

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

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**River Segment:** Des Moines River

**Interpretive Theme(s) suggested for this river segment:** Managing a river—from wild to tame and back again

**Stream Reach:** Hwy 210 Access (Boone County) to Jester Park and Saylorville Lake

**UTM Beginning:** 0428251 E - 4636148 N—Hwy 210 Access

**UTM End:** 0441946 E - 4617650 N—Lakeview Rec Area boat ramp, river right, above Saylorville Dam

**Approximate mileage:** 15.7 miles

**CFS average during this time period:** 900 cfs

**Description and interpretation of this section:**

This section of the river falls under the heavy influence of the dam at Saylorville Lake. While sections above and below entail a paddle that is mostly lined with trees, this section is nearly entirely open. The broad floodplain of the river in this section—from ½ mile to 1 mile or more in width—is treeless and, due to this summer's frequent alteration in river levels, the vegetation is composed largely of annual species of weedy herbs—plants able to take advantage of available location, moisture, and sunlight on very brief notice. A few areas, 10-15 feet above the current water levels, do contain some row-crops, mainly corn, on Corps of Engineers' ground. The rich alluvial soils, when not flooded, are capable of producing large yields—albeit with the high risk of being flooded. Saylorville Lake contains some 1,400 acres of open water (at conservation pool level), 800 of which are shallow waters less than 2 feet deep, in addition to 600 acres in shallow island complexes. The area about 2,000 feet north of the Mile-Long Bridge is closed to motorized water craft April 1 through August 31, but is open to canoes and kayaks year-round.

The distance and the lack of shade anywhere along the route make this a section that is not to be taken lightly. The current, at 900 cfs, is not much of a factor, but wind, sun, and motorboats certainly can be. Wind from the north or northwest can help propel paddlers downstream. However, wind from the opposite directions, south or southeast, can make an otherwise pleasant enough paddle downright difficult, and kick up considerable whitecaps. This is especially true in the last 6 miles of the paddle, approximately from the Jester Park Access to the Lakeview Access, in the main part of the lake. The addition of a considerable number of motorboats (especially on weekends), skiers, jet skis, sailboats, and other watercraft make the lake section (south

of Jester Park Access) to be considered optional for paddlers. Paddlers in this section should bring plenty of water to drink and sunscreen. The openness of the paddle, while often pleasant and offering views and perspectives unavailable on other DSM Riv sections, means that the sun can be unrelenting with no shade available. There are, of course, many beaches on which to land and get in the water to cool off!

The openness also means there is a lot of opportunity to observe wildlife, especially various waterfowl attracted to the large lake. The Des Moines River is a major corridor for migrant species. The presence of extremely healthy populations of such weeds as curly dock, smartweed, and ragweed will attract large flights of ducks and geese in the fall, assuming the water level can be raised so as to flood those areas (the “shallow island complexes”) now above the water flow. Mallards, geese, and blue-winged teal are present throughout the paddling season, but many other waterfowl species—both dabblers and divers—are found in the spring and fall. In addition, great blue and green herons, great egrets, white pelicans, double-crested cormorants, terns, and ring-billed gulls are ubiquitous along this reach. Cliff swallows (with nests attached to cement portions of steel span bridges), barn, tree, rough-winged, and bank swallows are commonly seen swooping over the water in search of insects. Dragonflies and damselflies join them in mid-to-late summer. Killdeer and spotted sandpipers are common nesters on the beaches, and many other shorebird species join them during migrations. Red-winged blackbirds, goldfinches, song sparrows, diskcissels, and yellowthroats make use of the tall weedy plants along the shore for nesting and food. Beavers, harvesting some of the corn and the giant ragweed along the shoreline, dig bank dens in the silty soils, while deer wander down to the water from the adjacent woodlands. Carp breed and lazily graze in the shallows, while turtles bask on the silty ends of beaches. Red-tailed hawks and turkey vultures share the thermal air currents over the valley. Bald eagles and osprey, the latter encouraged by releases and nesting platforms, dive for fish in the waters of the river and the lake. Careful observers will find many other species in this stretch, many that are otherwise rare over the rest of the state.

The frequently changing water levels make for a braided river in parts of this stretch, with many side channels that may, or may not, be paddleable. Sandbars change frequently, making the thalweg illusive. Paddlers should be prepared to occasionally wade. The stumps of large old trees are sometimes exposed along the shoreline, revealing that the river was once wooded from its edge, prior to the dam being built in the 1960s and 70s for flood control.

Accesses are well-developed along this stretch. The Hwy 210 access is a cement boat ramp with a good parking lot, though no water trail signs exist on the highway. Interpretive signage is present, but is badly overgrown with weeds and barely visible. It is just upriver from the impressive High Trestle Trail Bridge rising 13-stories high over the river. An access exists a bit downstream (“Sub 1”) on river right, and multiple accesses exist once into the lake itself. The most paddle-friendly is the rocky beach at Jester Park (river right). Paddlers may prefer to take out at the Jester Park cement boat ramp, just a couple of hundred yards southeast of the beach. If it is desired to paddle

farther down into the lake, either the Mile-Long Bridge Access or the Lakeview Rec Area boat ramp next to the dam (both river right) are available. In any case, transportation will be necessary to take through-paddlers over the dam and down to the next access below the spillway at Cottonwood Access on river left. No portage trail exists and the distance, roads, and topography make installing one undesirable.

**Major vegetation groups along the reach:**

This section is a frequently flooded area under the influence of the Saylorville Lake Dam. Trees have been removed from the floodplain and are only seen on the distant hills rising up from the floodplain. They are a mix of oaks (red, white, Chinkapin, and bur), ash, hackberry, basswood, and sugar maple, with some shagbark hickory and black cherry in the canopy and ironwood and musclewood in the understory layer. The floodplain, which dominates the view from canoe or kayak, consists largely of weedy annuals, able to establish themselves quickly in an often unpredictable environment of alluvial soils. Lesser and giant ragweed, lambsquarters, foxtail, smartweeds, curly dock, cocklebur, evening primrose, cinquefoil, and maretail make up the vast majority of plants on the banks and flat floodplains of the river in this section. Few grasses are established anywhere and, in a few places, willows have set roots into the soils.

**Notable hazards and locations:**

0430047 E - 4630648 N—Transmission lines across river

**Notable landmarks and locations:**

0429343 E - 4633991 N—Juv. bald eagle

0429403 E - 4633421 N—"Sub-1" access ramp

0429813 E - 4631134 N—5 untagged trotlines in bank along river (1" PC); also osprey platform for reintroduction

0430171 E - 4630461 N—Sub-adult bald eagle

0435942 E - 4626182 N—Jester Park access (beach take-out just below campground)

0436189 E - 4625899 N—Jester Park boat ramp

0437897 E - 4623198 N—Mile Long Bridge Access (aka "Lincoln Access")

**Interpretive sub-themes:** Flood control dams also provide valuable recreation and wildlife habitat.

**Recommended Experience Classification:** Recreational

**Stream Reach:** Cottonwood Access to Birdland Access

**UTM Beginning:** 0443318 E - 4615954 N—Cottonwood Access

**UTM End:** 0449043 E - 4606660 N—Birdland Park access

**Approximate mileage:** 8.8 miles

**CFS average during this time period:** 950 cfs

**Description and interpretation of this section:**

The Des Moines River was once a working river. Before the days of interstate highways and airports, before the days of railroads, the Des Moines was the major route for transportation of goods and people into the interior of Iowa. For the two decades prior to the Civil War, steamboats paddled up and down the Des Moines River, as far north as Fort Dodge, supplying the goods and people for the Euro-American settlement of Iowa. Railroads quickly replaced the Des Moines, though, and the river continued to flow, its flows subject to the cycle of flood and drought that it had followed since the last glacial advance, about 12,000 years earlier.

It was 20<sup>th</sup> Century engineers that endeavored to control those flows. Flood waters of the Des Moines regularly spilled out onto the floodplain, inundating parts of the city of Des Moines. The city, like so many Iowa cities, had been built on the floodplain, close to the river, to facilitate transportation, power, and a sewer that would take its wastes “away”. But, instead of trying to control human behavior by moving the city out of the floodplain, engineers tried to control the river. In the 1960s and 70s, Saylorville Dam was constructed, primarily as a flood control structure. It has since become a major recreation and wildlife haven, in addition. For flood control, it usually works. In some years, though—1993 and 2010 come to mind—the rain and the river conspire to overwhelm the dam and engineers’ calculations. Sometimes, the river still has the last word.

In the section of the Des Moines River between the Saylorville Dam and Birdland Access, the Des Moines River tries to return to a wild version of itself, only to be constricted again as it travels through the city. Paddlers can readily watch the river as it changes. At Cottonwood Access, looking upstream, a paddler can see the narrow, cement outlet of the dam, through which the river—after becoming a lake—re-emerges. At the end of the sluice, it rapidly spreads out, stretching its constricted aquatic muscles. Sometimes the sluice is boiling and raging; at others the river is only a stream, a fraction of its former self. Just downriver, paddlers can observe the river’s power: about 100 feet of exposed storm sewer, once buried, and its cement end support, once at the river’s edge, lie useless in the river. The Des Moines River’s waters removed the tons of soil and plants that once covered it and took them farther downriver. It serves to warn the homes perched on the hills above that sometimes, the river is not tamable.

Unlike the section above, trees return to the riverside on this stretch. Bottomland hardwoods of silver maple, cottonwood, willow, sycamore and box elder—all tolerant of inundation and having their roots in wet soils—line the river. Honey locusts, walnuts, hackberries, and oaks are found on the slightly higher benches above the river. A catalpa tree makes an occasional appearance. Intermingled among the trees are bike trails on both sides of the river from Sycamore Access on downriver. Understory shrubs and vines en route tell of the influence of Euro-Americans: non-native buckthorn, honeysuckle, and bittersweet are more common than dogwood and elderberry.

The treed corridor is fairly wide above I-80/35, making room for many other species. Great blue herons and kingfishers are common, the kingfishers hovering 15 feet or so

above the water, dropping like rocks into the water, and emerging a second or two later with a fish in the beak. Eastern kingbirds and cedar waxwings wait patiently on overhanging branches, “hawking” out to catch insects in the air above the river. Woodchucks and the occasional mink run along the shoreline, and spotted sandpipers and killdeer run on the frequent sand beaches. Bank swallows dig nests in exposed clay banks and cliff swallows build their pottery nests beneath bridges, attaching them to the rough cement. Along with their cousins, rough-winged, tree, and barn, the swallows seem to fly almost incessantly to catch flying insects, not having the patience of the kingbirds, it seems. Blue jays call from the woods, warning of the red-tailed hawk perched on a snag. Ospreys and bald eagles are even found in this stretch, feeding on fish within sight of a busy highway. Once thought too wild for a tamed Iowa, they teach us that, given a bit of habitat, they are more adaptable. In the water, mussels try to continue their ancient existence in an altered river. The more adaptable mussel species—plain pocket book, pimpleback, heal-splitter, and three ridge—can still be found alive in some small sections, though old, long-dead mussel shell is more common on the beaches.

Transmission lines and numerous bridges cross the river in this stretch, reminding paddlers that this is an urban area. Below the I-80/35 bridges, the treed corridor narrows, and thus, the habitat for wildlife does also. As one moves deeper into the city limits, the shoreline is littered with more cement, brick and tile, reminders of the days when the river was seen more as a waste disposal vessel. The noise from vehicles, which is muted by the trees earlier, becomes a more constant background. More human trash is snagged on branches and log piles. The closer one paddles to Birdland Access, the closer buildings are to the river, with pumping stations on the edge. Still, riverside home owners seem to value the river, with docks, boats, and fishing poles at the ready. Dikes to protect buildings, pumping stations, and other human structures appear along the river.

Downriver from Birdland, the river is further restricted with cement flood walls and dams in downtown Des Moines. Only after it goes over the SE 1<sup>st</sup> St. dam, does the river regain its wildness. The city is schizophrenic about the river. It admires the river’s beauty, putting trails along and even over it, providing scenic viewpoints of it, even sharing its name. But the city fears the river’s rowdy moods, as well, using dams, flood walls and rip-rap to try to control it. We must remember that sometimes, the river rebels against those strictures.

Accesses are well-developed in this section, from Cottonwood and Sycamore Accesses installed by the Corps of Engineers on the north part of this stretch, to Prospect Park and Birdland Accesses established by the City of Des Moines. Should another access be desired, one could easily be installed below the city-owned parking area on the northwest side of the Euclid Ave. bridge. The banks are low and the slope gentle, making access easy. As a legally meandered river, camping on the numerous beaches in this reach might easily be done, as many are accessible both from the river and from the adjacent bike trails. Some arrangements for sanitation must be made, however, if this is to be encouraged.

**Major vegetation groups along the reach:**

Bottomland hardwoods of silver maple, cottonwood, willow, sycamore and box elder—all tolerant of inundation and having their roots in wet soils—line the river. Honey locusts, walnuts, hackberries, and oaks are found on the slightly higher benches above the river. A catalpa tree makes an occasional appearance. Understory shrubs and vines en route tell of the influence of Euro-Americans: non-native buckthorn, honeysuckle, and bittersweet are more common than dogwood and elderberry.

**Notable hazards and locations:**

0444299 E - 4613522 N—Transmission lines across river, heavily rip-rapped  
0446663 E - 4610013 N—Transmission lines across river and steel wall along river  
0446316 E - 4608304 N—Transmission lines across river

**Notable landmarks and locations:**

0444328 E - 4614553 N—Sycamore Access at NW 66<sup>th</sup> Ave.  
0444443 E - 4611359 N—Two adult bald eagles, 1 eating carp on beach ??  
0444836 E - 4610680 N—Osprey in dead snag  
0446292 E - 4608724 N—Potential access at City Offices on NW side of Euclid Ave.  
0446947 E - 4607593 N—Prospect Park Access

**Interpretive sub-themes:** A not-so-tame tamed river

**Recommended Experience Classification:** Recreational

**Stream Reach:** Below 1<sup>st</sup> St. Dam to Pleasant Hill Access to Yellow Banks Access

**UTM Beginning:** 0449041 E - 4603189 N—Potential access on river right below 1<sup>st</sup> St. Dam

**UTM End:** 0460386 E - 4599378 N—Yellow Banks Access

**Approximate mileage:** 11 miles

**CFS average during this time period:** 3800 cfs

**Description and interpretation of this section:**

This stretch of river moves from the highly urbanized downtown of Des Moines through the city's eastern industrial area, including the metro area's sewage treatment facility and Des Moines power plant, plus vehicle recycling and major grain handling operations, all on the north side of the river. After passing under the bridges of the very busy Hwy 65, the paddler will find some of the best Des Moines River wildness on through to Yellow Banks Park. Despite the industrial section, the river is popular with anglers and with fish-eating birds. At each bend of the river, the inside bend contains a large beach, often 4+ feet high off the current water level. These are popular with both people and wildlife. The river is shaking off its confined city ways and increasingly expressing its wild side.

Wildlife is abundant in this stretch, especially in the last four miles, but it is by no means confined to that section. Bald eagles and their nests are found in this river reach. It is significant that they are of several ages, indicating that reproduction in the area has been successful over the last several years. Bald eagles do not reach maturity until age 5 years. Herons, too, are very abundant in this stretch feeding on numerous small fish in the river and adjacent lakes and streams. It also indicates that a heronry—a colony of heron nests—is likely present in at least one of the nearby wooded areas. Ring-billed gulls and Caspian terns, more often seen on Saylorville Lake to the north, are also common in this section, presumably feeding on the same abundance of small fish as the herons. Kingfishers, too, make use of many small fish found in the river. Red-tailed hawks, white pelicans, and turkey vultures, as in other Des Moines River sections, are common here, as well. Wood ducks take advantage of the cavities in dead trees along the river and red-bellied woodpeckers provide carpentry services for many other cavity nesters in the area. Songbirds include cardinals, song sparrows, blue jays, and hummingbirds. Bank, rough-winged, cliff, and tree swallows all nest in this river reach and gather in large numbers in the late summer for migration. Spotted sandpipers and killdeer run the beaches in search of food, as a Cooper's hawk swoops through, hoping to catch one on the wing. Deer, fox squirrels, raccoons, turtles, and beavers leave behind tracks and other signs that they, too, like the wildness this river provides. Mussels, perhaps unable to adapt to the river's many challenges of volume and water quality, do not appear to be found in this stretch. Perhaps when they are, we will know that wildness has truly returned.

Three major roads cross the river in this stretch—two of them in the first mile—adding considerable vehicle noise to the river for some distance above and below them. Trains and other industrial sounds add to the noise level in some portions, although this appears not to directly affect wildlife abundance. Rip-rap is commonly used to protect infrastructure along the river. Although most of it is rock, there is some cement and the occasional crushed car in some areas. Downriver of the DSM Metro Sewage Treatment Plant, there is a northern bank that contains what is undoubtedly the ugliest collection of cement "riprap" on the entire river. It needs to be removed and replaced, preferably with living vegetative bank protection. It is nothing less than an insult to the river and all its users. High voltage transmission lines also drape across the river in several locations, especially near the power plant, none of which have bird warning balls on them. For a section so abundant with large birds, such "basketballs" should be in place. A high pressure petroleum line is marked and crosses beneath the river near the power plant and paddlers should not anchor or explore nearby. Just downstream from the Pleasant Hill Access, an abandoned red boat hull is jammed into a log pile. Its numbers removed, it has apparently been left for the river to "take away"—downriver, of course.

Several quite adequate accesses exist on this stretch of river. An additional potential access could be easily developed just below the southeast side of the 1<sup>st</sup> St. bridge and dam. This would allow through-paddlers from the Raccoon River to portage across the trail bridge from Principal Park and put back into the Des Moines River. The Harriett St. Access is well-developed for both motorboats and paddlers, with a ramp and a gravel

area. This access is very popular with anglers and the parking area small, however, and the interpretive sign has been vandalized. Demand in an urban area may indicate the need for the additional access at 1<sup>st</sup> St. The Pleasant Hill Access is on the edge of the urban area and has a large parking area and good interpretive signage, although a kybo would improve its utility for paddlers and anglers. Downriver, Yellow Banks Park adds much to the wildness of the area and provides a campsite for paddlers and a good boat ramp. Both, however, have been severely silted in by this summer's high water and need to be cleaned out to be truly accessible.

**Major vegetation groups along the reach:**

Owing especially to the public land set aside on much of this stretch (city and county), the riparian corridor is well-treed over much of this stretch. Bottomland hardwoods dominate nearest the water with silver maple, willow, and cottonwood joined by sycamore in some locations. Grape vines frequently drape down the banks. On hills and bluffs above some sections, red and white oaks, walnuts, hackberries, and honey locusts are visible. Understory plants include native elderberry and invasive non-native honeysuckle and autumn olive. Beaches found on the inside bends in the river are backed by a wedge of willows, their roots securing the sand against the river's fluctuating current. On the long sweeping bend above the Pleasant Hill Access, corn is planted too near the river's edge and unprotected, recently scoured of vegetation by flooding. The vegetated corridor is similarly narrow to non-existent on a portion of the river west of Yellow Banks. A well-vegetated WRP easement of bottomland hardwoods exists on river right to the south and east of Yellow Banks Park, in contrast.

**Notable hazards and locations:**

0453722 E - 4601844 N—Sewage plant effluent outlet  
0454825 E - 4599958 N—Large drainage ditch entering from river right  
0456190 E - 4600130 N—Series of transmission lines out of substation crossing river  
0456484 E - 4600152 N—High pressure petroleum pipeline crossing below river  
0457745 E - 4601457 N—Sunken boat in log pile (numbers removed)

**Notable landmarks and locations:**

0450522 E - 4602650 N—Harriett St. Access  
0451654 E - 4602391 N—Bald eagle nest  
0452276 E - 4602177 N—Adult bald eagle  
0452520 E - 4602285 N—1.5 year old juv. bald eagle  
0453585 E - 4602123 N—Small nest across from sewage treatment plant—possible heron or hawk  
0454044 E - 4601403 N—3.5 yr. old bald eagle  
0454652 E - 4599989 N—2 adult bald eagles sitting on sycamore branch  
0457467 E - 4601667 N—Pleasant Hill Access along Hwy 65  
0457987 E - 4600594 N—Juvenile bald eagle, YOY  
0458170 E - 4600272 N—Sub-adult bald eagle, likely 3.5-4 yr old  
0459420 E - 4599465 N—Adult bald eagle (within Yellow Banks Park)  
0460303 E - 4599257 N—Yellow Banks Canoe Campsite access



**Interpretive sub-themes:** From urban to wild: a river's journey

**Recommended Experience Classification:** Recreational. Pleasant Hill Access to Yellow Banks Access is an excellent 3.8 mile gateway paddle, assuming water levels are not excessive.

**Stream Reach:** Yellow Banks Access to Bennington Bridge to Box Car Access

**UTM Beginning:** 0460386 E – 4599378 N—Yellow Banks Access

**UTM End:** 0481712 E – 4591194 N—Box Car Bend Access

**Approximate mileage:** 25.4 miles

**CFS average during this time period:** 2650 cfs

**Description and interpretation of this section:**

This long stretch of river is dominated by the effects of Lake Red Rock, an Army Corps of Engineers flood control dam between Knoxville and Pella. The level of water held back by that dam influences nearly this entire stretch of river, its wildlife, its banks, its accesses, and its vegetation. Thus, it is treated as one section, though perhaps few will want to paddle this entire length in 1 day. Paddlers need to be cognizant that a few feet of difference in water level will mean drastically different currents, availability and unavailability of designated accesses, possible vulnerability to wind, and will influence what wildlife they might be able to see. While trees next to the river are present along approximately the upper half of this paddle, openness and a lack of shade are the rule in much of the lower half, making the paddle hot on a summer day. Careful planning is a necessity.

Many wildlife species, especially those adapted to utilize large water bodies, can be abundant on this stretch of river. Though no heronry was seen close to the river, great blue herons are a paddler's constant companion on this paddle. They wade the shallows off beaches, stalk fish from logs along and in the river, perch on tree snags over the river, and fly gracefully downriver, necks folded in a tight "S", long legs stretched behind, with wings making a rounded "M" shape as they retreat from paddlers. Their white-feathered cousins, the great egrets, are also a common and graceful sight along the Des Moines River in this area. Even the diminutive green heron can be seen waiting on low-hanging branches for Des Moines River fish. Double-crested cormorants, once a species with only a few small nesting colonies along the Mississippi River, have increased in numbers since the DDT era, and now are also persecuted less by people. They are seen along the Des Moines River on this stretch, especially in the lower half, where the lake provides deeper waters for fishing. White pelicans, once only an occasional visitor to central Iowa, can be seen throughout the growing season in this stretch. In late summer and fall, especially during migration, white pelicans appear in flocks of a few dozen to several hundreds. Paddlers who are stealthy enough to get close may be lucky to observe their cooperative feeding behavior. They form circles or straight lines, heads down, beaks in the water, shoulder to shoulder, swimming forward and closing the circle or pushing the line towards shore. This behavior—acting as if a

single organism—pushes small fish to the center or towards shore and makes it easy to grab a beakful in a single scoop, filling their 3-gallon pouch with fish! Bald eagles, too, have made a dramatic comeback from the bad old DDT days, and are seen commonly in this stretch. Once seen only during migration or during winter months feeding on fish in the open water below dams, Iowa now boasts over 300 nests along rivers all across the state. The multiple ages of eagles seen on this stretch—from young-of-the-year through adults—is testimony to the continuing success of eagle nests. (Bald eagles don't achieve the white head and tail until age 5 so younger eagles go through various plumage stages until age 5.) As in the Saylorville Reservoir to the north, ring-billed gulls and Caspian terns are common residents, too.

But many other birds, in addition to the fish eaters, are also commonly seen in this stretch. Canada geese, once extirpated from Iowa, are now common across the state, especially along larger rivers that have good grazing and nesting areas along them. Wood ducks take advantage of cavities for nesting, both in dead trees and in provided wood duck houses, and can be seen bursting from the branches of trees fallen into the river. Mallards, a common nesting duck in Iowa, also frequent this stretch of river. Several species of blackbirds—red-winged, yellow-headed, grackles, cowbirds, and orioles—can be found nesting along the river in the summer or in large flocks along the river in the fall. Spotted sandpipers, killdeer, mourning doves, and others can be seen on the beaches. Woodpeckers, eastern kingbirds, song sparrows, and many other songbirds are found in the habitats along the river, making use of the wild areas the river provides. Several species of swallows are common all along this stretch, nesting in tree or bank cavities or creating mud nests under bridges. Turkey vultures are present from March through October, seeking to do their part in recycling the river's deceased wildlife resources.

Many mammals also take advantage of the river's resources and their signs are commonly seen by observant paddlers. Beavers take advantage of the willows that are abundant in this stretch, leaving 1-inch or smaller sticks and branches cut at a 45 degree angle and frequently stripped of their nutritious young bark. Deer, too, avail themselves of the willow resource, supplementing it with nearby cottonwoods, or even the acorns from oaks in woodlands on the higher slopes along the river. Muskrat lodges of cattails can be found in some quiet adjacent backwaters, their residents feeding on the roots and leaves of cattails throughout the year. Some muskrat lodges will be visited by area mink in the winter and the muskrats invited to dinner—but as the main course!

Turtles and water snakes are present here, too, though perhaps not as common as further upstream. Though basking on branches and beaches still happens, it may be that the rapidly fluctuating water levels makes for an area less able to support them. Or perhaps the larger water body just makes them more difficult to observe than on a narrower portion of the river.

The dam strongly influences the availability and quality of access to the river for paddlers. High water levels mean that several accesses—Middle River, Ford's, Runnells,

Box Cars, and even Bennington Bridge—are often under water. At lower water levels, the silt and mud left behind means that the accesses and the roads to them may be covered with deep mud and silt, inaccessible by vehicle even if paddlers can get their boats out of the water. At the very least, it means that the accesses must be frequently cleared, both of mud and of logs that float in during high water. It also means that signage, both way-finding and interpretive, may undergo inundation as well, and render it useless. These are frustrations with all of the above-mentioned accesses in this stretch. They can turn a half-day trip into one many miles and hours longer, as paddlers search for an access, especially a usable one. Thus, efforts need to be made to find and negotiate for accesses that are more dependable for paddlers. This may include on private land, such as at Webb's Camping Resort. This privately owned campground is in an upland area above the river, but includes a narrow, winding road down to the river. It is, at present, the only dependable access at the mid-point of this stretch. The bridge at Hwy 316, just downriver, perhaps could have two accesses on its northeast side: one for high water and one for lower water conditions. The bridge accesses are not a perfect solution, but neither are undependable accesses. The Bennington Bridge Access is nearly always available, though it was blocked by large trees during this paddle and necessitated use of an alternate, just slightly upriver at a flooded road crossing.

For example, when the Middle River was paddled on August 6, 2015, the water level at its confluence with the Des Moines River was only a few inches below level with the bank at the "Middle River Access". That access was totally filled with silt, meaning a ½-mile long slog through knee-deep mud to get to the vehicle. Less than two weeks later, the Middle River Access was nearly 6 feet above the water level and to get to the access trail, one had to climb up a steep bank covered with large concrete pieces interlaced with cable and re-rod. So, as a result, it was no more accessible in low water than in high water. I did locate a nearby beach from which, with a short walk and a climb over a small log pile, I could locate the access trail. But the trail was still covered with many feet of now-dried mud. Neither time, then, was the "access" accessible.

Near the upper end of this paddle, the shoreline along the river consists of the exposed yellow loess of the park's namesake. While some banks are scoured, others are vegetated. Some along the route are rip-rapped with rock or concrete, but in a few locations old cars, machinery, appliances, and other junk litter the shoreline. Log piles, accumulated from this summer's heavy rains and high water, also contain hundreds of bottles, cans, float tubes, and other human detritus. A determined clean-up could rid the river of both the old and the new debris and make this section more beautiful and much safer. A few large cement blocks and slabs, including at the mouth of the Middle River (remains of a former bridge?) litter some spots along the river.

At higher water levels, it becomes difficult to follow a flooded river channel, and therefore it may be difficult to tell exactly where one is on the lake. The Box Car Bend Access, without parked vehicles at the access shoreline, looks much like anywhere else along the north shore from a distance. Some sort of visible marking along the shoreline would assist paddlers in determining the proper take-out point.

This section of the Des Moines returns the river to the semi-control of a dam, converting it to a lake once again. The lake and its waters influence many things besides flood control, including access, wildlife, and vegetation. Paddlers who decide to explore its wild side will not be disappointed.

**Major vegetation groups along the reach:**

The water levels in the river and lake strongly influence the vegetation growing along the shoreline. Along Yellow Banks Park, bottomland hardwoods dominate nearest the shoreline, including cottonwoods, willows, and some silver maples, while oaks dominate the uplands. Understory shrubs include invasive honeysuckle and autumn olive in the Park. Grapevines and wild hops are often abundant along the shoreline, draping over trees and down to the water. Downstream from Yellow Banks and before the river enters the Red Rock Wildlife Management Area, the corridor is lined with young willows backed by silver maples and cottonwoods. At times the treed riparian corridor becomes very narrow and row-crops are easily visible on the south side of the river. In and below that area, some banks are severely eroded, with artificial dikes blown out by high water. One section of private land there contains dense plantings of pines and spruces. As the river winds through the upper end of Red Rock, willows are nearly the only vegetation that survives the constant inundation, with many cottonwoods dead, but still standing in the floodplain. Sometimes, a solid wall of 1-inch willow fills the shoreline, a welcome site to area beavers, to be sure! A few living cottonwoods struggle to survive in some locations, and area pastures and fields are visible on the low hills above the lakeshore.

**Notable hazards and locations:**

0462899 E - 4595755 N—Confluence of North River. junk cars along shoreline  
0464165 E - 4595306 N—Large log pile with hundreds of bottles and cans caught in it

**Notable landmarks and locations:**

0461774 E - 4597480 N—Adult, 3.5 year old, and juvenile (YOY) bald eagles  
0462899 E - 4595755 N—Juvenile (YOY) bald eagle  
0462899 E - 4595755 N—Confluence of North River with DSMRiv  
0464165 E - 4595306 N—Juvenile (YOY) bald eagle  
0464070 E - 4594934 N—Large drainage ditch entering river  
0464295 E - 4594751 N—Large drainage ditch entering river  
0464765 E - 4595059 N—Blow-out of bank and field behind it  
0466820 E - 4592746 N—Confluence of Middle River with DSMRiv  
0466897 E - 4592714 N—Middle River “Access”  
0467469 E - 4593211 N—2 juvenile bald eagles, 1.5 years old  
0468629 E - 4593527 N—Possible location of “Ford’s Access”—not accessible  
0468948 E - 4592732 N—Webb’s Camping landing—the only reliable mid-point access, at present  
0470033 E - 4592772 N—Runnell’s Access, very muddy at present  
0471001 E - 4592927 N—Major drainage ditch coming in from north (river left)  
0471001 E - 4592927 N—Juvenile bald eagle (2.5 years old)  
0471424 E - 4593013 N—Major drainage coming in above Hwy 316 bridge

0472297 E - 4593075 N—Bald eagle, 4.5 years old  
0472589 E - 4593217 N—Juvenile (YOY) bald eagle  
0475771 E - 4592255 N—Adult bald eagle  
0476897 E - 4593017 N—Bennington Bridge Access

**Interpretive sub-themes:** A river becomes a lake, once again.

**Recommended Experience Classification:** Challenge due to distance if done in one day. Otherwise, it could be recreational.

**Photos and descriptions:** A total of 176 photos in 4 folders is being made available.

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

Maps and interpretive information regarding paddling the Des Moines River should be on the websites of County Conservation Boards, DNR, Chambers of Commerce, Dept. of Natural Resources, Corps of Engineers, liveries and other paddling related businesses in Boone, Dallas, Polk, Warren, and Marion Counties. Brochures regarding the water trails should be in offices and kiosks of all of those, as well. Interpretive signs already exist at some locations along the water trail but must be maintained in good and usable condition. Cell phone reception appears to be good throughout the length of the river in these counties so consideration should be given to using that technology to provide interpretative info to paddlers in cell-compatible formats and include links to maps.