

**CAREY LAKE
WILDLIFE MANAGEMENT AREA**

**Management Plan
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Magic Valley Region
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EXECUTIVE SUMMARY

Carey Lake Wildlife Management Area (CLWMA) is located 1 mile east of Carey, Idaho in Blaine County. The first acquisition by Idaho Department of Fish and Game (Department) was made in 1949 from the Carey Lake Reservoir Company. Additions to CLWMA were purchased from several sources between 1951 and 1957. The lake surface area is approximately 365 acres at high water. The remaining 385 acres consist of irrigated cropland, shrub-steppe and lava outcroppings.

CLWMA provides an important stop-over for migrating waterfowl and shore birds as well as breeding and brood rearing habitat for resident birds.

The lake is shallow and goes dry periodically during drought years. In 1955 and 1977, deep water channels were constructed to help improve water flow into the lake and provide deeper water to improve fish survival. The spoil banks were planted to dense nesting cover (DNC). This project substantially improved fish survival and provided waterfowl habitat in low water years. In 1992, a 10,000 ft. channel was dug that surrounds the spoil dike from the 1977 channel. This provides 20 acres of predator-proof nesting habitat in addition to fish and waterfowl habitat.

CLWMA receives considerable use from fisherman, estimated at 2,500 annually (R. Morris, Department Conservation Officer, pers. comm.), early-season waterfowl hunters and bird watchers (Appendix 4).

The primary purpose of CLWMA is to provide quality wetland habitat to meet the needs of migratory and resident wetland wildlife resources. A second purpose is to provide quality recreational opportunities consistent with the primary purpose. This plan will provide management direction for the Department. It will provide a brief history of the area, a description of the flora and fauna, current habitat conditions and important management issues.

During the public and inter-department comment period no significant issues were generated on the goals or management of the area.

MISSION STATEMENT

The Carey Lake Wildlife Management Area will provide quality wetland and upland habitat, meeting the resource needs of migratory and resident wildlife and provide multiple outdoor recreational activities compatible with these wildlife resource needs.

CHAPTER ONE - PLANNING ISSUES AND MANAGEMENT REQUIREMENTS

INTRODUCTION

CLWMA encompasses approximately 750 acres, and provides aquatic and upland habitats for migrating, nesting and feeding waterfowl and shorebirds. In 1949, CLWMA was purchased by the Department, from the Carey Lake Reservoir Company (CLRC). A natural shallow lake and adjacent marsh dominate CLWMA. Within the lake are deep excavated channels that help maintain a fishery during drought years. The major wetland vegetation found in the shallow lake are hardstem bulrush (*Scirpus acutus*) and broad-leafed cattail (*Typha latifolia*). On the upland habitats, the dominant vegetation, include irrigated alfalfa (*Medicago sativa*) and dryland pasture on the west side of CLWMA. Mountain big sage (*Artemisia tridentata vaseyana*) and lava outcrops dominate the eastern and southern edges of the lake.

PURPOSE OF THE PLAN

The purpose of this plan is to document public resources and management issues and provide long term guidance to future management activities. This plan establishes management direction and will be supplemented by specific programmatic plans.

DESIRED FUTURE CONDITION

The Desired Future Condition (DFC) of CLWMA is briefly described as including the following key elements:

1. An extensive area characterized by native wetland vegetation maintained in good to excellent stand conditions. Vegetation will be maintained in a variety of successional stages and in a complex mosaic of cover types.
2. A shallow water lake that is characterized by clean water and healthy stands of emergent vegetation, providing habitat for wildlife populations.
3. Reduced soil erosion through minimal soil disturbance, control or elimination of noxious weeds, and restoration of biologically diverse plant communities.
4. Wildlife populations will be managed to ensure that all species are restored to desirable population levels which will provide hunting and viewing opportunity.
5. Provide human recreation, for present and future generations, particularly opportunities for wildlife-associated recreation that minimizes wildlife disturbance.
6. Cultural and historic values will be protected from natural and human-related degradation.
7. Carey Lake will be valued by the citizens of Idaho.

PLANNING PROCESS

The CLWMA plan has been developed under the following process.

1. Inventory of baseline resource conditions

General botanical and wildlife inventories were conducted on CLWMA by past and present manager. Physical features such as roads, fence lines, water structures and irrigation equipment were also inventoried.

2. Issue scoping

Management issues have been identified through a series public meetings hosted by the Department from 1995 to present. Issues were further identified by internal Department review.

3. Long-term monitoring of result

Monitoring will be preformed by the manager to measure progress toward the DFC.

4. Adaptive management based on results of monitoring

If CLWMA is not moving toward the DFC, the Department will adjust management as needed to meet those conditions.

ORGANIZATION OF PLAN

This management plan includes 4 chapters and supporting appendices.

Chapter 1: Includes an introduction to the plan and detail on any special management constraints existing on the area

Chapter 2: Provides an overview of the historical management of the area and a detailed description of existing resources.

Chapter 3: Identifies issues and alternatives for management of the area and provide an evaluation of the biological, physical, social, and economic effects of each alternative relative to constraints, mandates, and opportunities.

Chapter 4: Presents strategies to accomplish objectives for each prioritized goal.

MANAGEMENT REQUIREMENTS AUTHORITIES

Direction from the Commission and Director

The Idaho Fish and Game Commission (Commission) has established and approved general policies for the management of Idaho's wildlife resources (IDFG 1991).

Management- *"Fish and wildlife habitat and populations will be preserved, protected, perpetuated and managed for their intrinsic and ecological values, as well as their direct benefit to man." "Protection and restoration of wildlife habitat will continue to be a top priority in the management program."*

Cooperation- *"The Department will advocate land management practices that protect, restore and enhance fish and wildlife habitat, especially habitats such as wetlands and riparian areas that benefit a wide variety of fish and wildlife species."*

The Department has a responsibility to manage lands it controls for the benefit of Idaho wildlife, and where opportunities exist, to provide for wildlife-associated recreation opportunities.

This plan will attempt to evaluate habitat conditions in both the short and long-term context (at both fine and broad landscape scales) and opportunities to manage and restore habitats through practices designed to reduce short and long-term risks to species and their habitats on Carey Lake lands.

Requirements Relative to Funding

The annual operating funds for CLWMA currently come from United States Fish and Wildlife Service (USFS) Federal Aid Pitman-Robertson funds (PR). Federal funds must be used for restoration, conservation, and enhancement of wild birds and wild mammals, and the provision for public use of and benefits from these resources (Federal Aid Handbook).

The Department general license funds must be used to help meet the mission and policies of the Commission as stated in *Idaho Code 36-103(b)*. This code states: *"All wildlife, including all wild animals, wild birds, and fish, within the state of Idaho, is hereby declared to be the property of the state of Idaho. It shall be preserved, protected, perpetuated, and managed."*

Federal and State Law Requirements

The Department has the responsibility under the Endangered Species Act (ESA) to ensure that management actions protect threatened and endangered species. The Department also has management responsibility under the Clean Water Act to ensure that water quality standards and guidelines are in place on CLWMA lands and waters.

Under the National Historic Preservation Act, the Department must ensure that historic sites are protected on CLWMA.

The Idaho Noxious Weed Law under (*Idaho Code 22-2405*) requires all landowners to eradicate noxious weeds on their lands, except in special management zones. The counties are required to enforce the law and the State of Idaho is required to ensure the counties do so.

The Department is required by (*Idaho Code 63-602*) to pay a fee-in-lieu-of-tax (FILT) to counties on lands owned by the Department. These fees are submitted annually to home counties based on the number of qualifying acres. The fee paid for 1998 in Blaine County was \$1,345.86.

Regulations

The Department has a published set of regulations governing public use of all Department lands and access areas (commission rule # 13.01.03). Regulations cover motor vehicle access, fires, fireworks, dog use, firearm use, and other land use activities and recreational opportunities. These regulations are available from the Magic Valley Regional Office in Jerome (208-324-4359) or state headquarters in Boise (208-334-2920). The Department will comply with other state and federal regulations as they apply.

LIFE SPAN OF PLAN

The CLWMA plan will provide broad long management direction. This plan may be revised and updated, in whole or in part, as necessary to meet resource management objectives consistent with area goals and requirements.

PURPOSE OF WILDLIFE MANAGEMENT AREAS

Background

The Department manages over 360,000 acres of land statewide; of this total about 193,000 acres are owned (about 0.36% of Idaho's total acreage). Most of the remainder are managed under a variety of easements, agreements, and leases with private land owners and other land management agencies. A statewide network of 29 Wildlife Management Areas (WMAs) varying in size from several hundred acres to Craig Mountain's 110,000 acres. They provide critical habitat for nearly every species of wildlife found in Idaho and supply thousands of recreational use days annually.

Management Goals

The Department acquires and develops wildlife management areas with the following 4 general goals in mind:

1. Preserve and improve habitat for the production and maintenance of wildlife and fish populations.
2. Provide public hunting and fishing opportunities.
3. Provide nonconsumptive wildlife and fish uses.
4. Provide scientific, educational and recreational uses not related to wildlife and fish.

The operation and management direction statements for all WMA plans are established on a priority basis and conform to these general goal statements.

Relationship to Species Management Plans

This plan and all other wildlife management area plans provides a mechanism to integrate the habitat management program with the species management plans approved by the commission. Appropriate management of wildlife habitats under Department control will complement species management plans and should aid in the achievement of desired population goals. It should be recognized, however, that the Department usually does not own or manage all habitats needed by any wildlife species through their annual life cycle. An ecosystem management approach is required to assure all needs are met for wildlife species able to move freely off Department-owned and managed lands. The goals for habitat and population levels for wildlife big game, upland game, waterfowl, and non-game species on CLWMA are consistent with the species management plans approved by the Commission.

CHAPTER TWO - EXISTING MANAGEMENT CONDITION

AREA BACKGROUND

Cultural History

Before Anglo-European settlement, CLWMA was a gathering area and summer hunting grounds for the Native Americans of the middle Snake River region (Strahtam 1982). Bannock, Shoshoni, and Northern Paiute family bands were the most common tribes using the area in the spring, summer and fall. During the harsh winters the Tribes moved south to the Snake River area (Strahtam 1982).

In 1820, Donald Mackenzie, a Northwest Company fur trader, was the first recorded white man to discover the Carey area (USDA 1981). He passed through while returning from a trapping expedition in the Lost River area. Trappers subsequently used this as a travel route to Fort Boise (USDA 1981).

The first farming community in the area was established along Spring Creek near Carey in 1879 (USDA 1991). The population of the early farming communities fluctuated with the boom and decline of the mining industry in the nearby Wood River Valley. Also contributing to the instability of the agricultural communities was the cool climate, which limited the number of suitable crops (USDA 1991).

The Department initial acquisition of CLWMA in 1949 was from CLRC, after the company failed to make Carey Lake into an irrigation reservoir. The Company was unable to store the desired amount of water due to water loss through the lava faults on the south and east sides of the lake. The remaining land in CLWMA was acquired from several sources between 1951 and 1957.

PHYSICAL FEATURES

Geographic Location

CLWMA is located in south central Idaho, 1 mile east of the town of Carey, Idaho and is located in Blaine County. The northern boundary of CLWMA adjoins U.S. Highway 93 (Figure 1).

Topography

The CLWMA is located in south central Idaho, at an elevation of 4,763 ft., on the northern border of the Snake River Plain (Figure 1). CLWMA is a shallow natural basin formed when lava flows 3,000-4,000 years ago blocked the natural outlet of Fish Creek (USDA 1991). As the basin filled, the water found a new outlet around the lava at a slightly higher elevation leaving the flooded basin. A control structure was built at this outlet to increase the capacity of the lake but the porosity of the lava along eastern and southern edges prevented the lake from ever reaching depths of more than about 3 ft. Carey Lake has a surface area of about 530 acres at high water.

Figure 1. Map of Carey Lake Wildlife Management Area, Blaine County, Idaho.

Climate

CLWMA has moderately severe winters with temperatures as low as -35°F and snow depths ranging from 10 to 24 in. (USDA 1991). The lake usually freezes over in mid-November. Summers are moderately hot and dry with temperatures often reaching 95°F. The growing season averages about 110 days. Annual precipitation varies from 9 to 13 in. with less than half falling during the growing season (USDA 1991).

Soils

The CLWMA soils are segregated into 5 categories established by the United States Natural Resources Conservation Service (NRCS) (USDA 1991). Four of the soil types are characterized by clay loam, silty clay loam and/or sand loam to a depth of 38 to 47 in. (USDA 1991). Below this depth, sand loam, gravelly sand and/or coarse sand is prevalent. Loam and gravelly loam are the major soil types found above water on the WMA. These soils are 90% class III and IV land that is suited for cultivation. The fifth soil type is composed of Lava flows from the Cinderhurst complex and is in Class VI that is unsuited for cultivation (USDA 1991).

Geology

The mountains to the north are composed of granitic igneous rocks of the Cretaceous Age, Idaho Batholith and Challis Volcanic of the Eocene Age, (USDA 1991). From these mountains, alluvial fan terraces were deposited as proglacial outwash. These alluvium soils are well developed and well drained. On the outer reaches of these alluvial fans, the soils progressively become finer and heavier in clay. It was near this point where the fan was covered with the Cinderhurst lava complex 3,000 to 4,000 years ago (USDA 1991).

Hydrology

Carey Lake has a surface area of approximately 530 acres at high water. There are 30 acres of water 15 to 18 ft. deep and 20 acres of 5 to 6 ft. deep water in the excavated channels. The remainder of the lake varies from 1 to 3 ft. There are 6 water sources supplying CLWMA. Four with water rights: decreed water, storage water, canal stock, and spring run-off from Little Wood River. There are 2 additional sources a hot spring located in the northeast section of the management area and overflow from Fish Creek Reservoir. The spring keeps 1 to 2 acres of the lake from completely freezing in the winter. The overflow of Fish Creek Reservoir runs south until it meets the lavas and gradually moves west filling the many pockets, holes and a small lake in the lavas. If enough water overflows from the reservoir it eventually reaches Carey Lake.

NATURAL RESOURCES

Wildlife

CLWMA provides habitat for a wide variety of wildlife species. Waterfowl and shorebirds are found throughout the lake and wetlands. The largest numbers occur during spring migrations on and around CLWMA. Canada geese (*Branta canadensis*), mallards (*Anas platyrhynchos*), northern pintail (*Anas acuta*), green-winged (*Anas crecca*) and cinnamon teal (*Anas cyanoptera*),

lesser scaup (*Aythya affinis*), northern shoveler (*Anas clypeata*) and ruddy ducks (*Oxyura jamaicensis*) are the primary waterfowl species observed and nest on the area. Shorebirds commonly seen are sandhill cranes (*Grus canadensis*), long-billed curlews (*Numenius americanus*), American avocet (*Recurvirostra americana*), pied-billed (*Podilymbus podiceps*) and western grebe (*Aechmophorus occidentalis*) and spotted sandpiper (*Actitis macularia*). Passerine birds include red-winged (*Agelaius phoeniceus*) and yellow-headed blackbird (*Xanthocephalus xanthocephalus*) and western meadowlark (*Sturnella neglecta*). Raptors that occupy the area include the American kestrel (*Falco sparverius*), northern harrier (*Circus cyaneus*), Swainson's (*Buteo swainsoni*) and red-tailed hawk (*Buteo jamaicensis*).

Mule deer (*Odocoileus hemionus*) are the most abundant big game animal and occur throughout the year on CLWMA. Pronghorn antelope (*Antilocapra americana*) occur mainly on private agricultural ground surrounding CLWMA. Approximately 500 elk (*Cervus elaphus*) summer north of CLWMA in the mountains and winter in the foothills. Coyote (*Canis latrans*), red fox (*Vulpes vulpes*), badger (*Taxidea taxus*), striped skunk (*Mephitis mephitis*) and numerous rodents including Columbian ground squirrel (*Spermophilus columbianus*), northern pocket gopher (*Thomomys talpoides*), western harvest mouse (*Reithrodontomys megalotis*) and meadow vole (*Microtus pennsylvanicus*) are found throughout the upland area.

Upland species use the different habitat types surrounding CLWMA. Mourning doves (*Zenaidura macroura*) are closely associated with private farmlands, while sage grouse (*Centrocercus urophasianus*), gray partridge (*Perdix perdix*), white-tailed jack rabbit (*Lepus townsendii*) and Nuttall's cottontail (*Sylvilagus nuttallii*) are more commonly observed on the rangelands.

Fish

Fish that inhabit Carey Lake include largemouth bass (*Micropterus salmoides*), bluegill (*Lepomis macrochirus*), yellow perch (*Perca flavescens*), brown bullhead (*Ameiurus nebulosus*) and channel catfish (*Ictalurus punctatus*) (F. Partridge, Department Regional Fishery Manager pers. comm.).

Vegetation

Palustrine emergent persistent intermittently exposed wetland (Cowardin et al. 1979)

This habitat type dominates CLWMA and covers approximately 340 acres. The wetland vegetation type is a mix of shallow water emergents dominated by broad-leafed cattail (*Typha latifolia*) and hardstem bulrush (*Scirpus acutus*). Throughout the year the majority of this area is typically covered from the shoreline to a depth of 3 ft. throughout the year. The lake elevation varies considerably by year and season. Because of the shallow nature of the lake, when the water levels drop a large area of shoreline is exposed. The intermittently exposed wetland this is dominated by foxtail barley (*Hordeum jubatum*).

Lacustrine aquatic bed rooted vascular permanently flooded wetland (Cowardin et al. 1979)

There are approximately 25 acres of deep-water channels on CLWMA. These channels were excavated and range in depth from 4 to 12 ft. The dominant vegetation is the submerged aquatic coontail (*Ceratophyllum* spp.).

Upland grass cover type

On the western shoreline, between the high water and irrigated cropland is a grass habitat which consists of Great Basin wildrye (*Leymus cinereus*), Idaho fescue (*Festuca idahoensis*), Kentucky bluegrass (*Poa pratensis*) and bulbous bluegrass (*Poa bulbosa*). This cover type also occurs on the islands that were created from the excavated deep water channels. This cover type has the only noxious weed problem on CLWMA. Canada thistle (*Cirsium arvense*) has invaded the islands and Scotch thistle (*Onopordum acanthium*) in the grass cover type.

Scrub-Shrub Broad-leaved Deciduous Seasonally Flooded Wetland (Cowardin et al. 1979)

Where the main canal enters the lake there is an area of approximately 1-acre of coyote willow (*Salix exigua*) with a reeds canary grass (*Phalaris arundinacea*) understory.

Irrigated cropland

There are approximately 100 acres of alfalfa (*Medicago savita*).

Lava Flows

CLWMA has approximately 200 acres of lava flows, the predominate vegetation includes mountain big sagebrush (*Artemisia tridentata vaseyana*), lava fernbush (*Chamaebatiaria millifolium*), antelope bitterbrush (*Purshia tridentata*) and Nevada bluegrass (*Poa nevadaensis*).

THREATENED AND ENDANGERED SPECIES

Several threatened and endangered flora and fauna (Moseley and Groves 1992) have been observed on or adjacent to CLWMA.

The following is an explanation of the status symbols used below:

<u>Federal:</u>	LE	Listed Endangered	<u>State:</u>	E	Endangered
	LT	Listed Threatened		SSC	Species of Special Concern
	FSC	Species of Concern		P	Protected Nongame Species
	WS	Watch species			

Birds

black tern	(<i>Chlidonias niger</i>)	SSC
great egret	(<i>Ardea alba</i>)	SSC
white-faced ibis	(<i>Plegadis chihi</i>)	FSC
bald eagle	(<i>Haliaeetus leucephalus</i>)	LT, E
long-billed curlew	(<i>Numenius americanus</i>)	FSC, P
trumpeter swan	(<i>Cygnus buccinator</i>)	FSC, SSC

Mammals

long-legged myotis	(Myotis volans)	WS
western small-footed myotis	(Myotis ciliolabrum)	WS

Amphibians

western toad	(Bufo boreas)	WS, SSC
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PUBLIC USE

The main consumptive use of CLWMA is fisherman. An estimated 2,500 user-days annually are spent at CLWMA. Waterfowl hunters make up the second largest consumptive use with approximately 500 user-days (R. Morris, Department Conservation officer, personal communication). Bird watchers and photographers visit the area spring, summer and fall.

PHYSICAL IMPROVEMENTS

CLWMA has boundary fencing and a cross fence that separates the cropland from the grassland on the west side of CLWMA. There is a outhouse, parking area and boat launching ramp at the signed public access site on the north end of CLWMA. A 75 hp pump and 2,500 ft. of 10 in. mainline serve the irrigated cropland. A concrete drop-board control structure is located at the outlet of the lake.

DEVELOPMENT PROGRAM

Periodic development work at CLWMA has occurred since the 1950's. In 1951, a 7,500 ft. canal was built by the Little Wood River Canal Company. It was enlarged in 1958 to transport spring flood waters from the Little Wood River prior to the irrigation season. Bridges and water turnouts for unauthorized water use were installed along the canal. Boundary fences were replaced or rebuilt to protect wildlife habitat from unrestricted livestock grazing. Several signs were installed to direct people to CLWMA and a parking lot was constructed in the northeast corner in 1965.

In 1953, extensive surveys were conducted to reestablish boundary lines and to determine maximum high water elevation (4763.28 ft.) in the lake. During the mid-1960's storage water rights caused the inundation of a short section of Highway 93, as a result the highway was raised to prevent flooding.

In 1955 a channel 1,700 ft. long, 4 to 6 ft. deep, and 20 to 35 ft. wide was excavated on the north end of Carey lake. The resulting spoil banks were planted to mixed grasses. The hot spring flowed into the northeast corner of the CLWMA was redirected to the lake through the new channel. In 1960, a large water measuring weir was constructed in the lower end of CLWMA.

In August 1977, a channel was excavated with the aid of Bureau of Reclamation drought funds. The channel was 15 ft. deep, 55 ft. wide, and 9,000 ft. long and was excavated on the northeast end of CLWMA. Twenty-nine goose nesting platforms were installed.

During the drought years (1991-1992) a predator deterrent channel, 10,000 ft. in length, 50 ft. wide and 4 ft. deep was constructed. This channel is adjacent to the dike built in 1977 and encloses 20 acres. The old dike was constructed with very steep sides. In 1992, it was recontoured and seeded to a DNC mix of Great basin wildrye, tall wheatgrass (*Elytrigia elongata*), intermediate wheatgrass (*Elytrigia intermedia*) and yellow sweetclover (*Melilotus officinalis*). Twenty-five Canada goose nesting platforms were installed. The following year, 15 more platforms were added on the east side of CLWMA. In 1980, a 120-acre sprinkler irrigation system was developed utilizing Department surplus steel mainline. Due to the deterioration of this steel mainline it was replaced in 1996 with PVC. Continued problems with a consistent and reliable water supply to the pump, resulted in moving the pump across the county road to the main canal. The pump was moved in conjunction with the replacement of the mainline.

MANAGEMENT

With the exception of 1977, 1991 and 1992, CLWMA has provided a significant amount of hunting and fishing opportunity. Even during these years of extreme drought, the excavated channel provided fish habitat, waterfowl nesting islands and brood-rearing habitat. The irrigated cropland on CLWMA has always had inadequate water prior to the establishment of the sprinkler system. The water conserved by the sprinkler system is put into Carey Lake.

Goose production on CLWMA has generally increased since 1975. In 1985 all 29 goose nesting platforms were occupied and 150 goslings were produced (IDFG 1985). During the summers of 1992 and 1993, 40 new platforms were installed, recent counts of platform use and production have not been made. Duck brood counts made in 1991, 1993 and 1994 average of 150 ducklings.

CLWMA is open to general hunting and trapping seasons. The 1977 drought nearly eliminated the resident muskrat population. Since the drought the muskrat population has increased to the point where in 1985, 1,000 muskrats were harvested (IDFG 1985). The drought of 1991/1992 again decimated the muskrat population, in 1997 only 400 muskrats were harvested.

CLWMA was closed to fishing from 1978 through August 1980 to reestablish bluegill and bass. Fishing was good to excellent from 1980 to 1985. However, in the winter of 1984/1985, a serious fish kill occurred, and fishing success dropped significantly (IDFG 1985). Since 1993, the lake has retained sufficient water levels to produce a very good large mouthed bass and bluegill fishery (F. Partridge, Department Regional Fishery Manager pers. comm.).

Noxious weeds have been a continuing problem on CLWMA. Canada thistle is the most prevalent and difficult to control. Six years of extensive herbicide application has resulted in very little success. The ineffectiveness was partly due to the inability to spray more than once a summer, because of unavailable manpower and the problems associated with spraying the

islands. In 1994 biological control was initiated with thistle stem weevil (*Ceutorhynchus litura*) and thistle stem gall fly (*Urophora cardui*). The insects are used only on the islands, for economic and logistical reasons. The biological efforts have yielded inconsistent results. The remainder of the noxious weeds on CLWMA are sprayed with herbicides.

WATER RIGHTS

Four types of water are used on the CLWMA: 1) decreed water, 2) storage water, 3) canal stock, and 4) spring run-off from the Little Wood River. Decreed water is allocated by the courts to a specific parcel of land, the Department has 310 in. of decreed water for CLWMA. Storage water is the water stored in Little Wood Reservoir and can be used in the operation of CLWMA. In 1954 the old Little Wood Reservoir dam was raised in order to increase the capacity of the reservoir. In the years following the construction of the new dam, there was very little flood water available for CLWMA. In 1958 the Bureau of Reclamation (BOR) granted the Department 2,000-acre ft of storage water in Little Wood River Reservoir. The BOR required that this water is to be used for maintaining the water level in CLWMA and/or developing wildlife habitat on CLWMA. The third type of water is canal stock water. The Department owns 13.05 shares of stock in the Little Wood River Canal Company that provides 417.6 in. of water for use on CLWMA. The amount of water received from canal stock is dependent on the river flow. At peak flow, one share of canal stock is worth 32 in. of water; at minimum flow, usually in August, one share is worth approximately 2.3 in. The fourth type of water is 43 cfs of spring run-off after the Little Wood River Reservoir is filled. This water right was tied to the CLRC property when it was purchased and is used to maintain water levels in Carey Lake.

CHAPTER THREE - ISSUES, CONCERNS, AND OPPORTUNITIES

ISSUE IDENTIFICATION

Public Issues

The Department conducted a series of public meetings and issued a number of news releases to inform Idaho citizens of resource management opportunities and to provide a forum for people to express their opinions regarding the future management of CLWMA. Two public meetings were held, in Burley and Gooding on April 3 and 4 1996, respectively. A second series of public meetings was held from February 8, 1999 through February 12, 1999 in Fairfield, Burley, Hailey, Gooding and Twin Falls respectively. The results of these public meetings illustrated that there are no significant issues or concerns involving CLWMA.

Three comment sheets were submitted as a result of these public meetings. The following are a summarization of the written comments received:

- Remove old fences - one comment
- Plant grain on CLWMA for the waterfowl - one comment
- Raise bass limit from 2 to 6 or 10 - one comment
- Put the appropriate amount of water into the lake - one comment
- Enforce the limit on number and size of bass - one comment

Four requests were made for copies of the CLWMA final management plan.

Issue Discussion

Livestock grazing has been a part of the land management practices on these lands since early settlement. The principal purpose of this CLWMA is waterfowl production. Since most waterfowl begin to nest before new growth is suitable for nesting, the presence of residual cover from the previous year permits birds to begin nesting earlier and allows a longer time for renesting. Any activity which reduces residual cover from the previous year may adversely affect waterfowl production. Elimination of grazing and mowing activities will result in increased waterfowl production (Leopold 1933, Kirsch 1969)

CLWMA currently has approximately 100 acres of irrigated cropland and 60 acres of nonirrigated grassland. One hundred and twenty AUM's have been permitted on CLWMA as part of the sharecrop agreement. It was used to maintain vegetation for goose pasture. The grazing sharecrop agreement will not be renewed for 1999, because sufficient goose pasture exists along the shoreline and the additional residual cover that will remain from not grazing CLWMA will benefit nesting waterfowl.

The arable lands on CLWMA have been farmed utilizing a sharecrop agreement. Typically, the Department's share of the grain was used as a food plot and left standing for wildlife. During the past 10 years, no small grains have been grown on CLWMA, the primary crop has been alfalfa.

The Department's share of this crop has been used toward habitat improvement projects on the CLWMA.

Another internal issue that has been discussed is the lack of DNC, and the resultant conversion of the existing alfalfa to DNC. Currently the Department's crop share is applied to upgrading the mainline, a larger pump and relocating the pump to the main canal. The Department currently owns these improvements. In contrast the Department does not own the wheel-line system that presently irrigates the alfalfa. It is currently owned by the existing farmer that holds the share-crop agreement. It would be desirable for the Department to own an irrigation delivery system at CLWMA, although current funding restrictions do not allow that luxury. In addition, additional man-power would be required to operate the irrigation delivery system, this would be necessary in order to convert to irrigated nesting cover.

Other habitat management scenarios have been attempted to provide additional nesting habitat. For example, a portion of the cropland was seeded to DNC, irrigated and left standing as nesting cover in exchange for farming the balance of the cropland. This was attempted for several years, but it failed. There were consistent and perpetual irrigation violations and non-compliance. The result was unsuitable weedy nesting cover.

The best management would be for the Department to purchase a suitable irrigation delivery system and then provide additional man-power to operate the system. This scenario would provide better nesting habitat for waterfowl and would maintain a valuable water-right. In addition, water would be conserved because less water would be required for 160 acres of DNC than alfalfa.

CHAPTER FOUR - MANAGEMENT DIRECTION

MANAGEMENT GOALS

The desired future condition will be attained by successfully accomplishing the following goals:

1. Provide quality upland and wetland habitat to meet the needs of migratory and resident wildlife.
2. Provide quality recreational opportunities without adversely impacting wildlife.

MANAGEMENT OBJECTIVES AND STRATEGIES

- I. Goal: Provide quality upland and wetland habitat to meet the needs of migratory and resident wildlife.
 - A. Objective: Maintain existing wetland habitat.
Strategies
 1. Maintain approximately 150 acres of waterfowl production and migration wetland vegetation. Using various vegetation management scenarios to maintain a 50:50 open water to emergent vegetation ratio.
 2. Maintain livestock exclusion to maximize nesting cover and minimize wetland damage.
 - B. Objective: Enhance nesting cover on upland site.
Strategies
 1. Replace unsatisfactory existing cover with appropriate grasses, forbs and shrubs on approximately 20 acres of upland cropland. (completion date: 2000 if funding is available).
 2. Eliminate current farming sharecrop agreement and develop nesting cover (completion date: dependant on available funding)
 - a. Option 1: convert 100 acres of irrigated alfalfa to irrigated pasture. Using a controlled grazing system that would not be detrimental to nesting waterfowl.
 - b. Option 2: Convert the 100 acres to irrigated nesting cover. This option would provide the most wildlife benefits.
 - C. Objective: Control noxious weeds.
Strategies
 1. Annually identify and control noxious weeds on 85 acres of CLWMA. Herbicides and biological control would be used.

2. Coordinate weed control with the Blaine County weed supervisor.

D. Objective: Maintain and enhance artificial nesting structures

Strategies

1. Maintain 50 Canada goose nesting structures and add additional structures when use exceeds 80%.
2. Construct, install and maintain 6 floating duck nesting structures. They will be installed and removed annually to avoid ice damage (completion date: 2000, if funding is available).
3. Construct and install 10 American kestrel and 10 mountain blue bird nesting boxes (completion date: fall of 1999).

E. Objective: Monitor waterfowl production on CLWMA

These objectives will be conducted by Adopt-A-Wetland participants. If they are unable to accomplish this task, completion of the surveys will depend on available manpower and funding.

Strategies

1. Conduct annual survey of Canada goose nesting structures use.
2. Conduct annual duck brood counts.

II. Goal: Provide quality recreational opportunities without adversely impacting wildlife.

A. Objective: Maintain and create additional waterfowl hunting opportunities.

Strategies

1. Improve an existing substandard road and add a parking area on the west side of the lake (completion date: 2002).
2. Provide additional water in the fall when available.
3. Continue unrestricted walk-on hunting.
4. Delineate motorized and non-motorized areas (completion date: 1999).
5. Maintain existing road, parking area, launching ramp and outhouse.

B. Objective: Provide fishing opportunity

Strategies

1. Allow walking access where compatible with waterfowl production.
2. Provide additional water, when available, to increase over-winter survival.
3. Maintain non-motorized boat restriction.

C. Objective: Provide trapping opportunity

Strategies

1. Limit trapping permits to 2 trappers.

D. Objective: Provide non-consumptive recreational and educational opportunity.

Strategies

1. Provide adequate roads and parking for bird watchers and photographers.
2. Maintain road, parking area, launching ramp and outhouse.
3. Continue unrestricted walk-on for bird watchers and photographers.
4. Delineate motorized and non-motorized areas.
5. Provide educational tours upon request.

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APPENDIX I
LAND LEGAL DESCRIPTION

<u>Name</u>	<u>Funds</u>	<u>Conveyance</u>	<u>Date Acquired</u>	<u>Acquire From</u>	<u>Cost</u>	<u>Acres</u>
CAREY LAKE WMA	PR	WARRANTY DEED	5/16/49	CAREY LAKE RESERVOIR COMP	\$3,100.00	130

T 1 S, R 21 E, BM. S $\frac{1}{2}$ NW $\frac{1}{4}$ lying 3 inches below the top of the top sill of the outlet structure, NE $\frac{1}{4}$ SW $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$ lying 3 inches below the top of the top sill of the outlet structure, and E $\frac{1}{2}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ together with 43 cfs of the waters of Little Wood River following the filling of Little Wood River Reservoir. Flowage Easements and Canal Right-of-Ways An 11-foot strip of land for canal right-of-way on and across the N portion of the NE $\frac{1}{4}$ NW $\frac{1}{4}$, Sec. 27. A 20-foot strip of land for canal right-of-way on and across the N portion of the N $\frac{1}{2}$ NE $\frac{1}{4}$ of Sec. 27 also an additional 11 feet over the N part of the NE $\frac{1}{4}$ NE $\frac{1}{4}$, Sec. 27. Also, a strip of land across the N portion of the NW $\frac{1}{4}$ NW $\frac{1}{4}$ of Sec. 26; this right-of-way was obtained in the purchase of the Turnbull property, and right of use was granted to Bennett in the land exchange. A strip of land 11 feet wide across the N side of the NE $\frac{1}{4}$ NE $\frac{1}{4}$ of Sec. 27 running along the S side of a 15-foot right-of-way, and also a 20-foot strip across the N side of the NE $\frac{1}{4}$ of Sec. 27 commencing near the N $\frac{1}{4}$ corner and running E along the N side of a canal right-of-way owned by A. M. Phippen and in length, 160 rods. Also, a strip 1 $\frac{1}{2}$ rods wide running along the E 25 feet of the NE $\frac{1}{4}$ NE $\frac{1}{4}$, Sec. 27. Flowage easement over portions of SE $\frac{1}{4}$ SE $\frac{1}{4}$, Sec. 14, and the NE $\frac{1}{4}$ NE $\frac{1}{4}$ of Sec. 23 described as follows: beginning at SW corner of the NE $\frac{1}{4}$ NE $\frac{1}{4}$ of Sec. 23, thence E 48 rods, thence N 20 rods, thence E 26 rods, thence NW 60 rods to a point 40 rods W from the NE corner of Sec. 23, thence N 52 rods, thence W 40 rods, thence S 132 rods to place of beginning and such lands that will necessarily be flooded in raising water to the water level line of the lake survey at 3 inches below the top of the top sill of the Carey Lake outlet headgate. Patented lands subject to reservoir flowage and storage rights of the Carey Lake Reservoir Company which reservoir and storage rights were assigned to the Department.

T 1 S, R 21 E, BM.

Sec. 23, SE $\frac{1}{4}$ NE $\frac{1}{4}$ and E $\frac{1}{2}$ SE $\frac{1}{4}$; Sec. 24, SW $\frac{1}{4}$ NW $\frac{1}{4}$.

<u>Name</u>	<u>Funds</u>	<u>Conveyance</u>	<u>Date Acquired</u>	<u>Acquire From</u>	<u>Cost</u>	<u>Acres</u>
CAREY LAKE WMA	PR	WARRANTY DEED	4/22/55	FOREST ELDREDGE	\$11,000.00	55

T 1 S, R 21 E, BM.

Sec. 23, SE $\frac{1}{4}$ SW $\frac{1}{4}$, W $\frac{1}{2}$ W $\frac{1}{2}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$, and E $\frac{1}{2}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$; 38 inches decreed water; 3 $\frac{1}{2}$ shares canal stock; 120-acre-feet storage in Little Wood River Reservoir.

CAREY LAKE WMA	PR	WARRANTY DEED	10/24/56	OLIVER ELDREDGE	\$15,000.00	52.6
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T 1 S, R 21 E, BM.

Sec. 23, N $\frac{1}{2}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ and portion of S $\frac{1}{2}$ NW $\frac{1}{4}$ plus grazing rights on 40 acres of Reservoir Company lands, 93 inches decreed water, three shares canal stock, and 28.85-acre-feet storage in Little Wood River Reservoir. Note: 1 share of canal stock = 31 inches of water.

CAREY LAKE WMA	PR	WARRANTY DEED	1/11/51	JAMES TURNBULL	\$12,000.00	42
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T 1 S, R 21 E, BM.

Sec. 26, NWNE and N 66 feet of NENW; 40 inches decreed water - priority, 4/26/93; 2-3/4 shares canal stock; and 40-acre-feet storage in lower Little Wood River Reservoir. Eighty-acre-feet storage, Little Wood River Dam addition.

CAREY LAKE WMA	PR	CORRECTED DEED	1/17/57	F W DAVIS	\$14,500.00	45
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T 1 S, R 21 E, BM.

Sec. 23, portions of NW $\frac{1}{4}$ SE $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$, and the S $\frac{1}{2}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ plus grazing rights on 50 acres of Carey Lake Reservoir Company lands; 65 inches decreed water; 3 $\frac{4}{5}$ shares canal stock; and 91-acre-feet storage in Little Wood River Reservoir.

<u>Name</u>	<u>Funds</u>	<u>Conveyance</u>	<u>Date Acquired</u>	<u>Acquire From</u>	<u>Cost</u>	<u>Acres</u>
CAREY LAKE WMA	NONE	AGREEMENT	10/30/56	BLM	\$0.00	320

T 1 S, R 21 E, BM.
Sec. 23, W½NE¼; Sec. 24, W½SW¼; Sec. 25, W½NW¼; Sec. 26, E½NE¼.

CAREY LAKE WMA	PR	WARRANTY DEED	5/18/55	ADAMSON BROTHERS INC	\$2,100.00	6.06
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T 1 S, R 21 E, BM.
Sec. 26, E 200 feet of SW1/4NW1/4.

CAREY LAKE WMA	PR	WARRANTY DEED	3/1/54	J L BENNETT	\$0.00	98.55
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T 1 S, R 21 E, BM.
Sec. 14, SE¼SW¼ and SW¼SE¼ lying S of US Highway 26; Sec. 23, NE¼NW¼ lying S of US Highway 26. Fifty-nine-acre-foot storage in Little Wood River Reservoir.

APPENDIX II
CAREY LAKE WILDLIFE MANAGEMENT AREA
General Species Inventory

N-not present; H-high; M-medium; L-low

Species	Population Level by Season			
	Winter	Spring	Summer	Fall
Coot	N	H	H	H
Eared Grebe	N	L	L	L
Western Grebe	N	L	L	L
Pied Bill Grebe	N	H	H	L
Caspian Tern	N	L	L	N
Common Tern	N	L	L	N
Black Crowned Night	N	L	L	N
Heron	N	L	L	L
American Bittern	N	L	L	N
Avocet	N	L	L	N
Willet	N	L	I	N
Yellow Legs	N	L	L	N
Wilson's Phalarope	N	L	L	N
Spotted Sandpiper	N	H	H	H
California Gull	N	L	L	N
Ring-billed Gull	N	H	H	H
Mallard	N	H	H	N
Green Winged Teal	N	M	M	N
Cinnamon Teal	N	L	L	N
Blue Winged Teal	N	L	L	L
American Widgeon	N	L	L	L
Gadwall	N	L	L	L
Northern Pintail	N	L	L	L
Northern Shoveler	N	N	N	L
Lesser Scaup	N	N	N	L
Ringneck Duck	N	N	N	L
Bufflehead	N	L	L	L
Ruddy Duck	N	L	L	N
Redhead	N	L	L	L
Canvasback	N	L	L	L
American Merganser	N	L	N	L
Common Loon	N	L	N	L
Tundra Swan	N	H	H	M
Canada Goose	N	H	H	H
Redwing Blackbird	N	H	H	H
Brewer's Blackbird	N	H	H	N
Yellow-headed Blackbird	N	L	L	N
Turkey Vulture	L	L	L	L
Gold Eagle	M	M	M	N
Northern Harrier	M	N	N	N
Rough-legged Hawk	L	L	L	L

APPENDIX III

CONSUMPTIVE USE INVENTORY¹

<u>Species</u>	<u>Population Estimate</u>		<u>User Days</u>	<u>Harvest</u>
	<u>Resident</u>	<u>Seasonal²</u>		
Muskrat	2000		28	1000
Mallard		1200 SP-S-F	150	300
Cinnamon Teal		25 SP-S-F	0	0
G.W. Teal		75 SP-S-F	50	50
B.W. Teal		50 SP-S-F	5	10
Redhead		500 SP-S-F	0	100
Canvasback		50 SP-S-F	10	50
Pintail		50 SP-S-F	100	80
Bald Pate		150 SP-S-F	150	300
Shoveler		50 SP-S-F	20	75
Gadwall		50 SP-S-F	50	300
Ruddy		200 SP-S-F	0	0
Canada Goose		200 SP-S-F	100	25
Swan		300 SP-S-F	0	0
Mourning Dove		500 SP-S-F	100	400
Largemouth Bass			200	500
Bluegill			200	2000

¹ IDFG 1985

² SP - Spring
 S - Summer
 F - Fall

APPENDIX IV

PUBLIC USE ¹

FISH AND WILDLIFE RELATED:

<u>Activity</u>	<u>User Days</u>
Scientific and Educational	50
Wildlife Observation	100
Photography	50
Trapping	50

NON-FISH AND WILDLIFE RELATED:

<u>Activity</u>	<u>User Days</u>
Sight Seeing	500
Horseback Riding	20
Other	200

¹ (IDFG 1985)

APPENDIX V

FEDERAL AID PROJECT STATEMENT AND PROGRESS REPORT

CAMAS PRAIRIE CENTENNIAL MARSH

CAREY LAKE WILDLIFE MANAGEMENT AREA

Management Priorities:

1. Waterfowl Production
2. Nongame Production and Appreciation
3. Waterfowl Hunting

Management Priorities:

1. Waterfowl Production
2. Nongame Production and Appreciation
3. Waterfowl Hunting

Activity specific to project

* Activity specific to project

∅ Additional work performed and reported under Magic Valley Habitat Maintenance.

ACTIVITY	ACTIVITY CODE	UNITS OF WORK		COST		COMMENTS
		Planned	Actual	Planned	Actual	
WATERFOWL PRODUCTION						
Management Program						
Develop and manage wetland and upland habitats, emphasizing production and migration habitats for ducks and geese		3,800 acres		∅		Species benefited: MALL, GADW, AMWI, AGWT, BWTE, CITE, NSHO, NOPI, REDH, CANV, LESC, CAGO, Shorebirds
Maintain wood duck nest boxes		1 week 24 boxes		1,252		
Maintain 100 goose nesting platforms annually, install 30 new platforms	1211	3 weeks 100 platforms		3,756		Species benefited: CAGO
Develop and maintain dense nesting cover	1322	1 week		1,252		Species benefited: MALL, GADW, AMWI, AGWT, BWTE, CITE, NSHO, NOPI, REDH, CANV, LESC, CAGO, Shorebirds

ACTIVITY	ACTIVITY CODE	UNITS OF WORK		COST		COMMENTS
		Planned	Actual	Planned	Actual	
Maintain water delivery system utilizing wells, piping and ditching	1211	1 week		1,252		Species benefited: MALL, GADW, AMWI, AGWT, BWTE, CITE, NSHO, NOPI, REDH, CANV, LESC, CAGO, Shorebirds
*Maintain dense nesting cover on dike	1322	1 weeks		1,252		Species benefited: MALL, GADW, AMWI, AGWT, BWTE, CITE, NSHO, NOPI, REDH, CANV, LESC, CAGO, Shorebirds
*Develop, install, maintain, and evaluate nesting boxes and duck nesting structures	1211	1 week 12 structures		1,252		Species benefited: MALL, GADW, AMWI, AGWT, BWTE, CITE, NSHO, NOPI, REDH, CANV, LESC, CAGO, Shorebirds
Maintain water levels for brood rearing habitat	1211	3 weeks		3,756		Species benefited: MALL, GADW, AMWI, AGWT, BWTE, CITE, NSHO, NOPI, REDH, CANV, LESC, CAGO, Shorebirds
#Restore riparian systems by encouraging beaver activity	1211	1 week		1,252		Species benefited: MALL, GADW, AMWI, AGWT, BWTE, CITE, NSHO, NOPI, REDH, CANV, LESC, CAGO, Shorebirds
Administer sharecroppers to perform farming activities consistent with waterfowl production goals	1211	1 week		1,252		Species benefited: MALL, GADW, AMWI, AGWT, BWTE, CITE, NSHO, NOPI, REDH, CANV, LESC, CAGO, Shorebirds, Antelope
#Develop and maintain four acres goose pasture	1322	2 weeks		2,504		Species benefited: CAGO

ACTIVITY	ACTIVITY CODE	UNITS OF WORK		COST		COMMENTS
		Planned	Actual	Planned	Actual	
Monitor waterfowl production with brood counts	1460	1 week		1,252		Species benefited: MALL, GADW, AMWI, AGWT, BWTE, CITE, NSHO, NOPI, REDH, CANV, LESC, CAGO, Shorebirds
NONGAME PRODUCTION AND APPRECIATION						
Management Program						
Develop and manage wetlands for migrating and nesting shorebirds	1322			∅		Species benefited: MALL, GADW, AMWI, AGWT, BWTE, CITE, NSHO, NOPI, REDH, CANV, LESC, CAGO, Shorebirds
Provide stabilized water levels varying in depth from 1-24 inches throughout the nesting period	1322					Done in conjunction with waterfowl water manipulation. Species benefited:
Encourage emergent vegetation on brood pond areas	1322	1 week		1,252		Same. Species benefited: MALL, GADW, AMWI, AGWT, BWTE, CITE, NSHO, NOPI, REDH, CANV, LESC, CAGO, Shorebirds
#Conduct tours, give talks and provide community with information	1630	1 week		1,252		Species benefited: All
Maintain species observation list	1630	1 week		1,252		Species benefited: All
WATERFOWL HUNTING						
Management Program - to provide habitat to attract waterfowl during hunting season						
#Utilize brood ponds and water system to provide some fall water on dry years	1211	1 week		1,252		Species benefited: MALL, GADW, AMWI, AGWT, BWTE, CITE, NSHO, NOPI, REDH, CANV, LESC, CAGO, Shorebirds

ACTIVITY	ACTIVITY CODE	UNITS OF WORK		COST		COMMENTS
		Planned	Actual	Planned	Actual	
*Utilize 2,000 acre feet water right to provide year-round water levels	1211	1 week		1,252		Species benefited: MALL, GADW, AMWI, AGWT, BWTE, CITE, NSHO, NOPI, REDH, CANV, LESC, CAGO, Shorebirds
Monitor hunter use	1430	1 week		1,252		Species benefited:
TECHNICAL ASSISTANCE						
Review of public projects	1710	7 weeks		8,764		Species benefited: All
Assistance to landowners	1720	3 weeks		3,756		Species benefited: All
ADMINISTRATION						
Management Program						
Maintain Department lands and facilities	1211	2 weeks		2,504		Species benefited: All
Control noxious weeds on project areas	1211	2 weeks		2,504		Species benefited:
Maintain project buildings	1211	1 week		1,252		Species benefited:
Maintain and repair equipment	1211	2 weeks		2,504		Species benefited:
Develop planning documents, review and evaluate	1630	2 weeks		2,504		Species benefited:
Maintain files, prepare administrative reports	1630	3 weeks		3,756		Species benefited:
Technical assistance for other agencies	1630	3 weeks		3,756		Species benefited:
Other duties (as assigned)	1630	5 weeks		6,260		Species benefited:

ABBREVIATION CODES TO BE USED IN THIS REPORT:

Mallard	MALL	Northern Shoveler	NSHO
Gadwall	GADW	Northern Pintail	NOPI
American Wigeon	AMWI	Redhead	REDH
American Green-winged Teal	AGWT	Canvasback	CANV
Blue-winged Teal	BWTE	Lesser Scaup	LESC
Cinnamon Teal	CITE	Canada Goose	CAGO

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