1	0	0	0	0	0	0	1	0	0	0
07-5-08	84	3	NFP	16	UDC	N	PAS	30	40	30	20	40	40	C1	N	0	10	90	N	5	0	1	2	4	0	2	0	1	0	0
07-5-09	84	3	NFP	24	UDC	N	PAS	0	25	75	0	10	90	C1	N	0	10	90	Y	1	1	1	0	3	0	0	0	0	0	0
07-5-10	84	3	NFP	16	UDC	N	CRP	0	0	100	0	0	100	C1	N	0	0	100	Y	0	1	0	0	0	0	0	0	0	0	0
07-5-11	84	3	NFP	16	UDC	N	PAS	0	50	50	0	30	70	C1	N	0	20	80	N	1	1	0	1	8	1	0	0	0	0	0
07-5-12	84	3	NFD	16	UDC	N	CRP	0	0	100	0	0	100	C1	N	0	0	100	N	0	0	0	0	0	0	0	0	0	0	0
** TOTAL **																				27	5	5	12	57	1	2	2	4	1	0

WATERFOWL STREAM SURVEY SUMMARY REPORT

8 Wild Rice River

SAMPLE NUMBER	YR	MOISTURE COND	FLOW	STREAM WIDTH	STREAM TYPE	MAN MADE DAMS	LAND USE	% GOOD NEST COV ADJ	% MED NEST COV ADJ	% POOR NEST COV ADJ	% GOOD NEST COV SUR	% MED NEST COV SUR	% POOR NEST COV SUR	COMPLEX	BEAVER DAMS	% GOOD BROD POT	% MED BROD POT	% POOR BROD POT	PREDATOR SIGN	MALLARD TIP	GADWALL TIP	WIDGEON TIP	PINTAIL TIP	BWTEAL TIP	GTIPR EDH	REDHEAD TIP	SCAUP TIP	SHOVELER TIP	WOODY TIP	OTHER TIP
08-3-01	84	3	F5+	24	WDC	N	IDL	25	50	25	10	30	60	C2	N	10	50	40	N	9	3	5	6	46	0	0	0	3	0	0
08-4-01	84	3	F5-	24	RPB	N	IDL	0	50	50	0	50	50	C2	N	10	30	60	N	1	2	0	2	21	0	0	0	9	0	0
08-5-01	84	3	NFD	16	UDC	N	HAY	0	5	95	0	0	100	C1	N	0	0	100	N	0	0	0	0	0	0	0	0	0	0	0
08-5-02	84	3	F5-	16	CHA	N	CRP	0	0	100	0	0	100	C1	N	0	0	100	N	0	0	0	0	0	0	0	0	0	0	0
08-5-03	84	3	F5-	16	RPB	N	IDL	25	50	25	10	30	60	C1	N	0	0	100	N	0	0	0	0	0	0	0	0	0	0	0
** TOTAL **																				10	5	5	8	67	0	0	0	12	0	0

WATERFOWL STREAM SURVEY SUMMARY REPORT #9 SW Slope (1 of 3)

SAMPLE NUMBER	YR	MOISTURE COND	FLOW	STREAM WIDTH	STREAM TYPE	MAN MADE DAMS	LAND USE	% GOOD NEST COV ADJ	% MED NEST COV ADJ	% POOR NEST COV ADJ	% GOOD NEST COV SUR	% MED NEST COV SUR	% POOR NEST COV SUR	COMPLEX	BEAVER DAMS	% GOOD BROD POT	% MED BROD POT	% POOR BROD POT	PREDATOR SIGN	MALLARD TIP	GADWALL TIP	WIDGEON TIP	PINTAIL TIP	BWTEAL TIP	GWTI PR EDH	REDHEAD TIP	SCAUP TIP	SHOVELER TIP	WOODY TIP	OTHER TIP
09-3-01	84	2	F5+	24	WDC	N	IDL	10	20	70	5	15	80	C1	T	0	0	100	Y	3	0	0	0	0	0	0	0	0	0	0
09-3-02	84	2	F5+	32	WDC	N	IDL	75	15	10	30	30	40	C1	N	0	0	100	Y	2	0	0	0	0	0	0	0	0	0	0
09-3-03	84	2	F5+	32	WDC	N	IDL	60	20	20	40	30	30	C1	N	0	50	50	Y	1	0	0	0	0	0	0	0	0	0	0
09-3-05	84	2	F5+	32	WDC	N	PAS	0	25	75	0	25	75	C1	N	0	25	75	N	4	0	0	0	0	0	0	0	0	0	0
09-3-07	84	2	F5+	16	WDC	N	IDL	60	20	20	40	20	40	C1	N	0	20	80	Y	3	0	0	0	0	0	0	0	0	0	0
09-4-01	84	2	NFP	16	RPB	N	HAY	0	0	100	0	0	100	C1	N	0	0	100	N	2	0	0	0	2	0	0	0	0	0	0
09-4-02	84	2	NFP	32	UDC	N	PAS	30	30	40	5	5	90	C1	N	60	20	20	N	11	1	1	7	1	1	0	0	0	0	0
09-4-03	84	2	F5-	16	RPB	N	PAS	0	40	60	0	40	60	C2	N	0	20	80	Y	5	0	0	1	0	0	0	0	0	0	0
09-4-04	84	2	F5+	24	WDC	N	PAS	0	100	0	0	50	50	C1	N	0	0	100	Y	2	0	0	0	0	0	0	0	0	0	0
09-4-05	84	2	F5+	32	WDC	N	IDL	20	30	50	10	20	70	C1	T	0	0	100	Y	0	0	0	0	0	0	0	0	0	0	0
09-4-06	84	2	F5-	16	WDC	N	CRP	20	20	60	10	20	70	C1	N	0	0	100	Y	1	0	0	0	0	0	0	0	0	0	0
09-5-01	84	2	F5-	16	WDC	N	HAY	25	40	35	20	30	50	C1	N	0	10	90	Y	2	1	0	0	1	0	0	0	0	0	0
09-5-02	84	2	F5-	16	WDC	N	PAS	0	10	90	0	5	95	C1	N	0	0	100	N	0	0	0	0	0	0	0	0	0	0	0
09-5-03	84	2	F5-	16	RPB	Y	PAS	0	20	80	0	80	20	C1	N	0	100	0	N	4	0	0	1	4	0	0	0	3	0	0
09-5-04	84	2	NFD	16	UDC	N	CRP	0	20	80	10	30	60	C1	N	0	0	100	Y	0	0	0	0	0	0	0	0	0	0	0
09-5-05	84	2	F5-	16	WDC	Y	CRP	20	20	60	5	25	70	C1	T	0	30	70	Y	6	1	0	1	1	2	0	0	1	0	0
09-5-06	84	2	F5-	16	RPB	N	PAS	0	20	80	0	10	90	C1	N	0	10	90	Y	3	0	0	1	2	0	0	0	0	0	0
09-5-07	84	2	F5+	16	WDC	N	PAS	0	0	100	0	0	100	C1	N	0	0	100	Y	3	0	0	1	0	0	0	0	0	0	0
09-5-08	84	2	F5-	16	NCP	Y	PAS	15	15	70	5	20	75	C1	N	0	100	0	N	2	0	1	0	1	0	0	0	0	0	0
09-5-09	84	2	F5-	16	NCP	Y	PAS	3	7	90	5	10	85	C1	N	5	5	90	N	1	0	0	2	0	0	0	0	0	0	0
09-5-10	84	2	F5+	16	WDC	N	PAS	30	40	30	10	40	50	C1	N	20	50	30	Y	2	0	2	1	3	0	0	0	0	0	0
09-5-11	84	2	F5-	16	WDC	N	PAS	50	30	20	30	30	40	C1	N	10	20	70	Y	2	0	0	0	2	0	0	0	0	0	0
09-5-12	84	2	F5-	16	WDC	N	CRP	0	10	90	0	5	95	C1	N	0	10	90	Y	0	0	0	1	0	0	0	0	0	0	0
09-5-13	84	2	F5-	32	WDC	N	IDL	30	50	20	20	50	30	C1	N	0	30	70	Y	4	2	3	0	1	0	0	0	1	0	0
09-5-14	84	2	F5-	16	RPB	N	PAS	0	5	95	0	5	95	C1	N	0	10	90	N	3	0	0	2	2	0	0	0	0	0	0
09-5-15	84	2	F5-	16	RPB	N	PAS	0	0	100	0	0	100	C1	N	0	0	100	N	2	0	0	1	0	0	0	0	0	0	0
09-5-16	84	2	NFP	16	RPB	Y	PAS	0	10	90	20	40	40	C1	N	0	10	90	N	1	5	1	2	5	0	0	0	0	0	0
09-5-17	84	2	F5-	24	WDC	N	PAS	10	40	50	10	40	50	C1	T	0	20	80	Y	2	0	0	0	0	0	0	0	0	1	0
09-5-18	84	2	F5+	16	WDC	N	CRP	10	30	60	20	30	50	C1	N	0	20	80	Y	3	0	0	0	0	0	0	0	0	0	0
09-5-20	84	2	F5-	16	WDC	N	PAS	10	40	50	10	40	50	C1	T	10	30	60	Y	3	0	1	0	3	0	0	0	0	0	0

#9 SW SlopE (cont.)
2 of 3

09-5-21	84	2	F5+	24	RPB	N	PAS	30	20	50	10	20	70	C1	N	30	20	50	Y	3	0	2	4	2	0	0	0	0	0	0
09-5-22	84	2	F5+	16	WDC	N	CRP	30	0	70	20	20	60	C1	N	0	10	90	Y	2	1	0	0	3	0	0	0	1	0	0
09-5-23	84	2	F5-	16	WDC	N	PAS	0	0	100	0	10	90	C1	P	0	10	90	Y	2	0	0	0	0	0	0	0	0	0	0
09-5-24	84	2	NFP	16	UDC	Y	CRP	20	20	60	0	10	90	C1	N	0	10	90	Y	1	0	1	1	0	0	0	0	0	0	0
09-5-26	84	2	F5-	16	RPB	N	PAS	0	20	80	0	80	20	C1	P	0	0	100	N	2	0	0	0	1	0	0	0	0	0	0
09-5-27	84	2	F5-	16	RPB	Y	PAS	0	100	0	0	100	0	C1	N	0	100	0	N	2	0	0	3	0	0	0	0	0	0	0
09-5-28	84	2	NFP	16	DAM	Y	PAS	0	20	80	40	30	30	C2	N	20	50	30	N	15	6	1	6	6	0	1	5	4	0	0
09-5-29	84	2	F5+	16	WDC	N	PAS	20	60	20	35	50	15	C1	N	60	40	0	N	0	1	0	1	2	0	0	0	2	0	0
09-5-30	84	2	F5-	16	WDC	N	PAS	40	50	10	25	50	25	C1	T	0	20	80	Y	2	0	0	0	1	0	0	0	0	0	0

#9 SW SlopE (cont) 3 of 3

SAMPLE NUMBER	YR	MOISTURE COND	FLOW	STREAM WIDTH	STREAM TYPE	MAN MADE DAMS	LAND USE	% GOOD NEST COV ADJ	% MED NEST COV ADJ	% POOR NEST COV ADJ	% GOOD NEST COV SUR	% MED NEST COV SUR	% POOR NEST COV SUR	COMPLEX	BEAVER DAMS	% GOOD BROD POT	% MED BROD POT	% POOR BROD POT	PREDATOR SIGN	MALLARD TIP	GADWALL TIP	WIDGEON TIP	PINTAIL TIP	BWTEAL TIP	G T I PR E D H	REDHEAD TIP	SCAUP TIP	SHOVELER TIP	WOODY TIP	OTHER TIP
09-5-31	84	2	F5-	16	WDC	N	PAS	0	15	85	0	10	90	C1	N	0	0	100	Y	1	0	0	0	1	0	0	0	0	0	0
09-5-32	84	2	NFD	16	UDC	Y	PAS	0	100	0	0	100	0	C1	N	0	0	100	Y	0	0	0	0	0	0	0	0	0	0	0
09-5-33	84	2	F5-	16	RPB	N	PAS	0	5	95	0	5	95	C1	N	0	0	100	N	1	0	0	1	0	1	0	0	0	0	0
09-5-34	84	2	F5-	16	NCP	N	PAS	0	10	90	3	12	85	C1	N	0	0	100	N	3	0	0	1	0	0	0	0	0	0	0
09-5-35	84	2	NFP	16	RPB	Y	PAS	30	60	10	10	40	50	C1	N	20	30	50	Y	11	7	0	7	8	1	0	0	11	0	0
09-5-36	84	2	F5+	16	WDC	N	PAS	30	30	40	10	20	70	C1	T	0	25	75	N	0	0	0	0	0	0	0	0	0	0	0
09-5-37	84	2	F5-	16	RPB	N	PAS	0	50	50	0	50	50	C1	T	0	0	100	N	2	0	0	0	0	0	0	0	0	0	0
09-5-38	84	2	F5-	16	RPB	N	PAS	40	40	20	10	20	70	C1	N	10	20	70	Y	6	0	3	1	4	0	0	0	0	0	0
09-5-39	84	2	F5+	16	WDC	N	PAS	0	20	80	0	5	95	C1	N	0	100	0	N	0	0	0	1	0	0	0	0	0	0	0
09-5-40	84	2	F5-	16	WDC	N	IDL	40	30	30	30	30	40	C1	N	0	20	80	Y	3	2	0	0	1	0	0	0	0	0	0
09-5-41	84	2	F5-	16	WDC	N	PAS	20	40	40	20	50	30	C1	N	0	10	90	Y	2	1	0	1	0	0	0	0	0	0	0
09-5-42	84	2	F5-	16	WDC	N	PAS	20	60	20	10	50	40	C1	N	10	20	70	Y	3	5	0	2	5	0	0	0	1	0	0
09-5-43	84	2	NFP	16	NCP	N	IDL	0	20	80	0	0	100	C1	N	0	0	100	N	0	0	0	0	0	0	0	0	0	0	0
09-5-44	84	2	F5-	16	NCP	N	PAS	10	60	30	5	70	25	C1	N	0	0	100	Y	0	0	0	0	0	0	0	0	0	0	0
** TOTAL **																				138	33	16	50	62	5	1	5	24	1	0

WATERFOWL STREAM SURVEY SUMMARY REPORT

#10 Little Missouri River

SAMPLE NUMBER	YR	MOISTURE COND	FLOW	STREAM WIDTH	STREAM TYPE	MAN MADE DAMS	LAND USE	% GOOD NEST COV ADJ	% MED NEST COV ADJ	% POOR NEST COV ADJ	% GOOD NEST COV SUR	% MED NEST COV SUR	% POOR NEST COV SUR	COMPLEX	BEAVER DAMS	% GOOD BROD POT	% MED BROD POT	% POOR BROD POT	PREDATOR SIGN	MALLARD TIP	GADWALL TIP	WIDGEON TIP	PINTAIL TIP	BWTEAL TIP	GWTEAL PR EDH	REDHEAD TIP	SCAUP TIP	SHOVELER TIP	WOODY TIP	OTHER TIP
10-2-01	84	2	F5+	32	WDC	N	PAS	30	50	20	30	50	20	C1	N	0	20	80	Y	0	0	0	0	0	0	0	0	0	0	0
10-2-02	84	2	F5+	32	WDC	N	IDL	30	40	30	30	40	30	C1	N	0	20	80	Y	0	0	0	0	1	0	0	0	0	0	0
10-4-01	84	2	F5-	16	WDC	N	PAS	80	20	0	40	30	20	C1	T	20	40	40	Y	5	8	6	4	6	0	0	0	1	0	0
10-5-02	84	2	NFP	16	RPB	N	PAS	10	40	50	10	20	70	C1	N	0	10	90	Y	3	2	1	0	1	0	0	0	0	0	0
10-5-06	84	2	F5-	16	WDC	N	PAS	0	30	70	0	30	70	C1	N	0	10	90	Y	6	0	1	0	1	0	0	0	0	0	0
10-5-07	83	1	F5-	16	WDC	N	HAY	20	75	5	20	75	5	C1	T	0	10	90	Z	4	0	0	0	0	0	0	0	0	0	0
10-5-08	84	2	F5-	24	WDC	N	PAS	0	30	70	0	10	90	C1	P	0	0	100	Y	0	0	0	0	0	0	0	0	0	0	0
10-5-09	84	2	F5-	16	WDC	N	IDL	20	40	40	30	40	30	C1	P	0	10	90	Y	1	0	0	0	0	0	0	0	0	0	0
10-5-10	83	1	NFP	24	NCP	N	IDL	0	30	70	0	10	90	C1	N	0	50	50	Z	5	0	1	2	1	0	0	0	1	0	0
10-5-11	83	1	F5-	16	NCP	N	IDL	0	30	70	0	30	70	C1	N	0	0	100	Z	3	0	0	0	7	0	0	0	0	0	0
10-5-12	83	1	F5-	16	NCP	N	PAS	0	20	80	0	20	80	C1	N	0	0	100	Z	4	0	1	0	0	0	0	0	0	0	0
10-5-13	84	2	NFD	16	UDC	N	CRP	0	0	100	0	20	80	C1	N	0	0	100	N	0	0	0	0	0	0	0	0	0	0	0
10-5-15	84	2	F5-	16	RPB	N	PAS	10	30	60	10	20	70	C1	N	0	20	80	N	2	0	0	0	1	0	0	0	0	0	0
10-5-16	83	1	NFP	16	NCP	N	IDL	50	50	0	30	20	50	C1	N	0	0	100	Z	7	0	0	0	1	0	0	0	0	0	0
10-5-17	83	1	NFP	24	NCP	N	IDL	0	40	60	15	10	75	C1	N	0	25	75	Z	6	4	6	2	0	0	0	0	2	0	0
10-5-18	83	1	F5-	24	NCP	N	PAS	25	75	0	25	50	25	C1	P	0	50	50	Z	3	2	3	0	5	1	0	0	2	0	0
10-5-19	83	1	F5-	16	WDC	N	IDL	25	50	25	25	50	25	C1	N	0	25	75	Z	1	0	0	0	0	0	0	0	0	0	0
10-5-20	83	1	F5-	16	NCP	N	PAS	0	0	100	0	0	100	C1	N	0	0	100	Z	3	1	1	0	2	0	0	0	0	0	0
10-5-21	83	1	F5-	16	NCP	N	IDL	50	50	0	10	50	40	C1	P	30	50	20	Z	4	0	0	0	2	0	0	0	0	0	0
** TOTAL **																				57	17	20	8	27	1	0	0	6	0	0