

UNITED STATES GOVERNMENT
MEMORANDUM

DATE: March 25, 2008

REPLY TO

ATTN OF: Acting Refuge Manager, Fort Niobrara-Valentine NWR Complex
(64520)

SUBJECT: 2007-2008 Annual Water Management Plan/Water Use Report – Fort
Niobrara NWR

TO: Paul Cornes, Refuge Supervisor

Approximately 375 acres of Fort Niobrara NWR are classified as wetland which includes ~9 miles of the Niobrara River and numerous intermittent streams and ponds. The Niobrara River is a very important habitat feature and public use resource on Fort Niobrara NWR; however, because we do not have water level control structures on the river, it is not specifically addressed in this report. Water management activities on Fort Niobrara are limited and involve the maintenance of water levels within several spring-fed ponds located outside of the Fort Niobrara Wilderness Area. Ponds are maintained at full capacity throughout most of the year with periodic draw downs accomplished for aquatic vegetation management after ice-out (late February-early March) or structure repair. Ponds are managed to provide water for bison and elk, as well as provide habitat for other wildlife species. They are also used by the Nebraska Game and Parks Commission (Fisheries Division) under cooperative agreement for fish rearing and maintenance of brood stock. Twenty-five windmill systems are maintained to provide water for bison and elk and serve as a reloading source during wildfire suppression. An approximate 3.5 mile water pipeline system off an existing well was constructed in 2006 and provides water for bison in 4 habitat management units.

Summary of 2007 Water Use:

Pond #	Location	Water Impounded	Principle Use	Water Depth	Surface Acres	Area Storage Capacity	Comments
1-T	H.U. 32	Yes	Fish, Bison & Other Wildlife	4'	.12	.23	Temporary holding pond for bluegill in the spring.
2-T	H.U. 30	Yes	Fish, Bison & Other Wildlife	4'	.82	2.46	Over-winter black bullhead brood stock.
3-T	H.U. 29/30	Yes/No	Fish, Bison & Other Wildlife	4'	.15	.39	Over-winter black bullheads. New water control structure installed July '07.

4-T	H.U. 29/30	No	Wildlife				Dike washed out, not impounded for several years.
5-T	H.U. 16 (back-down)	Yes	Fish, Bison, Elk & Other Wildlife	6'	.74	2.98	Largemouth bass brood stock.
6-T	H.U. 16 (central, "Y")	Yes	Fish, Bison, Elk & Other Wildlife	5'	.31	1.26	Over-winter largemouth bass and fathead minnows. Production and over-winter bluegill.
7-T	H.U. 16 (central)	Yes	Fish, Bison, Elk & Other Wildlife	4'	.3	1.2	Production and over-wintering of bluegill.
1	H.U. 27	Yes	Fish, Bison, Elk & Other Wildlife	4'	.22	.66	Over-wintering and production of bluegill and channel catfish.
2	H.U. 27	Yes	Fish, Bison, Elk & Other Wildlife	5'	.83	2.91	Over-wintering and/or production of largemouth bass, bluegill and channel catfish.
3	H.U. 27	Yes	Fish, Bison, Elk & Other Wildlife	5'	1.07	3.76	Over-wintering and/or production of bluegill and channel catfish.
4	H.U. 27	Yes	Fish, Bison, Elk & Other Wildlife	5'	1.85	6.47	Over-wintering and/or production of largemouth bass, bluegill and channel catfish.
5	H.U. 27	Yes	Fish, Bison, Elk & Other Wildlife	6'	.42	1.47	Production and over-wintering of largemouth bass and bluegill.
6	H.U. 13	Yes	Fish, Wildlife, Government Horses	8'	1.10	6.65	Largemouth bass rearing.
7	H.U. 16 (east)	Yes	Fish, Bison, Elk & Other Wildlife	6'	.61	2.47	Production and over-wintering of bluegill.

Proposed 2008 Water Use:

All ponds will be impounded in 2008 and maintained at maximum levels. Drawdown for vegetation control or dike/structure maintenance will be scheduled so as to not conflict with use by bison, elk, or nesting waterfowl.

Submitted By: _____

Date: _____

Reviewed and
Approved By: _____

Date: _____