VALLEY CITY WETLAND MANAGEMENT DISTRICT VALLEY CITY, NORTH DAKOTA

NARRATIVE REPORT FISCAL YEAR 1975 VALLEY CITY WETLAND MANAGEMENT DISTRICT VALLEY CITY, NORTH DAKOTA

ANNUAL NARATIVE REPORT

FISCAL YEAR 1975

PERSONNEL

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David E. Goeke (EOD 10/15/73)	Wetland Manager
Ronald Manson (EOD 8/4/74)	Biological Tech.
Mary Ann Brodal (EOD 3/31/74)	Clerk-Typist (PT)
Clarence Risser (4/27/75 - 11/15/75)	Laborer (Subject
	to Furlough)

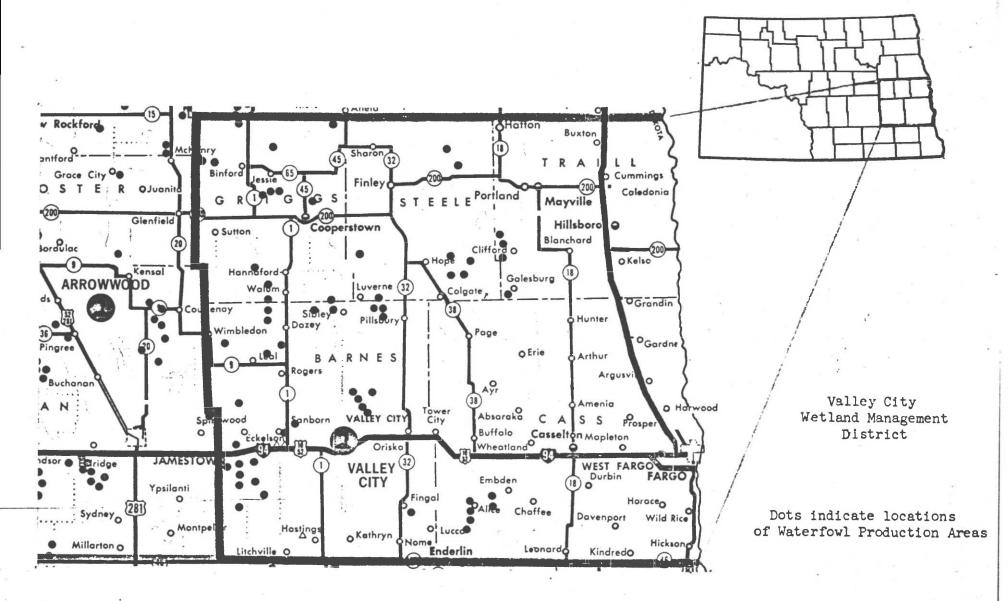
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I. GENERAL

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Description of the Area

The Valley City WMD is a substation of the Arrowwood complex and is made up of the five east-central North Dakota counties of Barnes, Cass, Griggs, Steele, and Traill. Sixty-three waterfowl production areas totalling 12,520 acres are managed and waterfowl management easements protecting 37,927 wetland acres and Hobart Lake, Sibley Lake, Stoney Slough, and Tomahawk easement refuges are administered from Valley City. The WMD shares headquarters facilities with the Valley City National Fish Hatchery.

B. Status of the Acquisition Program

1. Fee Title Program

Although only 95.65 acres of land, 15.9 acres in Barnes County and 79.75 acres in Steele County, were turned over to the WMD in FY 1974, it was over six times the land acquired in 1973. Acquisition in Barnes County in terms of land optioned was looking up with 663.6 acres optioned for purchase. Total fee acquisition for the district now stands at 12,520.31 acres.

2. Easement Program

Easement acquisition began to taper off in Griggs County but continued good in Barnes County. A total of 2,963 wetland acres was added in FY "75" bringing the cumulative total to 37,927 wetland acres under easement in the district. From April, 1973, when the Devils Lake WO took over Griggs County until July, 1975, 12,060 of the 16,176 wetland acres under easement in Griggs County were protected.

C. Habitat Conditions

Although total precipitation at Valley City for 1974 was .8 inches above normal, there was little recovery from the extremely dry conditions of 1973. By freeze up approximately 75% of all wetlands, including type IV's, were dry.

Winter snowfall was scarce and there was little to protect the blackened landscape when a severe blizzard raged through the area on January 10-12. Fifty mile per hour winds and temperatures down to -15° created a wind chill factor of -80°. The cold combined with the zero visibility resulting from blowing snow and dirt completely paralyzed the area for three days. Vast amounts of wind-blown soil formed huge black drifts in shelterbelts and wetlands, eliminating a great deal of food and shelter for wintering wildlife that managed to survive the blizzard itself. By the middle of March all snow was gone and the little runoff that resulted had disappeared into the cracks in the wetland bottoms.

The outlook was bleak indeed but then the tide turned. Three rapid-fire blizzards during late March and early April dumped 2 - 3 feet of snow on most of the district. Runoff from these late snows followed by seemingly endless days of rain filled all wetlands completely and then went on to the extreme of causing flooding problems. Storms on June 29 and 30 dumped up to ten or more inches of rain on the southern parts of Barnes and Cass counties. The town of Litchville, 20 miles southwest of Valley City, received 15.04 inches of rain in June alone!

The abundant spring moisture resulted in excellent growth of DNC plantings. Several plantings that appeared to be poor catches in the fall of 1973 turned out exceptionally well. The high water levels following the heavy spring precipitation may also help thin out the dense cattail stands on several WPA's.

II. <u>WILDLIFE</u>

When this station was reduced to a substation within the Arrowwood complex, in 1973, the resulting reduction in manpower forced suspension of regular wildlife census efforts. This, combined with the lack of a statistically acceptable yet operationally practical method of censusing wildlife on widely scattered WPA's and easement refuges, makes accurate, detailed analysis of district populations impossible. For the most part about all we can do is make educated guesses and talk in terms of population trends.

A. Migratory Birds

1. Waterfowl

a. Ducks

Water conditions deteriorated throughout the summer of 1974 and by the time significant numbers of migrants arrived the majority of district WPA's were dry. About all that remained were type V's and it appeared that most migrating ducks bypassed the area. Total duck use for CY 1974 was down considerably from previous years due to the dry conditions.

The late March and early April blizzards delayed the spring migration and resulted in many birds overflying the district. The first migrants observed were 5 lesser scaup over the Hagglund WPA, Barnes County, on March 17. The blizzards then brought a return to winter and no ducks were seen until April 7 when many species showed up on the only open water in the area, the Sheyenne River between Baldhill Dam and Valley City. The April 8 blizzard brought another setback but by April 10 almost all species could be found on the river.

In 1974 the number of random quarter sections used in the breeding pair count was increased to 100 in the 12 county Arrowwood WAD. Of these, 29 quarters are in the Valley City WAD. The 1975 counts were conducted on May 20-23. Over the entire 12 counties there was an increase of 6.7% more pairs than in 1974, a 12.7% decrease in dabler species and a 40.6% increase in diver species. Total production for WPA's in the 12 counties was projected to be 24,262 with about 5,884 produced on WPA's in the Valley City WAD.

The WPA pair count is a statistically valid method of estimating WPA duck production. Estimating total duck production for the district is another matter. Using the established guesstimate of .5 ducks produced per wetland acre on easement refuges and waterfowl production easements, estimated 1975 production for these two parts of the district was 20,063. Combined with the WPA pair count projection, we get a total estimated production of 25,947 ducks from the Valley City WHD.

b. Geese

Although there were no district-wide censuses run during the fall of 1974, it was apparent that there were normal or above normal numbers of geese present during October.

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Most WPA's were dry but traditional concentration areas such as Stoney Slough, Hobart Lake, and Sibley Lake easement refuges still attracted several thousand geese each, mostly blues and snows.

During the spring migrating geese were delayed by the March and April blizzards. The first observed were 15 large Canadas over Valley City on March 20. Significant numbers, however, were not seen until over 13,000 blue and snow geese in many flocks were observed on April 14 - 18. Like the ducks most geese did not stop in the district but flew on farther north where there was less snow and more available food.

c. Swans

Whistling swans again made good fall use of Hobart Lake NWR with a peak population of about 1,500. No color-marked birds were observed. One wounded swan was brought to the captive display flock at the NFH but it recovered fully and flew away.

The first spring swans were observed on April 11 and the main migration appeared to pass through on April 19 and 20. About seven swans were known to summer in the district and for awhile we thought a pair had nested on the Utke WPA in Cass County. No nest or young were found though.

2. Water and Marsh Birds

With the suspension of regular waterfowl censusing records of most other bird species have suffered also. Only spring observations were regularly recorded and these were reported in <u>American Birds</u>. The only unusual observation was of a green heron at the NFH on April 30 and for several days thereafter.

3. Shorebirds, Gulls, and Terns

With the extensive mudflats and shallow waters resulting from the many drying wetlands, there was abundant shorebird habitat again in the fall of 1974 and use by these birds was again high. The return of good water levels in the spring in turn reduced shorebird use on WPA's in 1975.

Large numbers of Franklin's gulls again used Alice WPA and Hobart Lake NWR during the fall.

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4. Doves

One annual coo count was conducted on May 28. Doves appeared to be more abundant than in 1974.

B. Upland Game Birds

Pheasants continued to hold their own on the Fullers Lake and Alice WPA's. Elsewhere in the district they are practically non-existent.

Sharp-tailed grouse were not observed.

Hungarian partridge were fairly common over the district until the January 10-12 blizzard. Since then sightings have been very rare and it's believed that a high percentage of the partridge population perished in the storm.

C. Raptorial Birds

No major movements of hawks was recorded during the fall of 1974. During the spring large numbers of hawks, particularly red-tailed, were migrating up the Sheyenne River valley on April 7, 10, and 13. Six bald eagles, one adult and five immatures, and two ospreys were observed during the spring.

D. Other Birds

Spring arrival dates were recorded for many species but detailed records of movements and population levels were not kept.

The fourth annual Valley City Christmas Bird Count was held on December 14. Record totals of both 25 species and 3,424 individuals were recorded by 12 observers in seven parties and one feeder watcher. The count is conducted each year in cooperation with the Sheyenne Valley Audubon Society. Whoever is the wetland manager serves as count compiler and coordinates the effort. Details of the count are in the April, 1975, issue of <u>American</u> Birds.

The severe January 10-12 blizzard decimated wintering populations of small birds. Following the storm nuthatches and black-capped chickadees were completely absent and at least 90% or more of the house sparrows were killed. The remainder of the winter was noteworthy for its almost complete lack of bird life.

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E. Big Game Animals

White-tailed deer are found on many WPA's, particularly on Fullers Lake and Alice WPA's, but deer populations are not monitored.

F. Fur Animals, Predators, Rodents, and Other Mammals

Fox numbers appeared to be good. However, fur prices in 1974 were not as high as in 1973 and in general it was felt trapping pressure was not as high. Muskrat populations remained low due to the dry conditions in 1974.

G. Rare, Endangered, and Status Undetermined Species

Six bald eagles, one adult and five immature, and two ospreys were observed during the spring.

H. Fish

Valley City NFH harvested a total of 1,080 pounds of minnows from Hobart Lake NWR for use as musky food.

I. Reptiles and Amphibians

No significant observations were made on species of these classes.

J. Disease

No disease cases were observed or reported and no significant losses are known to have occurred.

III. WPA DEVELOPMENT AND MAINTENANCE

A. Physical Development

A total of 10.56 miles of fencing was constructed on six WPA's, 8.91 miles by contract* and 1.65 miles by force account.

Grotberg WPA, Barnes County	1.06 miles*
McClain WPA, Barnes County	4.07 miles*
Meadow Lake WPA, Barnes County	1.25 miles
Kraus WPA, Cass County	.4 miles
Helland WPA, Griggs County	2.47 miles*
Groven WPA, Traill County	1.31 miles*

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About 1.9 miles of old fences were removed from Rogers and Fullers Lake WPA's in Steele County and one set of buildings was burned down on the Hagglund WPA in Barnes County.

With the appointment of Ron Manson to the staff we were able for the first time to continue work in this category during the winter. To do so, however, would have overcrowded the NFH shop facilities. So, in order to provide a work area, one stall of the hatchery's shop/storage building was partitioned off and remodeled to form another shop. Both WMD and NFH personnel cooperated in the remodeling and both share the combined facilities. In return the NFH will utilize space in the WMD's new four-stall storage building to be constructed on the NFH grounds in FY "76".

Following construction of the additional shop area the major project consisted of constructing 218 metal wood duck houses for use on Arrowwood NWR. In addition, the redwood Alice WPA recognition sign was repaired, having suffered 44 rifle hits and one shotgun blast; ten wren houses were built for the NFH; two goose nesting rafts were built for the display pond and a four-spool wire dispensing rack was built for use on a pickup during fence construction.

B. Plantings

1. Aquatic and Marsh Plants

None

2. Trees and Shrubs

A mixed planting of 50 Russian olive, 25 wild plum, 75 red osier dogwood, and 50 nanking cherry was made by the WMD on NFH grounds to help screen the new storage building site and attract small birds.

3. Grasslands

All seeding efforts were directed to establishing dense nesting cover on former crop lands. Force account work consisted of planting 25 acres of DNC on Meadow Lake WPA in Barnes County. In addition farm cooperators planted a total of 247 acres of DNC on six WPA's. Three areas that were to be seeded in 1975 remained too wet until it was too late for good chances of a successful catch.

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These areas will be seeded in 1976. Cooperators planted 48 acres on Ernie WPA, 56 acres on Knudtson WPA, and 12 acres on Breske WPA, Barnes County; 60 acres on Alice WPA, Cass County; 25 acres on Goose Lake WPA, Steele County; and 46 acres on Thompson WPA, Traill County.

Twenty seven acres of alfalfa were planted on the Storhoff WPA in Barnes County. The alfalfa will provide nesting cover and will also be hayed to make alfalfa pellets for use by the NFH in fertilizing their ponds.

With the late seeding and dry conditions in 1974 it was feared we might lose most or all of that year's DNC seedings. The wet spring, however, showed the fallacy of getting too worried in the fall. Seedings on all but one WPA came through and look very good. Two fields totaling 35 acres on Fullers Lake WPA were to be reseeded this spring but weather delays postponed reseeding until 1976.

C. Cultivated Crops

Eleven cooperative farming agreements were issued in 1974 for cultivation of 642 acres. Most cooperative agreements follow a three year cycle from plowing to DNC. Generally the cooperator's share is 100% of the crop during the season after plowing and summer fallowing. He receives 2/3 of the crop the next year when he also seeds DNC. The government's share of the 1974 crop was harvested and 450 bushels of wheat, 150 bushels of barley and 135 bushels of millet were donated to the Northern Prairie Wildlife Research Center for use as feed. About 50 bushels of rye were donated to the NFH for seeding down pond bottoms.

In 1975 ten cooperators are farming a total of 631 acres.

D. Collection and Receipts

1. Seed or Other Propagules

None

2. Specimens

None

3. Building Disposal

The buildings on Barnes County Tract #76, Hagglund WPA, were burned down. The house on Barnes County Tract #277, Storhoff WPA, was sold for \$50.00 and is being salvaged for its lumber.

E. Control of Vegetation

Although leafy spurge is and will continue to be a problem on several areas, it looks like we may be getting the upper hand on it. Of the 11 areas treated in 1974 only four areas with a total of about 5 acres of spurge required Tordon treatment in 1975.

Several calls were received about Canada thistle problems and about 50 acres of thistle were sprayed with 2,4-D. None of the counties in this district has a very active weed control program and a conscientious effort on our part would be a unilateral action.

During the fall 10.5 miles of roadsides were mowed on Stoney Slough NWR and four WPA's in keeping with county regulations.

F. Fires

No known fires occurred.

- IV. RESOURCE MANAGEMENT
 - A. Grazing

None

B. Haying

None

C. Fur Harvest

Trappers and hunters using WPA's have free access and no measure of the number of animals harvested is attempted. Trapping on easement refuges is allowed by permit only and one permit each was issued for Hobart Lake, Sibley Lake, Stoney Slough, and Tomahawk refuges and no measure was made of the harvest. Fur prices in 1974 were down from 1973 and in general it was felt trapping pressure was also down.

V. FIELD INVESTIGATIONS OR APPLIED RESEARCH

A. Wildlife Management Studies

The Northern Prairie Wildlife Research Center project entitled "A Study of Raccoon-Waterfowl Relationships on a Prairie-Marsh Complex" continued using the Wogsland WPA in Griggs County as a study area. To date no results or progress reports on the project have been received.

B. Informal Biological Activities

None

C. Depredations Control

The primary depredation problem in this district is blackbirds feeding in sunflowers. In 1974 Avitrol was licensed for application on oil type sunflowers and after a farmer was referred to the local aerial applicator no more was heard concerning the farmer's problem. Evidently the use of Avitrol solved most problems because no one came in for scare devices. Barnes County problems were handled from the WMD office and other counties by their respective county agents. This system seemed to work very well and no calls were received from the other counties.

The Denver Wildlife Research Center continued its study of control methods and received temporary manpower assistance from the WHD. No WPA's were used in the 1974 part of the study.

There were no known serious waterfowl depredation problems and no complaints were received.

VI. EASEMENT ADMINISTRATION

The 1974 easement surveillance flights were begun on November 4 and all easements in the district were checked. A second flight was made on November 27 to compare suspected violations with drainage facility maps and photographs of all confirmed violations were taken. Confirmed violations were also mapped on aerial photographs.

Sixteen violations were confirmed, twice the number found in 1973. Two of the cases were not pursued. One was an extremely minor ditch designed to dry a soft spot which prevented the landowner's access to a portion of his field. The other was a dike preventing overflow of a wetland which received a substantial amount of illegal drainage from adjacent land not under easement. In effect the dike stopped the illegal drainage.

Of the remaining 14 violations ten involved plow furrow ditches, three were filling violations, and one was a scraper violation. Maynard Henricks, Barnes County 177X, was a third time repeater and received the first criminal citation written for an easement violation in North Dakota. Mr. Henricks got the message and immediately filled his ditch. When he appeared before the magistrate in Devils Lake he received a \$100 fine which, because he had already filled the ditch, was suspended. All other cases were satisfactorily closed without court action. The manager was detailed to the Devils Lake WMD for a week in January and a week in May to assist in a consolidated enforcement effort. Special agents from North Dakota, South Dakota, Kansas, Missouri, and Wyoming were teamed with wetland managers to make enforcement contacts.

VII. PUBLIC RELATIONS

A. Recreational Uses

Recreational use of WPA's in this district for other than hunting and trapping is very low. There is little or no practical potential or demand for development of other uses.

The greatest potential for wetland-related interpretive development in the district is at the WMD headquarters at the Valley City National Fish Hatchery. The hatchery has new facilities with an auditorium, an established interest on the part of schools, and tourism promoters, and proximity to Lake Ashtabula, a high use recreation area.

With these facts in mind an interpretive waterfowl exhibit is being developed by the WMD on the hatchery grounds. In the spring of 1974 a fence was constructed around the pond in front of the headquarters building to make a 3 acre waterfowl pen. Mated pairs of blue, snow and Canada geese and mallard ducks were acquired from Sand Lake and the Northern Prairie Wildlife Research Center. During the winter two nest rafts were constructed and in the spring were used successfully by one pair of Canada geese and one pair of mallards. Blue and snow geese were incubating 5 shore nests but all were destroyed by raccoons.

The waterfowl flock has been very popular with visitors and an interpretive site is being prepared. In the spring a 24' long concrete slab with a 34" high brick retaining wall was constructed. Six interpretive signs dealing with the waterfowl and wetlands and two signs dealing with the hatchery will be mounted on top the brick wall. A 120' parking area will provide parallel parking for at least four cars at a time.

B. Refuge Visitors

No presidents, governors, members of Congress or regional directors visited the district office. All others were arbitrarily considered "routine" visitors and as such will not be discussed.

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C. Refuge Participation

Goeke attended the Clean Water Workshop held in Moorhead on August 28 by the Institute for Ecological Studies, and served as judge for the Barnes County 4-H Achievement Days and the Valley City Science Fair. One slide program was presented to a class of 20 Valley City State College students and one news release concerning the Christmas Bird Count was published. During the spring Clarence Risser served with the National Guard on emergency flood control duty at Minot.

D. Hunting

With the dry conditions on WPA's during the fall there were few ducks in the district and hunting was poor. Most hunting efforts were concentrated on geese around easement refuges. Goose numbers were relatively high and goose hunting was considered good for this area.

Upland game bird hunting was poor to nonexistent due to the lack of birds.

Early interest in fox hunting was high but prices were not as high as in 1973 and fox hunting on WPA's was probably down some.

E. Violations

No hunting cases were made in the district. Goeke participated in the "border blitz" at the Pembina Port of Entry on October 11-13 during which a number of cases were made. One citation for \$25.00 was written for dumping on the Meadow Lake WPA.

Tracks in the dried out bottoms of many WPA sloughs indicate there is still much illegal use of trail bikes on WPA's. Tracks also indicate continuing illegal snowmobile use during the winter.

F. Safety

Oops! This was the year that shouldn't have been. From a history of no accidents at this station we strained, chopped, and smashed to three accidents. The first accident resulted in strained abdominal muscles and one day of lost time, from trying to lift a heavy object. The second involved the use of a post driver while constructing fence and resulted in a smashed thumb which required five stitches. The third accident occurred while removing an overhead door. The tension had not been released from the spring and as a bracket was loosened it spun slicing a finger which required 15 stitches. During the year regular monthly safety meetings were held in cooperation with fish hatchery personnel. Chairmanship was alternated between all personnel of the two stations.

G. Revenue Sharing

Refuge revenue sharing checks delivered to the five counties in the district were almost identical to those in 1973. The 1974 checks as compared to 1973 checks were as follows:

<u>COUNTY</u> Barnes Cass	\$2,178.52 2,619.55	<u>1974</u> \$2,180.38 2,619.54
Griggs	763.19	764.65
Steele Traill	1,346.55 538.07	1,346.55 538.06

VIII. OTHER ITEMS

A. 1100 Habitat Preservation

1. Water Bank

Goeke attended the Water Bank meeting at Jamestown on April 7. In their haste to process applications the Steele County SCS failed to review the applications with this office. Following our objection to this onesided approach, our comments were solicited on two class B applications. After a field inspection with SCS personnel both applications were turned down.

2. Private Drainage Survey

An aerial reconnaissance of 30 five-square-mile areas in 15 counties in the southeast quarter of the state was made in November. New drainage in these areas was added to maps going back to 1966. Data collected were summarized and sent to the area office. There it was combined with data from the two other surveys conducted in North Dakota and further summarized.

3. Road Projects

Two federal aid projects, one in Barnes County and one in Cass County, were evaluated primarily in terms of their impact on wetlands. The Barnes County project involves construction of a new east Valley City interchange on I-94 and may result in our management of a 29 acre mitigation area to be developed by the state.

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4. Drainage Referrals

Four requests for ACP cost sharing for drainage were referred to this office from the Cass County ASCS office. The four referrals included eight quarters of land with 82 wetland basins totalling 270 wetland acres. Drainage on all areas was denied but some areas were ditched without cost sharing assistance.

5. Miscellaneous

Two right of ways for underground utility lines through WPA's were checked for permit compliance. Comments were prepared on the Dome Pipeline project, the proposed Tower City sewage lagoon site and on an irrigation permit on Barnes County easement 305X. One tract was delineated for purchase.

B. Resource Inventory

Work was begun on preparing new RIP cards using aerial photos instead of the previously used tract maps.

C. Personnel

On July 29 Ron Manson transferred to Valley City as a laborer from Kulm WMD. Ron works for the WAD for nine months and works for the NFH, primarily during the fish spawning season.

At the beginning of the fiscal year Mary Ann Brodal, clerk for the NFH, also took over clerking duties for the MD. Mary Ann works approximately 14 hours per week for the WAD and 25 hours for the NFH.

In April Clarence Risser's appointment was changed to "Subject to Furlough" ending the annual appointment hassle.

Dave Goeke attended the CSC course "Managers Role in Performance Evaluation" held in Bismarck on January 27 -31.

D. Credits

This report was written by Manager Goeke.

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