# 2016 Survey Summary I-80 Lakes Lincoln and Dawson Counties - GAME PARKS -

### Jared Lorensen, Fisheries Biologist

There are 20 Interstate 80 (I-80) Lake fisheries in Lincoln and Dawson Counties that are actively managed by fisheries personnel from the North Platte District Office. These lakes range from 6 to 53 surface acres and primarily exist as Wildlife Management Areas (WMAs) but some areas are managed by Nebraska Department of Roads and others by local City Governments. For more information concerning I-80 Lakes consult our <u>Fishing Across Nebraska</u> publication and the <u>2017 Fishing Guide</u>.

On average, five of these I-80 Lake Fisheries are sampled per year. During the spring, boat electrofishing is used to sample largemouth bass while modified fyke nets are used to sample other shoreline-oriented species such as bluegill and redear sunfish. The following text and graphs depict survey data that was collected only during 2016. For historical survey information investigate <u>Historical Survey Summaries</u> on NGPC's website. For more explanation of what constitutes a fisheries survey read this <u>explanatory blog</u>.

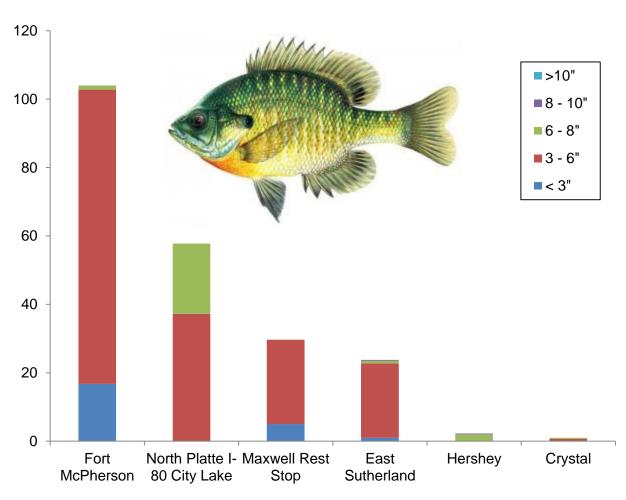
#### \*Note

Please don't litter as there is no designated litter control method in place at many of these I-80 Lakes. Investigate <u>WMA Regulations</u> (Chapter 4) and the <u>2017 Boating Guide</u> for more specifics.



**Bluegill** are prevalent in all I-80 Lakes and serve as the primary prey item for predatory species. For their size, bluegill are "scrappy" fighters on light tackle. Their tendency to inhabit near shoreline habitats make them a good target for bank anglers. Statewide regulations for bluegill apply to most I-80 Lakes but West Brady and East Hershey remain Catch and Release Only (C&R) for all species.

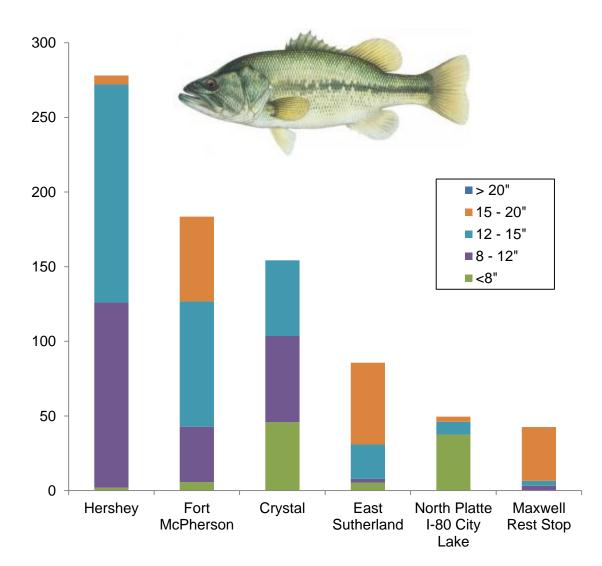
According to the 2016 survey data, Fort McPherson has a large bluegill population that consists primarily of small individuals. An angler could catch many bluegill at this lake but would be hard pressed to catch any over six inches. North Platte I-80 City Lake's population produces some bluegill over 6". Maxwell Rest Stop and East Sutherland's surveyed populations were dominated by small individuals. Hershey and Crystal had the lowest catch rates but in some cases this type of population produces the largest individuals. Access <u>Historical I-80 Lake</u> Information to review survey data from other lakes.



### **Bluegill per Net by Length Class**

**Largemouth bass** are the main predatory species in most I-80 Lakes. Statewide regulations for largemouth bass apply to most I-80 Lakes but West Brady and East Hershey remain catch and release only for all species.

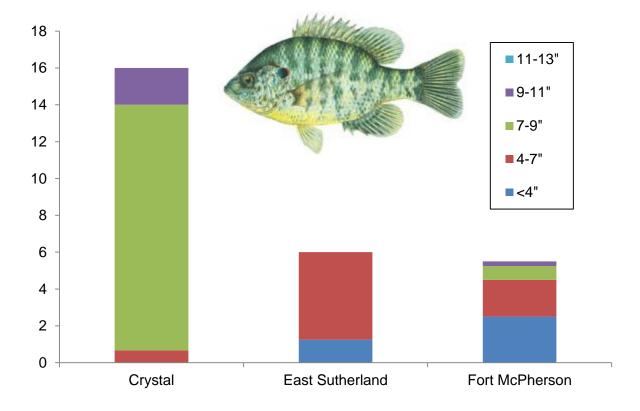
Hershey has the highest density population of 2016's surveyed I-80 Lakes. Fort McPherson has a smaller population but boasts fish greater than 15". Crystal has a relatively dense population of small bass. East Sutherland has a lower density yet but does have largemouth greater then 15". North Platte I-80 City Lake's largemouth population seems to have crashed as this fishery was renovated in 2012 and has supported large densities until now. Maxwell Rest Stop's largemouth population is low density but composed of large individuals. Access <u>Historical Sampling Surveys</u> to view other largemouth bass survey reports.



## Largemouth per Hour by Length Class

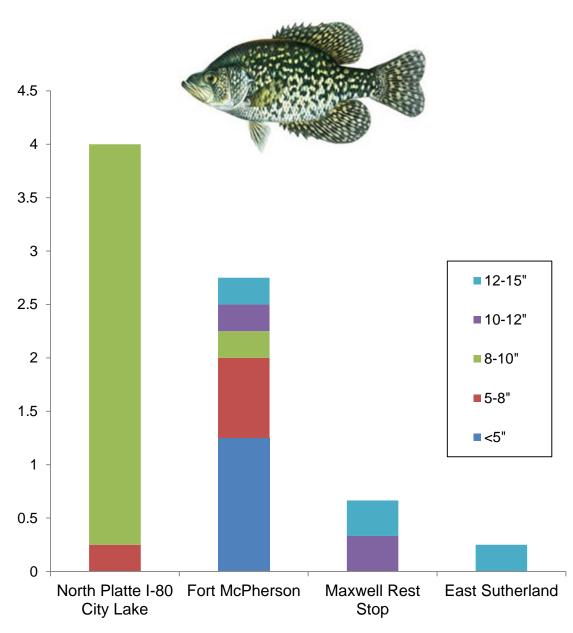
**Redear sunfish** is typically a southern species but they have found a niche in several I-80 lakes and Master Angler sizes have been produced. The red or orange margin of their gill cover tab gives this fish its name. The body is olive, with orange or yellow breast. Redear sunfish are typically less aggressive and have smaller mouths than bluegill and as adults their diet consists primarily of snails. For more identification information visit <u>NGPC's Fish</u> <u>Identification</u> website. Statewide regulations for redear sunfish apply to most I-80 Lakes but West Brady and East Hershey remain catch and release only for all species.

The 2016 survey at Crystal indicated a population consisting of individuals greater than 7". Many fewer were sampled at East Sutherland and small sizes were observed. Fort McPherson's population had the most length diversity but was dominated by small (less than 7") individuals. Access the historical I-80 Lake information at <u>Historical Sampling Surveys</u> to investigate other redear sunfish fisheries.



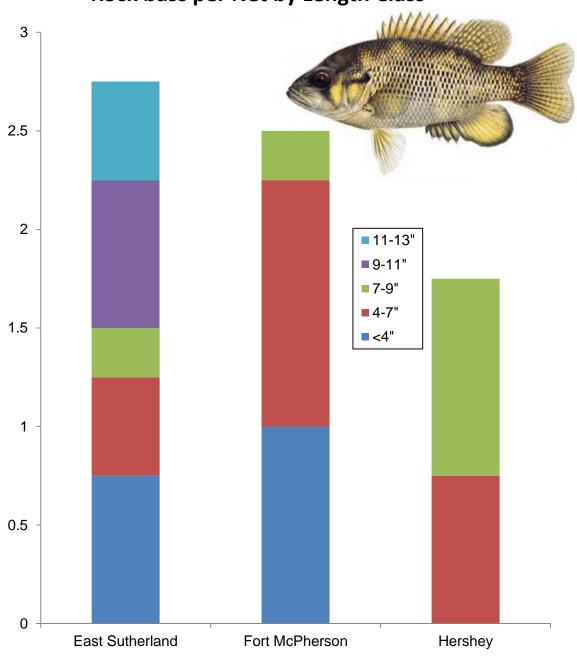
# **Redear sunfish per Net by Length Class**

**Crappie** are present in many I-80 Lakes but densities are typically low. During 2016, crappie were sampled in low densities at North Platte I-80 City Lake, Fort McPherson, Maxwell Rest Stop and East Sutherland I-80 Lakes. Of these four, North Platte I-80 City Lake had the most and largest while Fort McPherson had the most diversity in length groups with the largest crappie being just shy of 13" observed in the sample. One crappie (7") was also sampled at Hershey during subsidiary survey work.



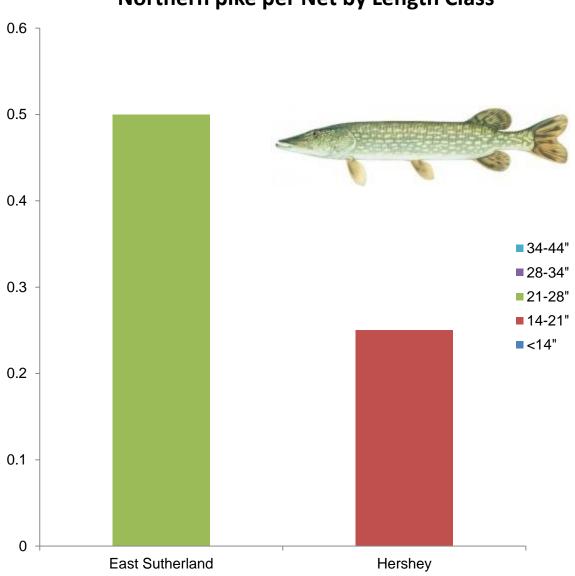
## **Crappie per Net by Length Class**

**Rock bass** are quite rare but have filled a niche in several I-80 Lakes. Utilizing the concrete rip rap placed along shorelines and the clear water of several I-80 Lakes, rock bass offer an additional angling opportunity. Master Angler potential exists and was observed during 2016 at East Sutherland. Rock bass also inhabit East Hershey I-80 Lake. When compared to bluegill, this species has low density populations in I-80 Lakes. For more identification information visit <u>NGPC's Fish Identification</u> website.



Rock bass per Net by Length Class

**Northern pike** were stocked frequently into I-80 Lakes prior to 2002. Some residual populations subsist like that at East Sutherland. Northern pike were stocked in Hershey during 2012 and 2013. Extra survey effort was expended during 2016 to sample these fish. In total, only five were captured with the largest being just under 20". These sampled pike had low relative weight (Wr) values meaning they were in poor health.



# Northern pike per Net by Length Class

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**Channel catfish** offer another angling opportunity in many I-80 Lakes. They are raised to 10" before being stocked to limit predation by largemouth bass and are stocked every other year in many I-80 Lakes to maintain fishable populations. The statewide daily bag limit is five channel catfish.

**Rainbow trout** are stocked into Birdwood I-80 Lake each year to provide a unique winter fishery. Trout are stocked twice each year for a total of 8,000 annually. There is no minimum length limit and the daily bag limit is five with only one fish 16" or longer. The possession limit is ten.

**Smallmouth bass** exist in low densities in many I-80 Lakes including Hershey, Brady and North Platte City I-80 Lake. They are infrequently stocked into Fort McPherson I-80 Lake as following its 2005 fishery renovation a smallmouth bass fishery was intended. Stocked fish are typically adults greater than 12".

**Other species** inhabit I-80 Lakes to a great degree due to historical stockings, illegal stockings and flood events. These species include (but not limited to) flathead catfish, goldfish, gizzard shad, alewife, yellow perch, hybrid sunfish, green sunfish, hybrid crappie, brook silverside, white sucker, common carp, grass carp and western mosquitofish. In some cases, many species within one I-80 Lake decrease the fisheries potential for growth but it does expand the opportunity for anglers to diversify their target species.







The table below illustrates the locations, species, number and average length of fish that were stocked during 2016. For more details and previous year's stockings visit the <u>NGPC Fish Stockings</u> website.

	Channel catfish	Rainbow trout	Largemouth bass
East Sutherland			
West Hershey	150-9.5"		
Hershey	1,325-9.5"		
East Hershey			
Birdwood	511-9.5"	7,946-9.75-11"	
North Platte I-80 City Lake			2,068-3"
Fremont Slough	759-9.5"		
Pawnee Slough			1,593-3-3.5"
West Maxwell			
Crystal			
Maxwell Rest Stop			
Fort McPherson			
West Brady			
Brady			
West Gothenburg			
East Gothenburg			
Willow Island			
West Cozad			
Cozad			
Dogwood East			

If you have questions or concerns about the I-80 Lakes in Dawson or Lincoln Counties please contact

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Several I-80 Lakes have been enhanced with fish attracting structure. Trees along shorelines have been hinge cut and dropped into the water to provide shallow cover while cedar trees are cut from surrounding WMAs and positioned on the ice or sunk using a large boat. Artificial structures are constructed and placed for the same reasoning. Artificial structures should be more snag proof and provide longer lasting structure. These projects are done to improve habitat and concentrate fish for anglers. These brush piles congregate game species such as bluegill, crappie and largemouth bass. Since January 1, 2016 brushing projects have occurred at Birdwood, Hershey, Fremont Slough and Brady.

Jan 5 – 14 cedar trees – Birdwood

N 41°06'57.1" W 100°49'50.7" N 41°06'58.9" W 100°50'13.3" Jan 10/16 – 72 cedar trees – Hershey

N 41°08'04.4" W 100°59'11.5" N 41°08'04.5" W100°59'11.7" N 41°08'04.3" W100°59'11.9" N 41°08'04.4" W100°59'12.1" N 41°08'04.8" W 100°59'20.4" N 41°08'04.5" W 100°59'21.6" N 41°08'04.7" W100°59'21.7" N 41°08'04.5" W 100°59'21.7" N 41°08'06.0" W 100°59'23.2" N 41°08'06.0" W 100°59'23.2" N 41°08'05.7" W 100°59'24.2" N 41°08'05.7" W 100°59'25.5" N 41°08'04.6" W 100°59'26.9" March 3 – **Hershey** – 20 cedar trees N  $41^{\circ}08'04.4"$  W  $100^{\circ}59'11.5"$  N  $41^{\circ}06'57.1"$  W  $100^{\circ}49'50.7"$  near south angler access pads

March 11 - **Hershey** – 24 cedar trees N 41<sup>0</sup>08.075' W 100<sup>0</sup>59.191' N 41<sup>0</sup>08.076' W 100<sup>0</sup>59.462

July 8 – **Birdwood** – 10 artificial structures N 41<sup>0</sup>06'58.0" W 100<sup>0</sup>50'07.8" N 41<sup>0</sup>07'02.9" W 100<sup>0</sup>50'19.5" July 8 – **Fremont Slough** – 10 artificial structures near west and middle angler access pads

September 8 – **Birdwood** – 10 hinged Along south shoreline

November 2 – **Brady** – 19 cedar trees N40°59.918' W 100°22.511' N40°59.944' W 100°22.436' N40°59.990' W 100°22.315' N40°59.888' W 100°22.184'





**Fort McPherson DOR–** located in the SE Quadrant of the Maxwell Interchange Latitude N 41° 02'55.61" Longitude W 100° 31'27.07" (boat ramp)

**Fort McPherson DOR** is 30 surface acres, is typically quite clear and has a maximum depth of approximately 12'. Emergent and submergent vegetation does well in this lake but does not impede usage. This fishery was renovated during 2005 and a smallmouth bass and redear sunfish fishery was initially intended but largemouth bass and bluegill quickly invaded the ecosystem. Of the I-80 Lakes surveyed during 2016, the largest catch of bluegill was observed but these were less than 6". Largemouth bass density was the 2<sup>nd</sup> highest surveyed. The largemouth fishery possesses a substantial quantity over 15". Channel catfish are not managed in this fishery. This fishery does provide limited opportunities for crappie and rock bass angling.

The property is managed by Nebraska Department of Roads (DOR). Vehicular traffic is limited to the SW corner of the lake where a primitive boat ramp exists. Non powered (electric only) vessels are allowed.



**Hershey** (aka Big Hershey) – located southeast of the Hershey Interchange – 1/10 mile south on Hershey Dickens Rd and ¼ mile east on Oregon Trail Rd. Latitude: 41°08'04.67"N Longitude: 100°59'52.89"W (boat ramp)

**Hershey I-80 Lake** is 53 surface acres, is typically quite clear and has an approximate maximum depth of 22 feet. The west and east ends are shallow and have heavy aquatic vegetation. Over the last 30 years this lake has produced many verified Master Angler fish including many species. The largemouth bass population has a large proportion of fish greater than 12" and the surveyed bluegill population was represented by large fish. Historically northern pike were stocked in this lake. During 2012 and 2013 12" northern pike were stocked to control abundant panfish populations and provide anglers another angling opportunity. Few pike were surveyed during 2016 and those sampled were small (14-21"). Rock bass and crappie offer anglers great opportunities at this lake as well.

Vehicle traffic is prohibited north of the boat ramp area and around the northwest portion of the lake. Angler access improvements were made at this lake and include an American Disabilities Act (ADA) accessible angling pad on the north shoreline. The newly replaced boat ramp in the SW corner will be replaced during 2017 to address slope issues. The current boating regulation allows vessels powered by internal combustion engines but prohibits production of wake. 5 mph is the maximum speed allowed.



**Crystal I-80 Lake** – (from the Maxwell Interchange) is located  $\frac{3}{4}$  mile North, 2 miles West,  $\frac{1}{2}$  mile North, 3  $\frac{1}{2}$  West and  $\frac{1}{2}$  mile South across overpass Latitude:  $41^{0}04'57.92$ "N Longitude:  $100^{0}37'05.99$ "W (boat ramp)

**Crystal I-80 Lake** is 7 surface acres and approximately 12' deep. The largemouth bass population is dominated by small individuals (less than 15"). The bluegill and redear sunfish populations benefit from this predator population that effectively reduces their densities allowing sufficient growth for those remaining bluegill and redear sunfish. 2016 survey data indicates that bluegill density has decreased and redear sunfish density is dominating.

Vehicular traffic is prohibited outside of the parking area located along the south shoreline. A primitive boat ramp exists and four wheel drive is recommended for trailering boats. Non powered (electric only) vessels are allowed.



**Maxwell Rest Stop DOR (aka Brady Rest Stop)** – is located 3 miles east of the Maxwell Interchange on the North side of I-80 (west bound lanes used to access) Latitude: 41°02'10.11"N Longitude: 100°28'10.86"W (boat ramp)

**Maxwell Rest Stop DOR –** is 5 surface acres, quite clear and has a maximum depth of approximately 12'. This lake receives little angling pressure. The 2016 survey data indicates bluegill less than 6" but larger were visually observed. Largemouth bass density appears to be low but consists of some larger individuals greater than 15".

The property is managed by Nebraska Department of Roads (DOR). Boats are NOT allowed on this lake and vehicular traffic is limited to the roads involved with the rest area.



**East Sutherland –** From the center of the Hershey Interchange,  $\frac{1}{4}$  S on Hershey Dickens Rd, 3W on Oregon Trail Rd,  $\frac{1}{2}$  N on Lamont Rd and NE across interstate overpass – Latitude:  $41^{0}08'29.30"$ N Longitude:  $101^{0}03'25.13"$ W (boat ramp)

**East Sutherland I-80 Lake** is 27 surface acres and has a maximum depth of 13 feet. The west end of the lake is shallow and has abundant vegetation while the east end is lined with concrete rip rap. Recent survey data indicates a largemouth bass population lower in density than in other I-80 Lakes but consisting of a larger percent greater than 15". Rock bass approaching 11" were sampled. Bluegill and redear sunfish are abundant and are small in size. Northern pike inhabit this lake in low densities from historic stockings. Common carp (8-25") appear to be more dense than in previous years. Channel catfish are typically stocked every other year and survive in large numbers.

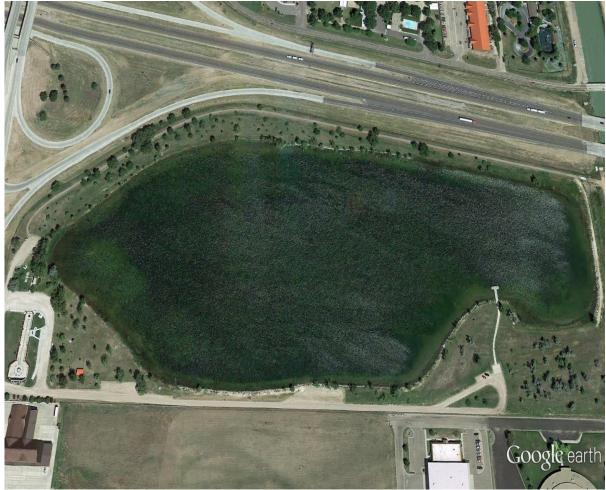
Vehicular traffic is limited to the west and northwest shorelines. The boat ramp surface is rock and four wheel drive is recommended for trailering boats. The current boating regulation allows vessels powered by internal combustion engines but prohibits production of wake. 5 mph is the maximum speed allowed.



**North Platte I-80 City Lake (Iron Horse Park)**– North Platte I-80 Interchange, exit 177, south on U.S. Hwy 83 first left turn Latitude: 41°06'27.16"N Longitude: 100°45'32.48"W (boat ramp)

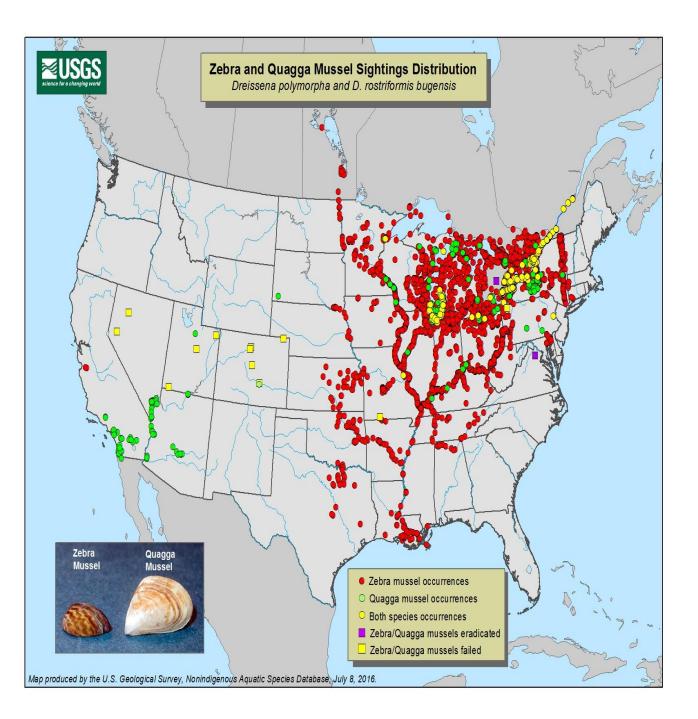
**North Platte I-80 City Lake** is 26 surface acres, has favorable underwater structure, water quality and an approximate maximum depth of 12'. This fishery was renovated in August of 2012. Largemouth bass, bluegill, channel catfish and black crappie have since been stocked. The 2016 survey indicates a diminished largemouth bass population. Bluegill survey data indicates plentiful individuals greater than 6". Other species already inhabit this waterbody due to illegal stockings. These species include yellow perch, white crappie, smallmouth bass, rock bass and walleye.

This property is managed by the City of North Platte and the lake is part of Iron Horse City Park. A fishing pier is located along the SE shoreline. Vehicle traffic is limited to the west and south shorelines. The current <u>Boating Regulation</u> allows vessels powered by internal combustion engines but prohibits production of wake. 5 mph is the maximum speed allowed.



### **Aquatic Invasive Species (AIS)**

Distribution of zebra and quagga mussels is getting closer and closer to SW Nebraska. The most recent finding was at Lewis and Clark Reservoir in NE Nebraska during 2015. This <u>distribution map</u> portrays the spread of these invasive mussels and is updated often.





According to Nebraska State Law, it is illegal for watercraft to enter a Nebraska waterbody or leave a launch area while containing water. This includes all containers, compartments, and equipment that are permanently attached to the watercraft.

# AND

All aquatic vegetation must be removed from watercraft and trailers before leaving a launch area.

Protect Your Waters—Remember to CLEAN, DRAIN, and DRY!

