

Report to IDNR River Programs
Interpretive and Informal Biological Reconnaissance
Des Moines Metro Area Waterways

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Date Submitted: 27 October 2015 **Dates Surveyed:** 6 August 2015

River Segment: Middle River, Warren County

Interpretive Theme(s) suggested for this river segment: A changing landscape, a changing stream

Stream Reach:

UTM Beginning: 0454406 E – 4587577 N—Access below Summerset Bike Trail bridge

UTM End: 0466903 E – 4592720 N—Confluence of Middle and DSM River - “access” on river right

Approximate mileage: 13.5 miles (plus miles on DSM River to usable access)

CFS average during this time period: 340 cfs

Description and interpretation of this section:

The Middle River in Warren County can be divided into three different sections. The first section is a mostly channelized section from the Summerset Park Bike Trail bridge to the Clarke St. bridge south of Carlisle. This section is bordered mostly by public land on the north side (Banner Lakes/Summerset State Park and Banner Flats WMA) and by private land on the south. The public land is mostly wooded and the private land varies from heavily wooded to cropland. The banks are universally steep and 6-10 feet in height. The second section is more naturally flowing, meandering over the land from the Clarke St. bridge to the beginning of the Red Rock WMA. The land along this section appears to be entirely privately owned and varies from a heavily wooded and fairly wide riparian zone to a few scattered trees to cropland and pasture. The banks are similarly steep as in the first section and shale bluffs rise up in a few areas. The third section consists of the final portion of the river, approximately 2 miles in length, which flows along and into the Red Rock WMA. On the south side of the river in this section, some of which is private land, the uplands rise up higher above the river, offering more shale bluffs for the paddler to enjoy, with upland woodlands above. The public land in Red Rock WMA is flatter, bottomland woodland and wetland area, consistent with the floodplain of the DSM River.

Because much of the entire route is wooded, woodland and riverine wildlife species are common. Fox squirrels, cardinals, catbirds, and yellow-billed cuckoos are often seen and heard along the river. Phoebes and cedar waxwings wait patiently on overhanging branches for insect prey to fly by. The dead snags readily available in the adjacent woodlands provide homes and feeding areas for red-headed, downy, and red-bellied woodpeckers. Great horned owls peer from perches by the river and wood ducks hide

in the tangles of trees fallen into the water, bursting from cover as the kayaker passes. A few cliff swallows build their pottery nests beneath some of the bridges that cross the river, and bank swallows dig nests in a few steep clay banks. Beavers make use of bank dens and the willows and cottonwoods that are common along the route. Deer trails lead down the steep slopes to the river's edge. Great blue herons wade stealthily for fish in the shallows around sand or rock bars as spotted sandpipers search the edges for prey. Softshell turtles scurry from the downstream ends of the sandbars, wary of any potential danger. A bald eagle nest can be found over the river in the first section of this paddle and both adult and juvenile bald eagles are often seen along this river. In more open areas, goldfinches, red-winged blackbirds, and indigo buntings may be seen and heard calling. The final section features cliffs, where flowers attract ruby-throated hummingbirds, and flats, where white pelicans and great egrets may be found. Red-tailed hawks and turkey vultures make use of the thermals that rise out of the river valley. A few mussels persist on some of the few rock bars in this river, trying to make a living in a river that is subject to rapid rises and falls in water levels. Sometimes, after a flash flood, the river exposes some of those who lived here long before, as bison bones become visible on sandbars or in freshly eroded banks.

Due to the channelization and unpredictability of the water levels, the banks adjacent to the river are most often steep and eroded. Frequent scouring of the banks is evident and, despite the efforts of willow and grass roots, collapsed banks are common. Paddlers must be experienced to paddle this river, as the thalweg is illusive and mid-river sandbars are common. In the second section of this river, between Clarke Ave. and Red Rock WMA, the meanders of the river create lots of catchments for trees and other river debris. At this paddle, none entirely blocked the river, but several exceeded 60% blockage of the river's width. Lower water levels may increase the problem further. In the first section of this paddle, not far below the put-in at Summerset Bike Trail bridge, two 6-inch pipes cross the river, suspended by cables and sporting a tree from recent high water. There is no indication if they contain water, oil, gas, or some other substance, nor to whom they might belong. They certainly are not stable and could present a hazard to paddlers and other river life. In the last portion of the river, large drainage tiles and even larger drainage ditches—likely draining nearby farmland—enter the river. These may provide others hazards for paddlers.

The most serious impediment to having a water trail on this river, however, is the problem of access. The very busy Highway 65 bridge is totally unacceptable and dangerous as an access. The Summerset Bike Trail bridge, which I chose, required parking in a neighbor's driveway and a carry of 200+ yards to the bridge, or an unadvisable drive down the bike trail. Even then, the slope to the water beside the bridge exceeds 60 degrees and is muddy and not vegetated. Access could possibly be gained through the Banner Shooting Range, but such an access might be dangerous and, in any case, the range is not open regularly enough for paddlers. An access could possibly be created on the northeast side of the 160th Ave. bridge, skipping the first 4 miles or so of the paddle. No access is possible or desirable along the busy Highway 5 bridges southeast of Carlisle. The other major problem is access on the east end of the river. The confluence of the Middle with the Des Moines River has a non-drivable

access. At this paddle, it meant ½ mile of slogging through knee-deep mud to get the boat to the vehicle. Few paddlers would do that at all and certainly not more than once. Other potential accesses are farther down the DSM River. The Ford Access (~ 1 mile from the confluence) was flooded at this paddle and not accessible, as was the Runnells Access (approximately 3 miles from the confluence). The only reliable access would be at Webb's Camping Resort, a privately owned area that has a road down to the Des Moines, approximately halfway between the Ford and Runnells accesses. While the owner was gracious in allowing us to use the access should we desire, I doubt that she would be so inclined with dozens of paddlers wanting to use it. Beyond that, the next viable and only reliable access is at Bennington Bridge, nearly 9 miles from the Middle/DSM confluence.

This river is certainly a river worthy of paddling, but I question whether it can be made a water trail. The access problems at both ends are substantial, and the flashiness of the river itself may expose paddlers and the sponsoring water trail agencies and organizations to unwanted liability and certainly to frequent maintenance.

Major vegetation groups along the reach:

Nearest the river, bottomland hardwoods are most common. Silver maple, cottonwood, box elder, and willow are common in wooded stretches nearest the water. Sycamores, sometimes exceeding 30 inches DBH, are found in groups along portions. Because banks are steep and often well above the water, other species are also mixed in. Hackberry, ash, walnut, and both slippery and American elm are found, some of them quite large in diameter. On slopes and bluffs higher above the river, large red and white oaks are found with sugar maples and basswoods growing beneath them, foretelling the make-up of the future forest in the area. Where vegetation covers the banks—rare in this river—riverbank grape and poison ivy vines hang down. Nettles, *Bidens*, ragweed, smartweed and other tolerant weedy species may be found. In more open areas, often adjacent to crop fields, goldenrod and a few other prairie species are growing. Grasses are primarily Reed's canary grass and brome grass. Young willows are common on the inside bends of meanders in the river and are sometimes found in the outside of such bends, as well. Though not entirely successful, they appear to be better than grasses at holding banks subject to water erosion. While woodlands are frequent along much of this river, croplands are occasionally planted within a few feet of the river, with scattered or no trees to provide a buffer from the river.

Notable hazards and locations:

0455619 E - 4588200 N—Unmarked pipeline hanging over river, tree hanging on it
0456541 E - 4588652 N—Transmission lines over river
0458708 E - 4589614 N—Downed trees in water, blocking 60% of river
0459328 E - 4590060 N—Corner where lots of fresh trees blocking 50% of river
0459615 E - 4590764 N—Fresh downed trees blocking part of river
0460344 E - 4593175 N—Silver maple blocking about 90% of river
0461015 E - 4593634 N—Series of cottonwoods, silver maple, blocking part of river

Notable landmarks and locations:

0455730 E - 4588266 N—Bald eagle nest in cottonwood

0458220 E - 4589500 N—Potential access on NE side of 160th Ave. bridge

0459591 E - 4591013 N—Adult bald eagle

0460920 E - 4593641 N—Adult bald eagle

0462041 E - 4593972 N—Adult bald eagle

0463107 E - 4593551 N—1.5 year old juv. bald eagle

Recommended Experience Classification: Recreational to Challenge (depending on length and accesses in and out)

Photos and descriptions: Thirty-four photos are provided in 1 folder.

Recommendation on how/where interpretive information could be shared with the public:

If it is a water trail—assuming all the access problems can be solved—then interpretive information about it should be shared in both Warren and Polk Counties. County Conservation Board offices, websites, and bulletin boards, Chambers of Commerce sites in towns in the region (Des Moines, Indianola, Carlisle, etc.) and in nearby parks (Summerset/Banner Lakes, for example). Due to the remoteness of potential accesses, I do not recommend placement of interpretive signage at accesses, though certainly the Water Trail way-finding signage should be present.