

PRESENTATION TO WATER TOPICS OVERVIEW COMMITTEE**November 5, 2015****North Dakota Game and Fish Department****Terry Steinwand, Director**

The purpose of this presentation is to provide an update to this committee on the recently enacted emergency administrative rule regarding aquatic nuisance species (ANS) resulting from the finding of adult zebra mussel in the Red River. The issue of aquatic nuisance species has been growing throughout North America in the past decade and I would like to provide some background on what the Department has been doing for the last 20+ years to address this matter. (Handout containing summary activities since 2005 included)

Since at least as early as 1991 the Department has been addressing ANS issues, although the ANS terminology had not yet been used. At that time our efforts focused primarily of carp and other species that were illegally introduced into statewide fishing waters that reduced the value of recreational fisheries across the state. Carp by far are the greatest ANS problem facing the recreational fishery in North Dakota waters. The Department began working with the U.S. Fish and Wildlife Service ANS Task Force, the 100th Meridian Initiative (focused on containing the threat of zebra mussel expansion) and the Western Governors' Regional Panel in the mid-1990s to secure some minimal funding. These monies were utilized in forming partnerships with other North Dakota natural resource agencies for ANS education and prevention activities. These funds provided signs at boat ramps in North Dakota Parks and Recreation areas and areas operated by the U.S. Army Corps of Engineers; publications by the ND Tourism Department to contain educational information, which were provided to those individuals requesting information about recreational opportunities; and posters in bait shops, sporting goods stores, boat dealerships and local Chamber of Commerce offices.

In the early 2000's, the Department began far more formal ANS monitoring, primarily for aquatic vegetation and zebra mussel. In 2005, the Department drafted a Statewide Prevention plan that was approved by then Governor Hoeven and implemented. Initial efforts to implement the ANS plan were incorporated into a new program with funding originating from within the Department, in combination with a small amount of federal money available to assist in ANS activities. Legislation in 2005 allowed the Department to form an Aquatic Invasive Species Committee (AISC) comprised of the Department, tribes, anglers and other appropriate entities. A list of North Dakota ANS species was also created in large part based upon the conclusions of a risk assessment report on the potential introduction, establishment and impacts of ANS in North Dakota. This list, and other ANS related information, can be found at <http://gf.nd.gov/ans>.

As a result of this plan and early efforts, items implemented included:

1. Public outreach and education (posters, pamphlets, radio ads, billboards, websites, fishing clubs, sporting goods stores, etc.);
2. Inspection of bait supplies (primarily out of state wholesalers to the east where the greatest threat existed);
3. Work with other agencies to mandate inspection of water borne vehicles (e.g., barges for bridge building) prior to entering water bodies in North Dakota.
4. Increased monitoring of lakes and rivers for ANS
 - a. When a zebra mussel infestation was reported upstream of the Red River in Pelican Lake in Minnesota (2009), monitoring on the Red River increased.
5. Administrative rules promulgated to provide for realistic and feasible reduction of risk for introduction or spread of ANS in North Dakota;
6. Check stations by Enforcement;
7. Developed an internal inspection and prevention protocol for department equipment to insure no movement between water bodies;

At the current time there are four documented ANS infestations in North Dakota. Two of these are aquatic plant species, neither which have caused negative documented impacts to date. The only new ANS fish species is the silver carp whose presence is confined to the James River. The silver carp made its way into North Dakota as a result of the 2011 flood across the region that allowed this species to move through the James River upstream into North Dakota. It's been found only in the James River up to Jamestown Dam. We've been monitoring this population and there doesn't appear to be any expansion in its range. The steps we've taken to reduce the risk of further movement is to prohibit the collection of bait fish from the James River for any reason so that young silver carp wouldn't be inadvertently transported to other water bodies.

The other species is, of course, the zebra mussel in the Red River which has garnered a considerable amount of attention and interest in recent months. We first documented the larval form, called veligers, in 2010 in the Red River at Wahpeton, which is where the Ottertail and Bois de Sioux rivers converge to form the Red. This finding was not entirely surprising, as zebra mussels had been first documented upstream within the Ottertail River drainage in Pelican Lake in 2009. A few veligers were detected again in 2011 and 2014, but none were noted during similar sampling in 2012 and 2013. We also requested municipalities and individuals to inspect their docks and 'hard' structures for zebra mussel when removed for maintenance or in the fall and report to us if they found any adults. Until the summer of 2015 no adult zebra mussels were reported or documented in any North Dakota water body, and the few veligers at Wahpeton were the only veligers detected. And prior to 2015 the Province of Manitoba had not detected any zebra mussel veligers or adults in the Red River within that province during the prior 12 years of sampling.

Sampling for veligers in June 2015 in Manitoba and North Dakota detected the presence of a considerable number of veligers in each of the eight sites sampled (2 in Manitoba and 6 in ND), confirming that veligers were very abundant throughout the entire length of the river. The first attached adult ever documented in North Dakota was found in the Red River at Fargo in early July. Three more adults were found at Grand Forks in late September. In October, fisheries staff

found numerous other adults at several sites along the length of the river from Wahpeton to Pembina, confirming that zebra mussels are now well established in the Red River.

Despite a considerable amount of sampling, zebra mussels have never been documented in any other North Dakota water body. Twenty four additional sites were surveyed in July of this year that included eastern lakes and tributaries to the Red River and the only positive finding of zebra mussel veligers were at the confluence of the Ottertail River and Red River, which was an expected outcome at that area.

The presence and threat of zebra mussels in North Dakota resulted in the emergency Administrative Rule action to quickly respond to the situation. The rule was crafted to reduce the risk of movement of zebra mussel away from the Red River by no longer allowing the transport of live bait in water from the area, making it mandatory that all boats have the plugs on their boat pulled when exiting the river or any other waters where Class I ANS have been documented as well as any watercraft entering the state. The rule also changes the penalty if water is transported from a Class I ANS infested water, it is a Class B misdemeanor—the largest penalty that can be imposed under administrative rules.

What more can be done?

We can never eliminate all risk of introduction or further spread but take action to reduce the risk in the most feasible and non-intrusive manner to the public. We've had comments on what more should be done, some of which are listed below:

Conduct mandatory watercraft inspection

Conducting mandatory watercraft inspections before a boat can enter a water body is often brought up. This is not a realistic strategy with current Department resources and the magnitude of the task. Just for summer fishing/boating, there are more than 220,000 licensed anglers who average more than 15 days/year of fishing, more than 80,000 licensed watercraft, approximately 440 public boat ramps, and a very mobile society – cumulatively this makes checking all watercraft infeasible. Further, evidence from states/lakes that have mandatory inspection rules indicates a relatively large number of watercraft are NOT inspected (for various reasons) thus many wrestle with the ultimate benefits (preventing transport of ANS) of mandatory inspections, especially given the high costs. Lastly, mandatory watercraft inspections likely will be met with significant push back in many areas, if not all, of the State.

With this in mind, the Department is considering employing a few part-time employees next summer to conduct watercraft ANS inspections on select areas of the state where the potential for future ANS introduction is high. The purpose is two-fold; one is to collect some good baseline data on current public compliance with existing regulations; and secondly, to assist Game Wardens on roadside checks.

Increase roadside check stations

Roadside check stations are oftentimes viewed as a more practical alternative to mandatory watercraft inspections at boating access sites, and are used by several western states. But even here, a cursory review of a North Dakota road map indicates that there are 17 port of entries along the Canadian border, and 24, 23 and 9 paved roads connecting North Dakota with Minnesota, South Dakota and Montana, respectively (and far more gravel roads and trails crossing into these three states). Thus even with roadside check stations, priorities have to be established, focusing on areas where the best results may be obtained. This has been a practice the Department has been increasingly implementing through our Enforcement staff but, again with the realization that we are still likely missing the majority of watercraft moving through North Dakota. And these stations are also very expensive. Exact expenses for other states that operate such stations are generally not well documented but one example would be Montana's annual Aquatic Invasive Species report for 2014, which lists the costs to operate 20 roving and seasonally permanent roadway stations at slightly over \$1,000,000.

Implement stricter policies for fishing tournaments

The Department required a stricter standard for fishing tournaments for a number of years as both pre-inspections and post-tournament reporting was required for ANS. After consultation with a group of citizens that included tournament and non-tournament anglers, it was decided this was an unnecessary measure after years of informing and educating the public on ANS issues. This will be discussed again with the tournament committee as well as the next Aquatic Invasive Species Committee.

Prohibit the transport of bait water away from all waters in North Dakota and not just those designated as ANS/Class I infested waters

This would have tremendous impacts to virtually all anglers in the state. This would basically state that anyone having bait in water anyplace other than on the water would potentially be in violation since there is no good system to determine where the bait originated. Through ongoing monitoring, we believe implementation of this rule should only occur where the threat is immediate, i.e., ANS/Class I infested water.

Require that drain plugs be removed and remain out of watercraft when not on North Dakota waters for all areas of the state

It should be noted that the pending administrative rule does require all watercraft entering North Dakota and/or leaving the Red River to have all drain plugs pulled. The question of applying this regulation statewide has been brought up numerous times by the public in recent years. Many states have this requirement in place. Given this coupled with the fact that implementation of a statewide rule would give game wardens the visual ability to immediately identify boats/watercraft that would be at higher risk of transporting ANS, the Department supports the statewide implementation of this rule. However, given that the emergency rule was focused on the Red River and reducing the risk of movement out of the Red River, it was not included on a statewide basis in the emergency draft. Immediately upon acceptance of the emergency rule by the Administrative Rules committee we will begin drafting language reflecting this to have in place by the open water season of 2016.

There is no guarantee that zebra mussel or other ANS will not spread into other areas of North Dakota. We have taken the approach to reduce the risk as much as possible with informational and educational material in concert with regulations. If extreme actions are taken it may slightly reduce the risk further but could be at the cost of some recreational fishing economies and still won't eliminate the risk.

What activities has GF undertaken in the last 10 years to prevent ANS from entering North Dakota?

In an effort to deal with Aquatic Nuisance Species (ANS) and their potential impacts on North Dakota waters, the legislature formally established the Aquatic Nuisance Species program in 2005. A few years later (2008) the first ANS regulations became effective. From the beginning and continuing to date, prevention has been the foundation of the Departments ANS program.

The following is a timeline and benchmarks (high/lowlights) that have been addressed/achieved during the first ten years of the ANS program:

- 2005 - ANS program established by the Legislature; ANS committee formed (termed AISC), representing governmental agencies and private interests.
- 2006 - ANS management plan written and adopted. Department established a species list of ANS and a classification system. Developed different monitoring protocols and an infestation response plan. Also, reviewed the Department's internal protocols regarding sampling lakes, etc., to ensure that the Game and Fish doesn't inadvertently move ANS during daily work activities.
- 2007 - Addressed various species risk assessments and developed first drafts of proposed ANS rules and regulations. Began concerted effort on ANS public outreach, including attempts to engage fishing clubs and bait vendors.
- 2008 - First ANS administrative rules became effective. Enforcement began to be formally engaged. ANS information provided on the Departments online licensing system. Sought and gained additional funding through federal aid. Signing at all access sites at all water bodies. Continued expanding Information/education efforts. Hired additional seasonal staff to assist with statewide monitoring efforts. New requirement that nonresident sources of aquatic bait (wholesalers) need to pass a Department on-site inspection before import permits can be issued. Post-contest ANS inspection forms required to be submitted by all tournament sponsors
- 2009 - Significant time and effort in the late 2000s addressing needed permitting of bait vendors and private fish hatcheries to address this potential and serious ANS pathway. Subsequently, respective administrative rules were developed and adopted. First game warden check station set up. Developed internal process for inspecting barges, etc., entering the state and recommendations to fishing tournaments for their own boat inspections. First ANS citation written by enforcement.
- 2010 - Further ramped up I/E efforts, including statewide newspaper ads, in-state and out-of-state (Minnesota) magazine ads, both AM and FM radio advertising, numerous electronic (including websites) messaging, billboards and television shows. Adopted additional ANS administrative rules to greatly restrict the transport of "water" in North Dakota; ANS beginning to have increased emphasis on incorporating rules and subsequent compliance (enforcement). Efforts to keep common carp out of Devils Lake continue with the completion of the Loma berm.
- 2011 - Mandatory boat inspections prior to any pre-fishing for all out-of-state sponsored tournaments. Increased inspections of incoming barges / other aquatic equipment coming into the state, most destined for Lake Sakakawea (related to oil activity). Silver carp documented in the James River.
- 2012 - Revamped ANS posters and brochures and distributed to numerous 'public contact'

outlets across the state. Increased the number of water bodies monitored for ANS. Noted a number of existing ANS vegetative infestations appear to have been reduced or even eliminated. Only new infestation noted was the documentation of curlyleaf pondweed at Lake Elsie in Richland County. Noted a number of existing ANS vegetative infestations appear to have been reduced or even eliminated. Enforcement of ANS rules increased with citations issued.

- 2013 – Completed a status and biological impacts review of ANS in ND; few species and few impacts to date. Completed a cooperative study with VCSU to sample crayfish across the entire state, with the primary focus being to determine whether rusty crayfish, a listed ANS, was present in ND (hundreds of waters sampled - none found). The number of water bodies monitored for ANS again increased; the only new infestation noted was the documentation of curlyleaf pondweed at Grass Lake in Richland County. Ten wholesale bait vendors in MN that export live aquatic baits into ND were inspected to assure compliance with ANS rules and regulations. Continued to provide an annual grant to Friends of Lake Sakakawea who provide a statewide public relations campaign informing the public about ANS.
- 2014 – Worked with US Fish & Wildlife Service staff to complete an inspection protocol and to then undertake thorough ANS inspections at Garrison Dam and Valley City National Fish Hatcheries. The number of water bodies monitored for ANS again increased; the only new infestation noted was the documentation of curlyleaf pondweed at Raleigh Reservoir in Grant County. Eight wholesale bait vendors in MN that export live aquatic baits into ND were inspected to assure compliance with ANS rules and regulations; regulations were changed to limit such imports to include only leeches, white suckers, and worms. Inspections of commercial equipment coming into ND to be used in or on state waters continued.
- 2015 – HACCP training class attended by most fisheries division staff. The NDGF ANS web site was revised, and new ANS signs, posters, and brochures were prepared. The new ANS signs were erected at all public access sites in ND (about 350), the new posters were mailed to all bait vendors and numerous other businesses in ND (about 400), and several thousand new brochures were distributed at various sport and rec shows, educational events, and to several FWS refuge headquarters. Monitoring of the Red River in mid-summer detected tremendous numbers of zebra mussel veliger's (immature life stage); emergency rules were enacted to better prevent the movement of water (likely containing veligers) away from the Red River. The first adult ever documented in ND waters was found in the Red River at Fargo in early July; by late in the year numerous additional adults had been found. Inspections of commercial equipment coming into ND to be used in or on state waters continued. Efforts continue to keep common carp out of Devils Lake.



North Dakota Aquatic Nuisance Species

North Dakota

STATEWIDE AQUATIC NUISANCE SPECIES (ANS) MANAGEMENT PLAN



Bighead
Asian Carp



Common Carp



Ru



Curlyleaf Pondweed



Elodea



New Zealand
Brown Mud snail

*Protecting our aquatic resources for the future
through education and responsible actions by
the public, and the public officials entrusted to manage
North Dakota's aquatic resources!*



Goby



Zebra
Mussel



Eurasian
Watermilfoil



Spiny Water Flea

Prepared by
Lynn R Schlueter, principle author
Special Project Biologist
North Dakota Game and Fish Department



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ANS Regulations

1. All aquatic vegetation must be removed from boats, personal watercraft, trailers, and fishing and hunting equipment such as fishing poles, bait buckets, lures, duck decoys, and waders before leaving a body of water. That means "vegetation free" when transporting watercraft and/or equipment away from a boat ramp, landing area or shoreline.
2. All water must be drained from boats and other watercraft, including bilges, livewells, baitwells and motors before leaving a water body.
3. Live aquatic bait or aquatic vegetation may not be transported into North Dakota.
4. All water must be drained from watercraft prior to entering the state.

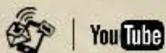
ANS Law and Management Plan signed and implemented in 2005

First ANS administrative rules in 2008



NORTH DAKOTA

GAME AND FISH DEPARTMENT

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Infested Waters in North Dakota

Click on an image to see a larger version.

Curlyleaf Pondweed Infestations



Grass Lake - Richland County
Lake Audubon - McLean County
Lake Ashtabula - Barnes County
Lake Elsie - Richland County
Lake Metigoshe - Bottineau County
Lake Oahe - Emmons and Morton counties
Lake Sakakawea - Dunn, McKenzie, McLean, Mercer, Mountrail, and Williams counties
McClusky Canal - McLean County
McDowell Dam - Burleigh County
Missouri River - Burleigh, Emmons, McLean, Mercer, Morton and Oliver counties
Raleigh Reservoir - Grant County
Sheyenne River - Barnes County

Department
Website is the
Source of
current ANS
information
including
species and
infested waters

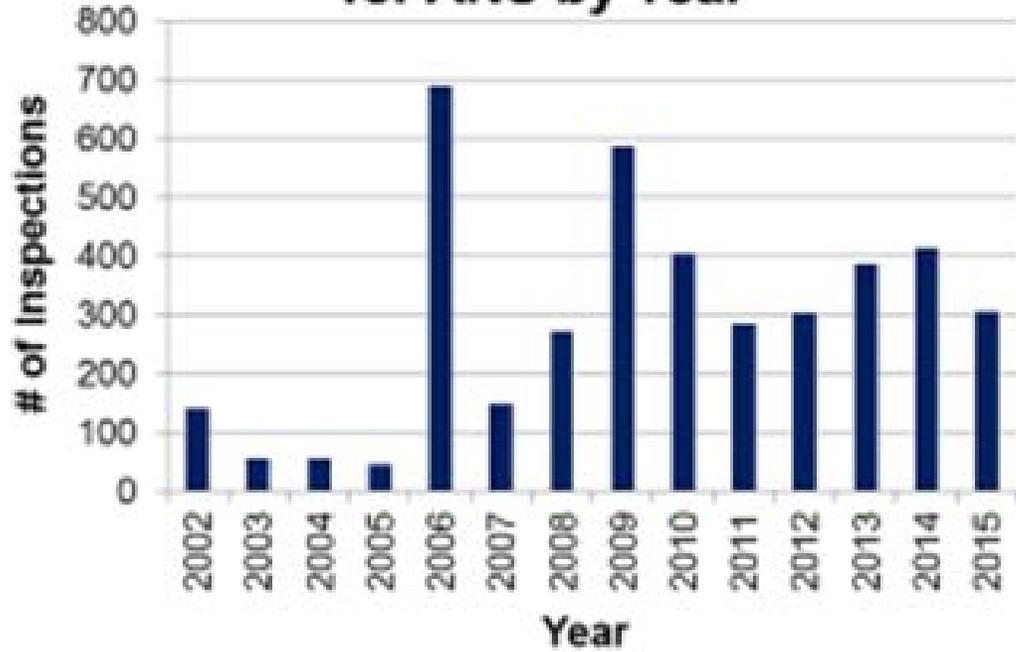


INFORMATION / EDUCATION

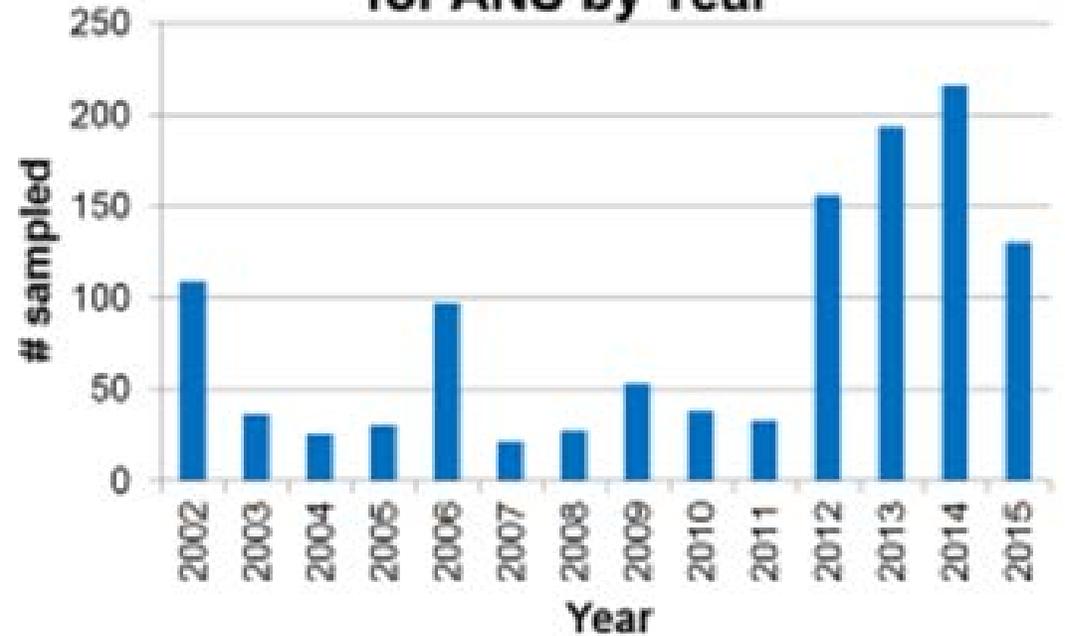
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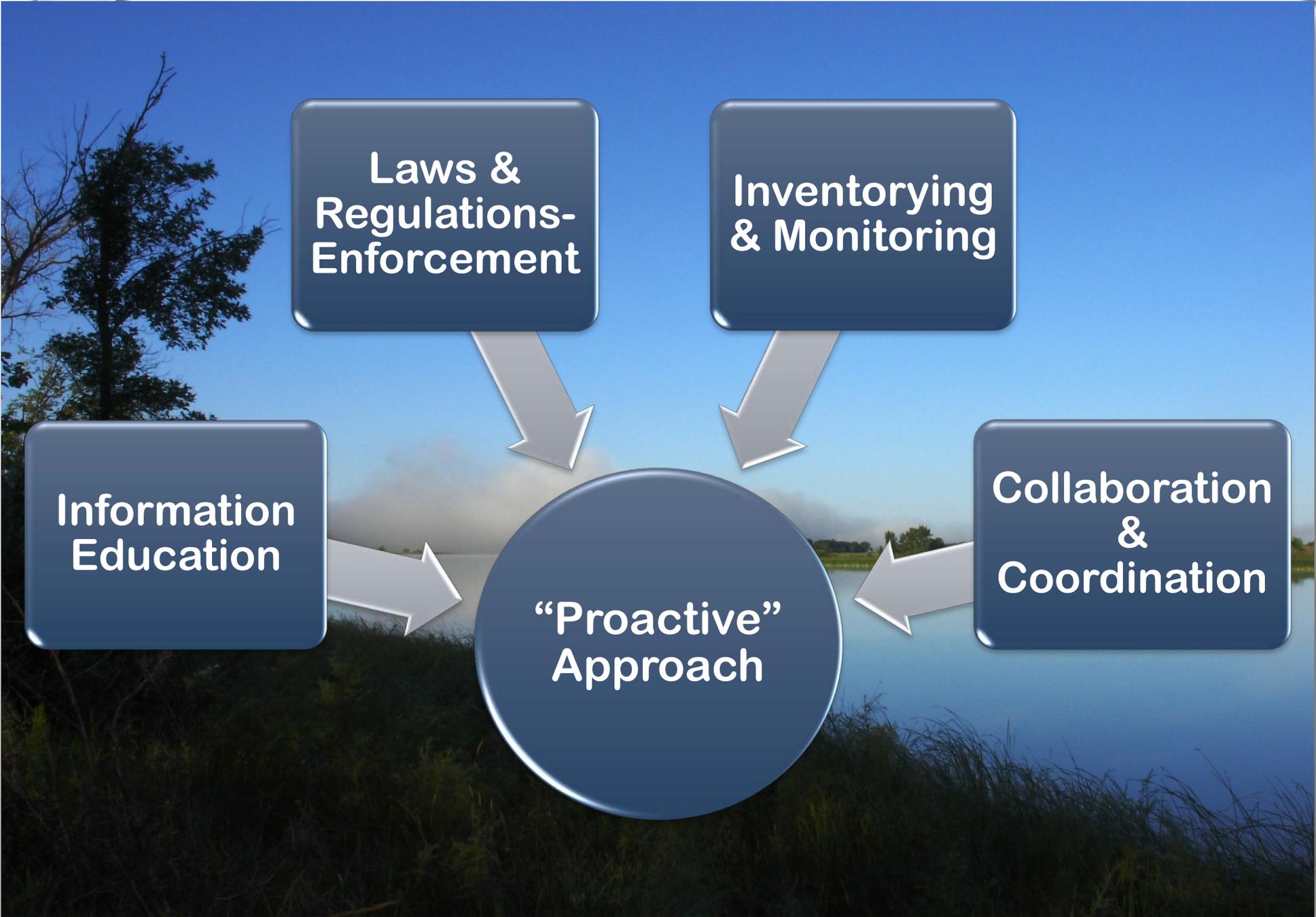


Number of Inspections for ANS by Year

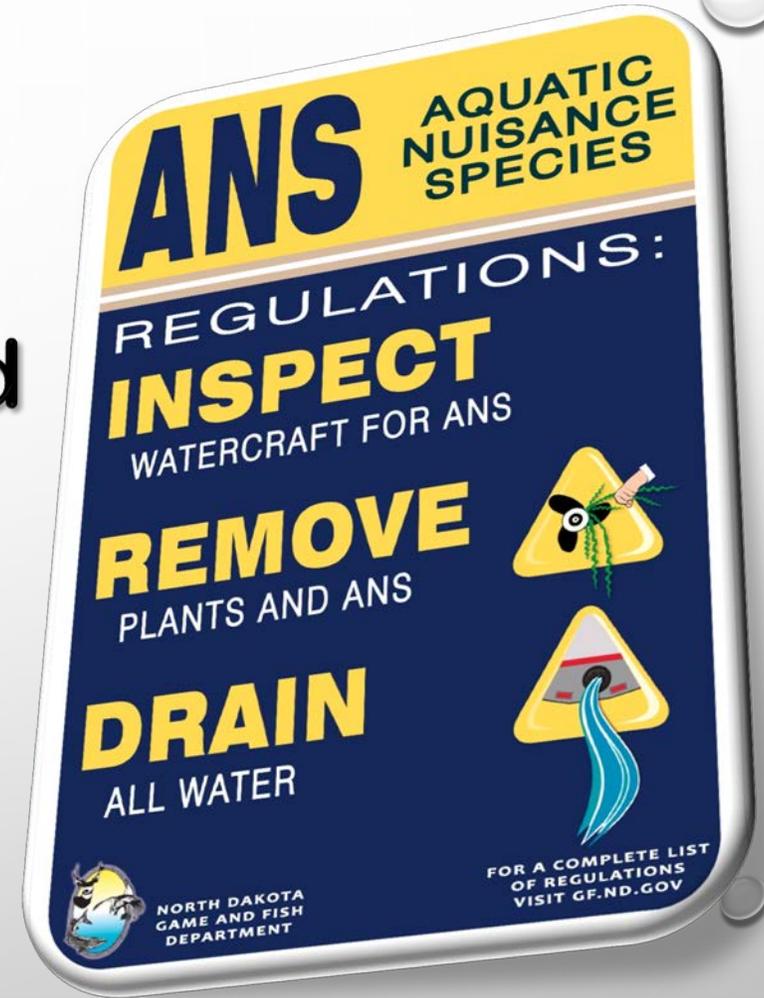


Number of Waters Sampled for ANS by Year

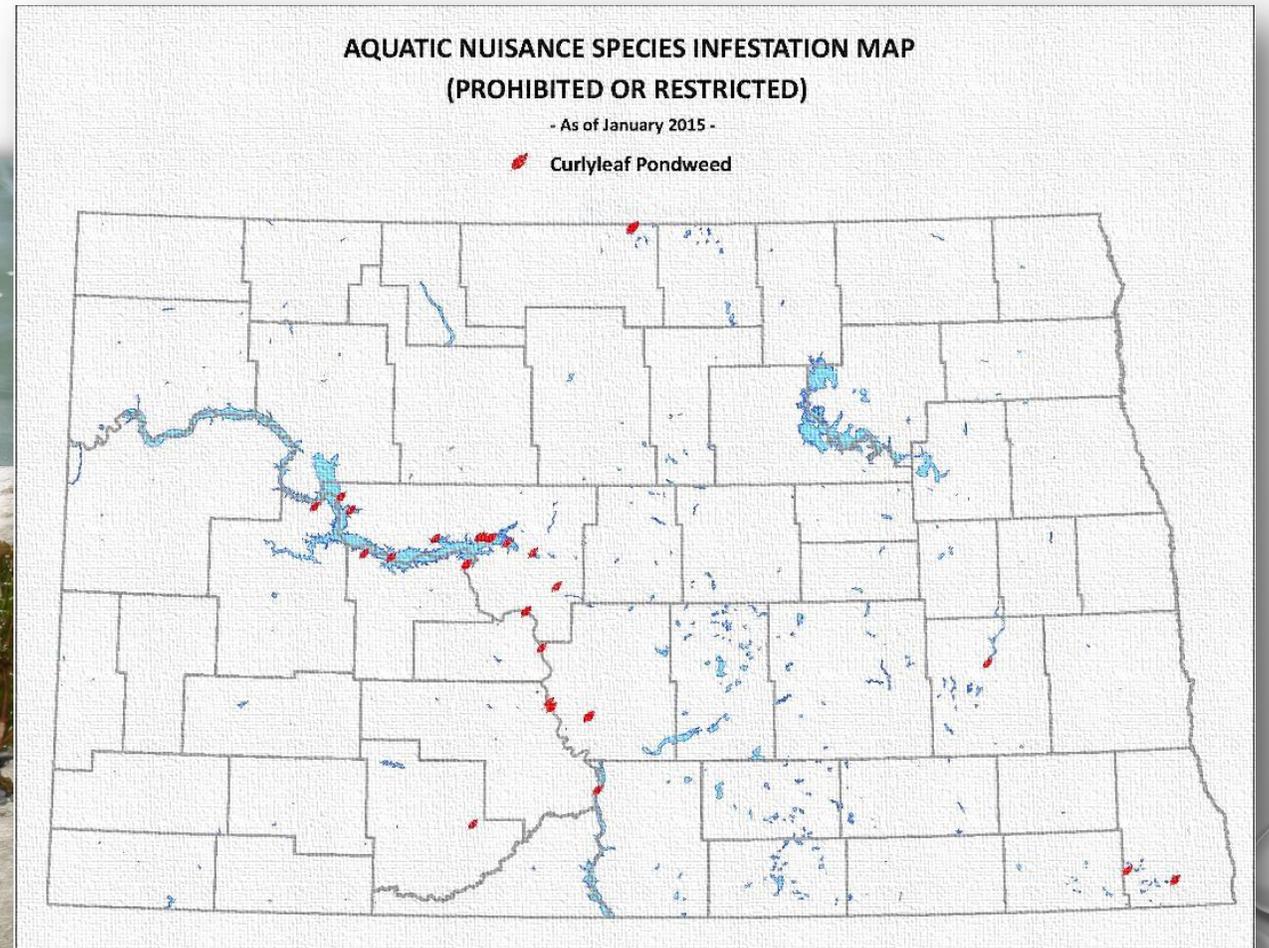




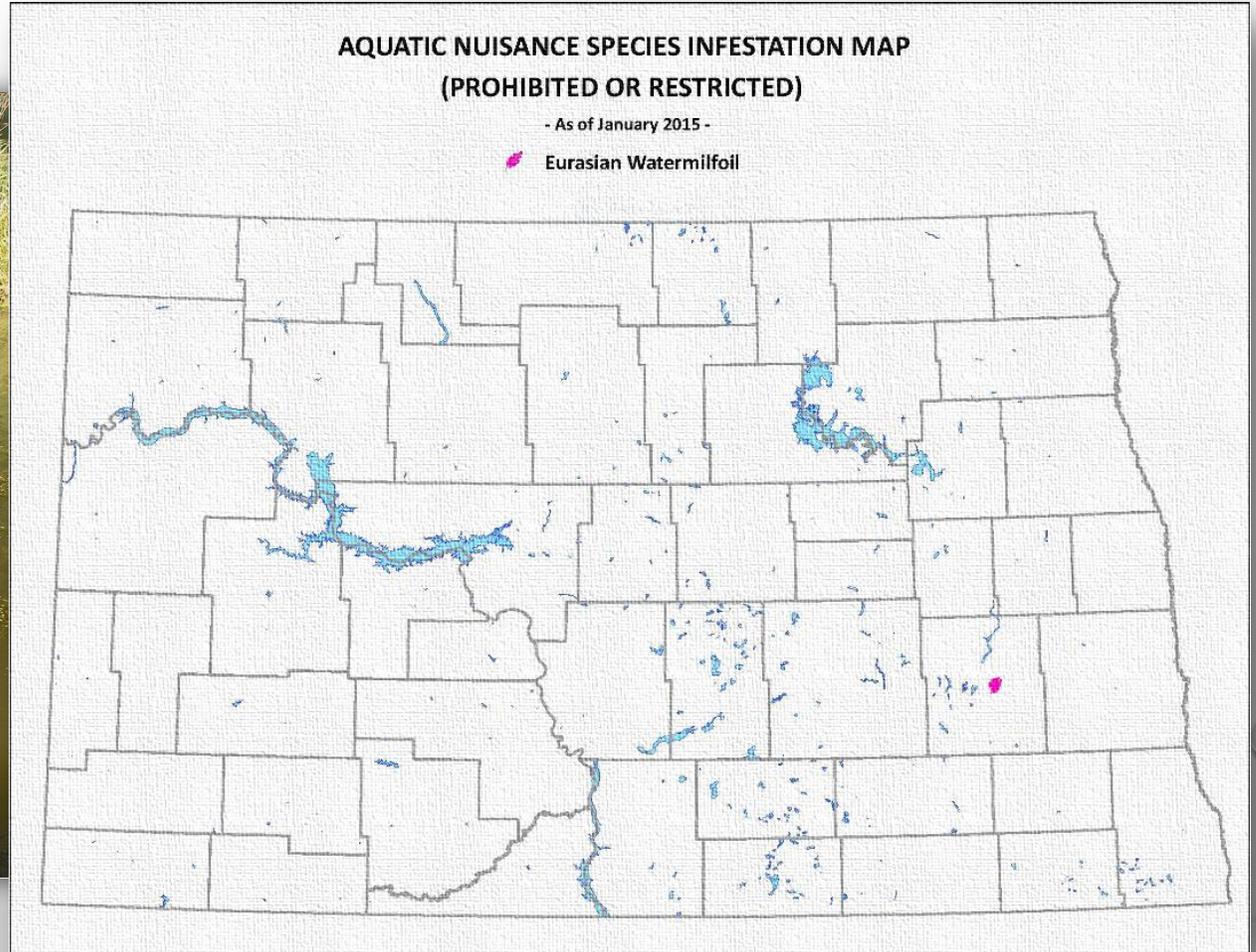
Currently, there are 4 documented ANS in North Dakota, 2 of which are aquatic plant species.



Curlyleaf Pondweed



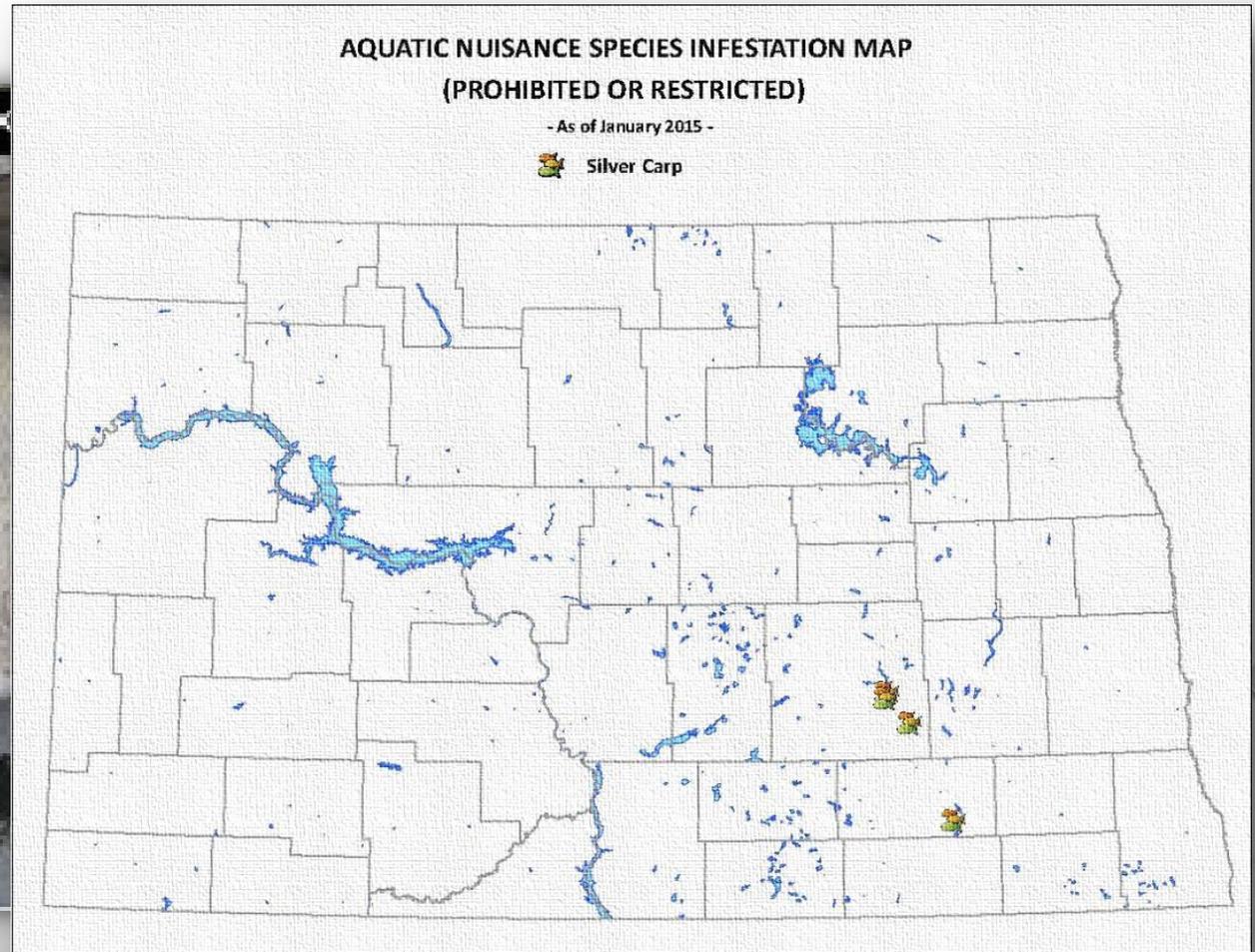
Eurasian Watermilfoil



Silver Carp

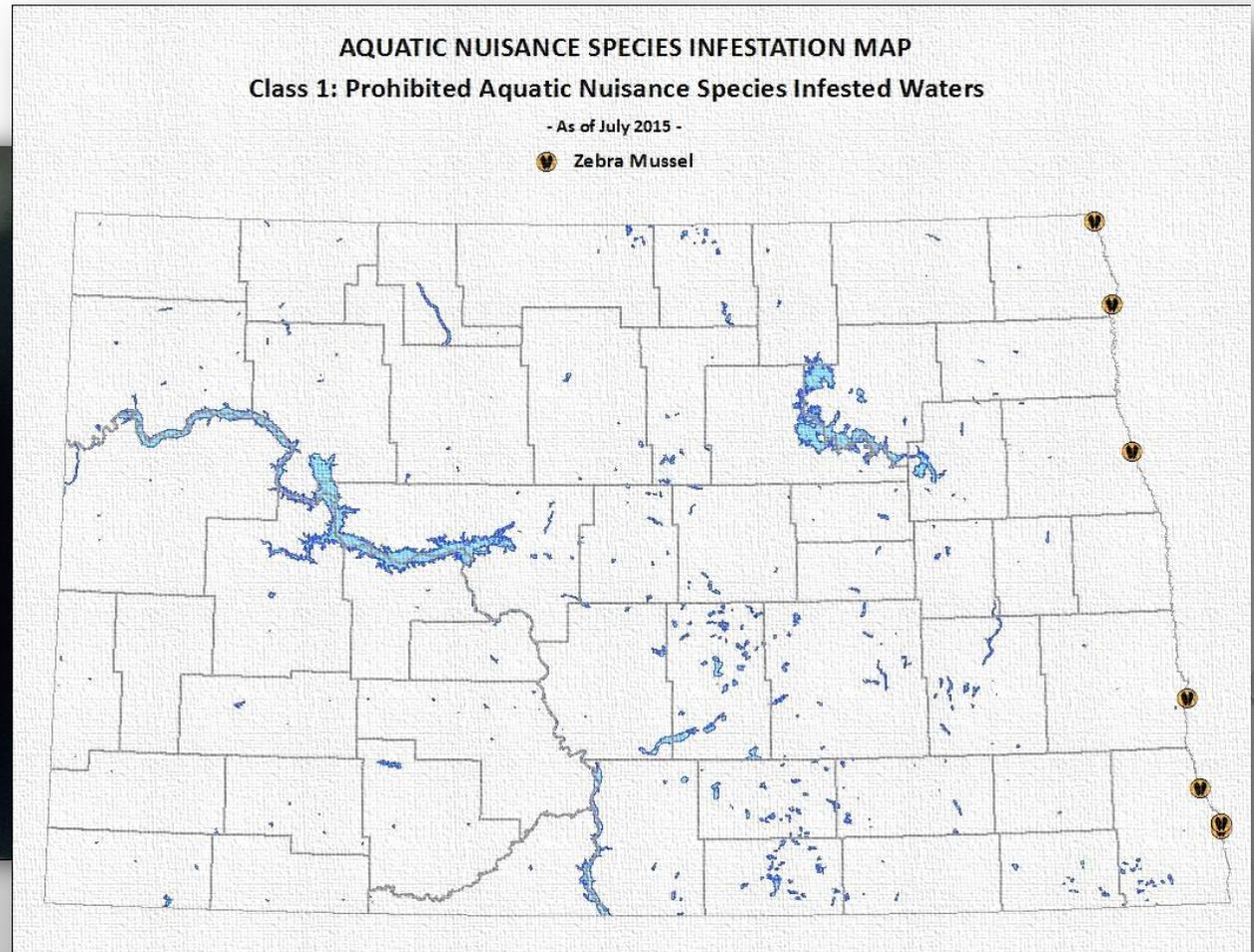
(result of the 2011 flood / presence is confined to the James River)

PHOTO CREDIT-NATE TESSLER, ENVIROSCIENCE, INC., BUGWOOD



Zebra Mussel

(until 2015, no reports were documented in North Dakota waters)

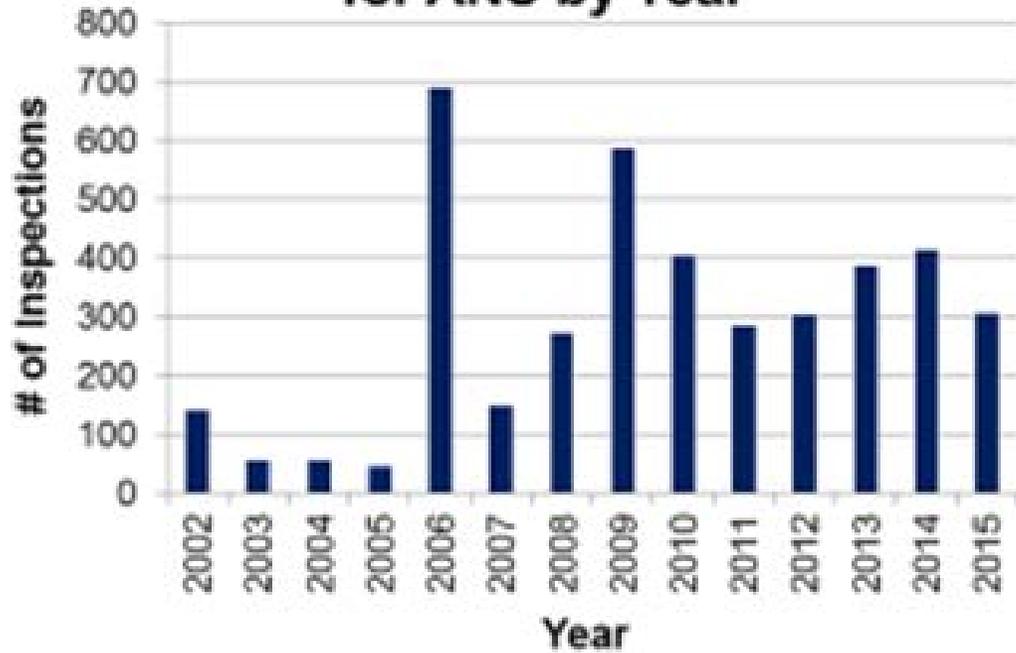




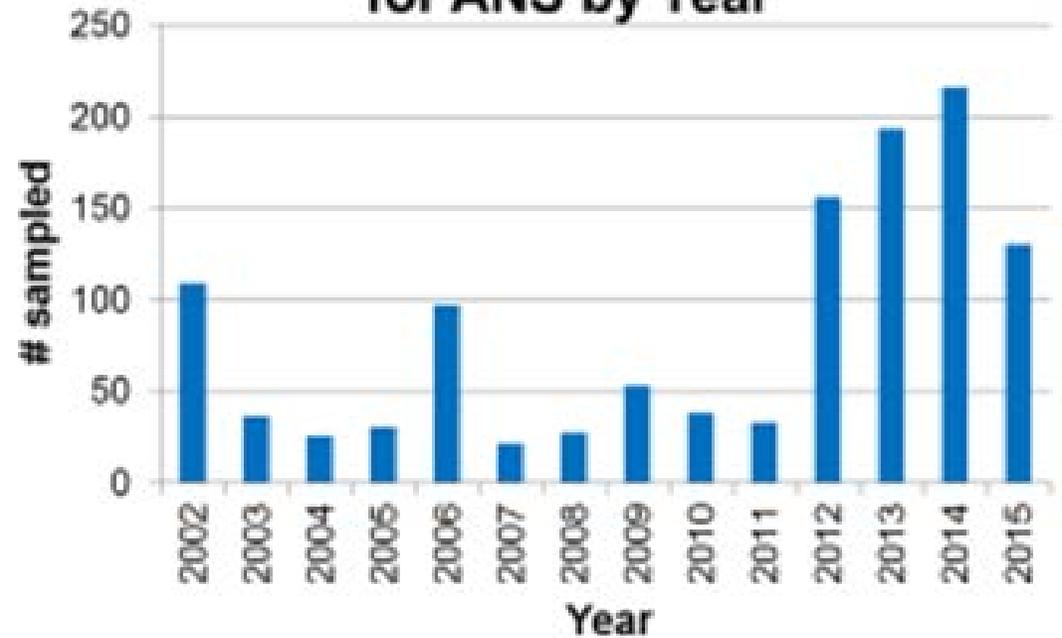
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Number of Inspections for ANS by Year



Number of Waters Sampled for ANS by Year



Administrative Rule Changes
Interim Final Rules Effective Aug. 3, 2015

NOTICE OF INTENT TO AMEND
ADMINISTRATIVE RULES RELATING TO
N.D.A.C. CHAPTER 30-03-06
AQUATIC NUISANCE SPECIES

TAKE NOTICE that the North Dakota Game and Fish Department (NDGFD) will hold a public hearing to address the proposed amendments to North Dakota Administrative Code Chapter 30-03-06 at 1:15 P.M. on Tues., Sept. 15, 2015 at the North Dakota Game and Fish Department's auditorium located at 100 N. Bismarck Expressway, Bismarck, ND. The proposed rules are declared to be an emergency effective August 3, 2015, as interim final rules under North Dakota Century Code 28-32-03; North Dakota Century Code section 20.1-17-01-05 allows for emergency rulemaking for the prevention and control of aquatic nuisance species.

The proposed amendment of North Dakota Administrative Code chapter 30-03-06, Aquatic Nuisance Species, is necessary to reduce the risk of westward spread of zebra mussels.

The proposed changes are as follows:

Chapter 30-03-06-05 – In addition to existing statewide aquatic nuisance species rules, anglers may no longer transport live bait in water away from the Red River. That means all water must be drained from bait buckets as anglers leave the shore, or remove their boat from the water. All boats and other watercraft must have their plugs pulled when exiting the Red River. In addition, all boats entering North Dakota must have their plugs pulled.

Chapter 30-03-06-07 – Changes to the penalty.

The proposed amendments are not anticipated to have an impact on the regulated community in excess of \$50,000. No taking of real property is involved in this rulemaking action.

The proposed rules may be reviewed at the NDGFD office, 100 North Bismarck Expressway, Bismarck, ND 58501-5095 or on the Department's website at <http://gf.nd.gov/>. A copy of the proposed rules may be requested in writing from the above address to the attention of: Attn: Admin. Services Division Chief, or by calling 701-328-6305, or emailing ndgf@nd.gov. Written or oral comments on the proposed rules sent to the above mailing or email address, or telephone number and received by Sept. 25, 2015 will be fully considered.

What more can be done ?

Conduct Mandatory Watercraft Inspection

- Just summer fishing shows 220,000 licensed anglers, 80,000 licensed watercraft, and 440 public boat ramps
- Evidence from states/lakes with mandatory inspection rules indicate

Increase Roadside Check Stations

- 17 Canadian ports of entry
- MN (24), SD (23), MT (9) paved connecting roads to ND
- Expense (MT 2014 AIS report - operating 20 roving stations exceeded \$1,000,000

Require drain plug removal ...

- The emergency rule's focus was the Red River, not statewide
- Language being drafted for the open water season of 2016

ENFORCEMENT



