

cated below KWMA's southern boundary in the Murphy Meadows area where bottom land is flooded with winter and spring runoff water, creating a large expanse of shallow-flooded area. Gulls, terns, double-crested cormorants and white pelicans are also found on KWMA, primarily during migration periods. Pied-billed grebes and eared grebes nest on the edges of Dacey and Adams-McGill reservoirs, while western and horned grebes are transient visitors. Greater sandhill cranes are also occasional visitors.

KWMA is visited by a variety of raptors during all seasons. Nesting species include great-horned owls and northern harriers. Golden eagles, red-tailed hawks, and prairie falcons use the area primarily for feeding. Peregrine falcons, osprey and merlins use the area seasonally during the spring and fall migration periods. Bald eagles and rough-legged hawks visit the area for winter feeding.

Songbird populations generally peak during the spring migration period. The greatest numbers occur near riparian habitat and in close association with marsh areas. Songbirds that regularly nest in or near KWMA include horned larks, marsh wrens, red-winged blackbirds, savannah sparrows and song sparrows.

The meadow and wetland areas are important habitat for voles, shrews, harvest mice and other small mammals. The uplands provide habitat for pocket mice, kangaroo rats, and other mice. In addition, the open water sources provide abundant insects for several species of bats.

## FISH RESOURCES

Populations of both game and nongame fish are present on KWMA. Largemouth bass and black bullhead are the self-sustaining game fish species on the area. The rainbow trout fishery is enhanced by hatchery-reared fish which are stocked spring and fall in Cold Springs and Haymeadow reservoirs only. Dacey and Adams-McGill reservoirs are managed as largemouth bass fisheries. Tule reservoir is managed as a

supplemental fishery dependent on water availability and waterfowl management needs. Cold Springs reservoir and Haymeadow reservoir are managed for high stable water levels on a yearly basis to maximize fisheries values.

Four native species of fish make their home at KWMA. White River spinedace, Moorman White River springfish, White River speckled dace, and White River desert sucker are found in Flag Springs and Hot Creek Springs. Management of these four endemic species is directed toward preservation of existing habitat and perpetuation of the species. The Hot Creek Refugium was officially designated in 1966 by NDOW for the protection of the Moorman White River springfish population. This site has also been designated as a National Natural Landmark.



## WATER RESOURCES

The major sources of water for KWMA come from springs, ground water inflow, surface water inflow and precipitation. Water is usually abundant in the winter, spring, and early summer, but somewhat less than adequate to maintain maximum levels in Cold Springs, Haymeadow and Adams-McGill reservoirs during the late summer-early fall period. KWMA is located near the northern end of the White River drainage basin and a considerable amount of water may flow through the project as surface water during runoff periods. The water distribution system is composed of approximately 17 miles of dirt ditches and about nine miles of natural stream channels.

## PUBLIC USES

### Wildlife-Related Recreation

Wildlife viewing, sightseeing, photography, horseback riding, camping, educational activities, swimming, and hiking are some of the wildlife-related activities available on KWMA. Camping is available at the Dave Deacon Campground. Boats are frequently used on KWMA by anglers and waterfowl hunters. Three developed boat ramps with docks, and four primitive boat ramps are available for easy access to the reservoirs. Roads throughout the area provide excellent viewing of wetland dependent wildlife and upland wildlife.

### Hunting

Numerous hunting opportunities are provided on KWMA. Waterfowl hunting is the most popular hunting activity on the area, with the pursuit of dove a close second. Rabbit and quail hunting are also favorites. KWMA is within NDOW's Big Game Hunt Management Unit 132. Hunting pressure is very light for mule deer on KWMA due to the low population level and weapons restrictions for safety purposes. Hunters are encouraged to review current regulation brochures prior to hunting at KWMA.



### Fishing

Fishing continues to be the most popular recreational activity on the area. Significant use by trout anglers occurs from March through August, peaking in May. Bass fishing becomes popular in late May and continues into September, peaking in July and August. The fishing season on KWMA is open year round, any hour of the day or night, except for Dacey and Tule reservoirs and the upper portion of Adams-McGill, Cold Springs, and Haymeadow reservoirs as posted, which are open to fishing August 16 through February 14. Hot Creek to its confluence with Adams-McGill reservoir is closed year round to fishing. A 100-yard radius around the inflow from Hot Creek to Dacey and Adams-McGill reservoir is closed to fishing January 1 through April 1. Anglers are encouraged to review current fishing regulations prior to fishing at KWMA.

## GETTING THERE

From Las Vegas (approximately 175 miles), take Interstate 15 north to U.S. 93, then take S.R. 318 north. KWMA is located about 60 miles north of Hiko.

From Ely (approximately 75 miles), take take U.S. 6 south to S.R. 318 and continue to KWMA.



**The Kirch Wildlife Management Area is open year-round, without hourly restrictions. There is no charge for use of the area, but hunters and anglers are asked to complete visitor cards before leaving. For more information contact the Kirch Wildlife Management Area at (775) 289-0927 or NDOW's Habitat Bureau at (775) 688-1569. This publication was developed by the Nevada Division of Wildlife's Habitat and Conservation Education Bureaus, 1100 Valley Road, Reno, NV 89512.**

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## INTRODUCTION

The Wayne E. Kirch Wildlife Management Area (KWMA) is located in the White River Valley in northeastern Nye County. State Route 318 is the major access route to the area.

Settlement of the White River Valley progressed during the 1870s when isolated homesteads appeared, generally associated with meadows where water supply was available. During the early 1900s, W. E. McGill and J. W. Adams formed the Adams-McGill Company, and successfully ranched nearly 100,000 acres of land in the area for several decades. Ervin Hendrix purchased the Sunnyside and Hot Creek Ranches in 1943 and operated the ranch for the next 16 years until 1959. The Nevada Fish and Game Commission recognized the wildlife potential of the property and purchased the area in 1959. In May 1968, the area was established as the Wayne E. Kirch WMA in honor of Fish and Game Commissioner Wayne E. Kirch of Clark County. Today, KWMA is composed of a total of 14,815 acres, including five major reservoirs.

## HABITATS

From sagebrush to wet meadows and grasslands, the various habitats of KWMA support an abundance of fish and wildlife that contribute significantly to the biological diversity of central Nevada. Wetlands are among the most productive wildlife habitats in Nevada. They provide food, cover, and water for numerous species of birds, mammals, reptiles, and amphibians. Tule, Adams-McGill, Cold Springs, Dacey and Haymeadow reservoirs, developed by NDOW, provide deep water habitat for fish and diving ducks. The edges of the reservoirs provide feeding areas for puddle ducks and shorebirds. The White River bisects the area and provides wetlands and deep water habitats. Uplands on KWMA include sagebrush, alkali desert scrub, annual grassland and desert wash. Sagebrush provides important habitat for mule deer, pronghorn, sage grouse and nongame species. The desert wash habitat is found in narrow corridors around intermittent streams carrying runoff from the Egan Range into the White River Valley.

## AREA MANAGEMENT

### Prescribed Burning

Prescribed burning is conducted on KWMA to improve habitat conditions for resting, nesting and feeding waterfowl. The controlled burns remove excessive litter and optimize food production for waterfowl. Prescribed burns on KWMA occur in the late fall and winter.

### Herbicide Spraying

Chemical control is an effective method to manage undesirable vegetation in conjunction with water management. Aerial spraying is conducted every few years to open up thick stands of cattail and hardstem bulrush to make them more desirable for waterfowl and other wildlife.



### Invasive Plant Control

The invasion of non-native plants has become a major threat to the native habitats on KWMA. Controlling these invaders is a difficult and time-consuming management concern. The competitive nature of these plants and their ability to spread impacts the natural plant diversity and ultimately the diversity of animals on KWMA. Invasive species on the area include: Tall whitetop, Russian knapweed, whitetop (hoary cress), and tamarisk (salt cedar).

## WILDLIFE

The wildlife of KWMA is extremely diverse due to the mosaic of habitats present and NDOW's efforts to develop all the potential wetland habitat that the area's water resource can maintain. The exceptional diversity in such a relatively small area emphasizes the biological importance of the area.

### Waterfowl

KWMA provides a valuable stopping point for migrant ducks that follow Nevada's eastern sub-flyway. More than 24 species of ducks have been recorded on KWMA, most common include canvasback, pintail, widgeon, and gadwall. Waterfowl populations on KWMA generally reach their highest numbers in October and early November. The spring migration occurs primarily in March and April. Up to 12 species of ducks breed and raise their young on the area with the peak of hatch occurring from late July through early August. Adams-McGill and Dacey reservoirs produce most of the ducklings on the area.

Canada geese are the most common geese on KWMA; white-fronted, snow and Ross geese are infrequent users of the area. Tundra swan are annual visitors to the White River Valley.

The Old Place, Dacey, Adams-McGill and Tule reservoirs are managed for maximum utilization by waterfowl during the spring and fall migration periods and for waterfowl production.

### Upland Game and Mammals

Mourning dove have been observed on all upland areas on the KWMA but are most concentrated in the food plots next to the headquarters. White-winged dove are seen occasionally on the area.

Mammals seen on KWMA include black-tailed jackrabbit, cottontail, bobcat, coyote, spotted skunk, striped skunk, long-tailed weasel, badger and others. Four different big game species have been recorded on the area. Mule deer can be seen throughout the year, with the population estimated at about 50 animals. Pronghorn continue to use portions of the area following reintroduction in the White River Valley in 1984. Rocky Mountain elk are infrequently seen on the area. Mountain lion presence is regarded as rare or accidental on KWMA.

### Nongame Wildlife

Although the area was originally purchased and developed to preserve wetland habitats for waterfowl, many other wildlife species including raptors, shorebirds, and wading birds have benefited from this project.

White-faced ibis, great blue herons, great egrets, snowy egrets, bitterns, and rails are common wading birds on KWMA. Black-crowned night herons and great blue herons nest on the area.

Black-necked stilts, American avocets, greater yellow legs, plovers, dowitchers, long-billed curlews and marbled godwits are common shorebirds on the area. Shorebird populations are most numerous during the fall and spring migrations. One of the most important shorebird habitat areas is lo-