

Aquatic Invasive Species Enforcement Policy Paper

**1) Public Policy Problem:**

Freshwater aquatic invasive species (AIS) are spreading between lakes by contaminated boats and boat trailers traveling to and from infested water bodies in Wisconsin. This is happening in part because the laws in place are not being enforced by local police officers and the general public is unaware of the law. Less than half (43.5%) of boaters are aware of mandatory laws to 1) inspect boats, trailers, and equipment; 2) remove plants and animals; 3) drain all water from watercraft; and 4) never move plants or animals away from a waterbody (MI Sea Grant, WI DNR).

Wisconsin Administrative Code Chapter NR 40 clearly identifies the transportation of plants, animals, and water on boats, trailers, or equipment as illegal. However, the laws are not readily enforced by local or State police officers, and only enforced minimally by the Department of Natural Resources (DNR). Thirty-nine citations were administered in the year 2017 regarding NR 40 laws, when more than 39 NR 40 violations are observed per week in some Southeastern Wisconsin municipalities (WI DNR, Washington County AIS Coordinator). Wisconsin conservation wardens, County Sheriffs, and municipal police are able to enforce the boating laws of Wisconsin (WI DNR). With State conservation warden programs losing money to fund enforcement, and local Sheriff's departments inundated with increasing workloads, the policy question becomes: How do we get local law enforcement to enforce NR 40 laws?

Freshwater AIS are detrimental to the economy, ecology, and recreational opportunities on lakes in Wisconsin (WI Sea Grant). AIS can make it impossible to swim, be the source of harmful algae blooms, decrease property values of riparian owners (Horsch, 2008), and clog

intake valves to industrial operations (USFWS). Millions of dollars are spent each year treating freshwater resources in the great lakes region for AIS (USFWS). Harmful algae blooms and parasites carried by invasive species may cause people and animals to get sick. Once a water body is infested with AIS, it is virtually impossible to remove it, and only in rare cases have water bodies become delisted from being infested with AIS (WI DNR).

## **2. Alternatives and Outcomes:**

To answer how local law enforcement will actively enforce AIS laws in communities, six alternative courses of action and their outcomes were developed and considered (**Table 1**). The proposed policy options were carefully scrutinized against criteria that most effectively addresses the issue of local enforcement regarding the NR 40 laws (**Table 2**).

The first alternative was to develop an invasive species training program to train local police officers how to enforce the NR 40 laws (**Table 1**, Alternative 2). The Wisconsin Department of Natural Resources Conservation Warden Division will develop a comprehensive training that can be administered by a variety of police and DNR staff including police trainers, conservation wardens, or AIS Coordinators.

This alternative is considered because of its low cost relatively short implementation amount of time. It also makes enforcing the laws easier, and will increase law-abiding boater tourism. Training local police gives them the knowledge, skills, and abilities to enforce NR 40 laws. Therefore, the outcome of training local officers is that they will learn the NR 40 laws and how to enforce them.

After attending the training, officers know the law, but will not necessarily put the law into practice without incentive. The second alternative course of action is to require local law enforcement officers to actively enforce NR 40 laws (**Table 1**, Alternative 3). When actively

enforcing laws, officers will stop drivers with tailored boats and issue citations if they are in violation of the NR 40 laws.

Requiring officers to uphold and enforce NR 40 laws will take little extra time or cost relative to their daily workload. It may also take some time away from citing motorists with other violations. It is beneficial because it requires active enforcement, and is feasible to implement locally. The outcome of requiring local police to actively enforce the NR 40 laws is that the NR 40 laws will be consistently enforced locally if boaters are illegally moving plants, animals, or water away from a water body.

In order for local officers to encounter AIS violations, an alternative to change officer routes to drive by boat launch areas is recommended. This alternative will increase local police opportunities to encounter NR 40 violations in action. The outcome of this alternative is higher police presence at local boat launches.

Changing police routes to pass boat launches requires relatively little cost to implement in most communities. It may or may not take extra time to drive to and from boat launches, and this issue may need to be further refined. If it takes too much time to drive to a specific launch, that launch may not be included in this process. Launches may be chosen on a case-by-case basis. Once at the launch, the NR 40 law is easily enforced. Most people will feel safe with the added police presence at the launch resulting in increased boater tourism. Other outcomes include NR 40 laws being actively enforced, and safe boater behavior.

<b>Alternatives</b>	<b>Outcomes</b>
1. Let present trends continue undisturbed.	1. NR 40 laws continue to be enforced at present rate.
2. Develop invasive species training program for local police officers.	2. Local police officers learn NR 40 laws related to AIS.

3. Require local law enforcement officers to actively enforce NR 40 law.	3. Officers actively enforce AIS NR 40 laws.
4. Maximize local law enforcement visits to launches by changing routes to drive by boat launches more often.	4. Higher police presence at boat launches, more enforcement of NR 40 laws.
5. Develop Watercraft Inspection Stations along highways (similar to weigh-stations) where law enforcement officers check for NR 40 violations.	5. NR 40 laws are enforced at specific highway checkpoints.
6. Encourage local lawmakers to pass resolutions funding NR 40 enforcement programs at all boat launches.	6. NR 40 enforcement programs are developed and enforced at launches.

**Table 1:** Alternatives and outcomes regarding local enforcement of NR 40 AIS laws.

### 3. Criteria to Evaluate Alternatives:

To determine which alternatives and outcomes should be considered in policy development, five criteria were developed (**Table 2**). Each criterion was given a weight (1-3), and resulting scores of alternatives were compared. The lower the score, the easier for that alternative and corresponding outcome to be turned into policy. The lowest score possible is three and the highest score is twelve for each alternative. A score of three means the alternative is easiest to implement and reach the outcomes, whereas a score of 12 means the alternative is the most difficult to implement to reach the outcomes. One criteria (maintains boat tourism) was omitted after some review because any enforcement can be taken positively or negatively by boaters, and the variability of that criterion deemed it insignificant. The most important evaluative criterion determines whether or not the projected outcome will solve the policy problem to an acceptable degree (Bardach & Patashnik, 2016). Each criterion listed below was considered because of its relevance to the policy problem and utility in making policy decisions. Similarly, each criterion is directly related to the outcomes to the proposed alternatives above.

Feasibility to implement at a local police level is the most important criterion. It is most important because the policy question asks how to get local police to enforce NR 40 laws. If the outcome is unable to be implemented at a local level, it was assigned three points, discouraging the outcome from being used. One might argue that this criteria should be disregarded because the associated alternative should not be considered if implementation is not feasible. However, the reason this criterion was not omitted is that in special cases, outcomes will not meet this criteria locally, but State and Federal programs still fund local enforcement of NR 40 laws. In most cases if the alternative is feasible to implement locally, police from local departments are most likely to enforce them.

The cost to implement each alternative is an important consideration because the cheaper it is to implement, the easier it is to enforce the associated policy. Low costs were weighted with low numbers (**Table 2**). This criteria is essential to implementing NR 40 laws because local departments have limited budgets, and are more likely to implement alternatives that do not cost extra money.

The time to implement each alternative was chosen as a criterion because law enforcement officers do not have much extra time due to a full daily workload. Long, drawn out initiatives may lose public interest, and local police departments may be blamed for wasting time, and therefore, taxpayer money. Proposed outcomes that took more than six months to implement were weighted at a three, giving them a disadvantage when compared with programs that took less than three months to implement with a weight of one.

The ability to enforce each alternative is a culmination of the time, cost, and willingness of local police departments to follow through with enforcement initiatives. This criterion was developed to address the fact that some outcomes may sound good on paper, but are difficult to

enforce in the real world. An example would be funding policed NR 40 enforcement programs at each boat launch (**Table 2**, Evaluation score of nine). It would be difficult to get enough support from local municipalities to fund police presence at each boat launch because of the resources that it would take away from other police initiatives. The more difficult to enforce, the higher the score of the alternative. When compared with low scoring alternatives, it is obvious that it is unrealistic to implement a policy that is unable to be enforced.

Alternatives	Cost to Implement	Time to Implement	Ability to Enforce	Maintains Boat Tourism	Feasible to Implement Locally?	Score
<b>Present trends continue</b>	High (3)	>12 months (3)	Easy (1)	Yes (0)	Yes (0)	5
	Med (2)	6 months (2)	Medium (2)	No (1)	No (3)	
	Low (1)	<3 months (1)	Difficult (3)			
<b>NR 40 training program</b>	High (3)	>12 months (3)	Easy (1)	Yes (0)	Yes (0)	3
	Med (2)	6 months (2)	Medium (2)	No (1)	No (3)	
	Low (1)	<3 months (1)	Difficult (3)			
<b>Require active enforcement</b>	High (3)	>12 months (3)	Easy (1)	Yes (0)	Yes (0)	4
	Med (2)	6 months (2)	Medium (2)	No (1)	No (3)	
	Low (1)	<3 months (1)	Difficult (3)			
<b>Changing police routes</b>	High (3)	>12 months (3)	Easy (1)	Yes (0)	Yes (0)	5
	Med (2)	6 months (2)	Medium (2)	No (1)	No (3)	
	Low (1)	<3 months (1)	Difficult (3)			
<b>Watercraft Inspection Stations</b>	High (3)	>12 months (3)	Easy (1)	Yes (0)	Yes (0)	11
	Med (2)	6 months (2)	Medium (2)	No (1)	No (3)	
	Low (1)	<3 months (1)	Difficult (3)			
<b>Fund NR 40 programs at all launches</b>	High (3)	>12 months (3)	Easy (1)	Yes (0)	Yes (0)	9
	Med (2)	6 months (2)	Medium (2)	No (1)	No (3)	
	Low (1)	<3 months (1)	Difficult (3)			

**Table 2:** Criteria used to evaluate alternatives and respective weights. Lower scores = less time, money, and resources spent.

#### 4. Recommendation

The criteria above were evaluated to determine the feasibility to change the enforcement of the NR 40 laws regarding AIS. An ideal recommended program would be low cost with a short time to implement (<3 months) and would be easily enforced by officers. Likewise, local officials and community members would determine the policy implementation as feasible.

The most effective outcome is having local police learn, enforce, and continue to monitor NR 40 violations. This requires a combination of three alternative courses of action that lead to an overarching proposed policy. First, developing a policy that requires training law enforcement officers about the NR 40 laws will be included in the policy recommendation. The outcome of this policy is that law enforcement will learn NR 40 on a local level. Requiring this training at the County level will benefit different communities, as well as the local Sheriff’s Department. Training on NR 40 laws will not require extra cost or time relative to the training program officers already receive. This alternative received the lowest score on the evaluation scale (**Table 3**), meaning it is most feasible to implement. The training will initially take place as a short module in the police academy, and then lake-rich community departments can schedule visits and refreshers from local DNR wardens or AIS Coordinators. The law is feasible to implement locally in lake-rich areas, and each municipality or local district may choose to add the training, giving each department their own ability to enforce.

<b>Alternatives</b>	<b>Cost to Implement</b>	<b>Time to Implement</b>	<b>Ability to Enforce</b>	<b>Feasible to Implement Locally?</b>	<b>Score</b>
NR 40 training program	High (3) Med (2) Low (1)	>12 months (3) 6 months (2) <3 months (1)	Easy (1) Medium (2) Difficult (3)	Yes (0) No (3)	3

**Table 3:** NR 40 Training program score = 3/12

Second, law enforcement officers will be required to enforce the NR 40 law. It is recommended that after training, officers are encouraged to use the NR 40 law twice per month during boating season in lake-rich counties as “reasonable suspicion” traffic stops. If the officers are not enforcing the NR 40 law, they will be required to log keep a log recording how many boats they have seen and if there were potential NR 40 violations. This policy will keep officers practicing enforcement of NR 40 laws and potentially help prevent the spread of invasive

species, keeping the economy, ecology, and recreational opportunities in check. Another peripheral benefit of requiring these stops is that officers may catch boaters with other violations.

The outcomes of enforcing the NR 40 laws will increase boater awareness and prevent the spread of AIS. The enforcement is inexpensive, since officers are already on patrol. It is not more time consuming than normal duties, and is easy to enforce. It received a score of four on the evaluation criteria scale (**Table 4**). Special districts and municipalities will be happy to see enforcement of the NR 40 laws, and officers will appreciate the arsenal of knowledge that may attribute to their traffic violation reporting.

Alternatives	Cost to Implement	Time to Implement	Ability to Enforce	Feasible to Implement Locally?	Score
Require active enforcement	High (3) Med (2) Low (1)	>12 months (3) 6 months (2) <3 months (1)	Easy (1) Medium (2) Difficult (3)	Yes (0) No (3)	4

**Table 4:** Requiring Active Enforcement = 4/12

Third, it is recommended that this policy changes police officers' normal routes in lake-rich areas to include boat launches if they are less than a 15 minute drive from current police routes. Officers visiting launches may encounter NR 40 violations, and the outcome will be higher enforcement of the NR 40 laws, leading to less chances for AIS to be spread between waterbodies. This may cost some money to plan on the front end, but once community routes are re-evaluated by departments, the cost for police to visit launches will be minimal. This policy recommendation also requires more time spent at boat launches, but police may enforce all laws at boat launches, so it will not cut into time to conduct normal police duties. This alternative scores five on the criteria evaluation scale, meaning it is no more difficult to enforce than current practice, and remains a feasible option (**Table 5**). Police may find other violations at boat launches and are encouraged to keep the community safe from all crime. The fact that they will

be trained on NR 40 laws means they have added to their knowledge base for enforcement at the launches.

Alternatives	Cost to Implement	Time to Implement	Ability to Enforce	Feasible to Implement Locally?	Score
Changing police routes	High (3) Med (2) Low (1)	>12 months (3) 6 months (2) <3 months (1)	Easy (1) Medium (2) Difficult (3)	Yes (0) No (3)	5

**Table 5:** Changing Police Routes = 5/12

In conclusion, the recommended policy to address local police departments enforcing NR 40 laws is three-fold.

1. Train police in what the NR 40 laws are on a local level.
2. Require enforcement of the NR 40 laws on a local level.
3. Review and change police routes to accommodate launches in lake-rich areas.

Administering and enforcing this policy is a cost-effective way to ensure that AIS are not spread as quickly between waterbodies in the state, ensuring safer waters, healthier communities, and more available recreational opportunities.

## 5. Assemble Evidence

### References:

Bardach, Eugene, and Eric M. Patashnik. *A Practical Guide for Policy Analysis: the Eightfold Path to More Effective Problem Solving*. CQ Press/SAGE, 2016.

Horsch, E. J., & Lewis, D. J. (2008). *The effects of aquatic invasive species on property values: Evidence from a quasi-random experiment*

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Interview with State AIS Coordinator Bob Wakeman

Interview with State AIS Outreach Coordinator Tim Campbell

Interview with State WDNR Law Enforcement Training Lead Samantha Olsen

Interview with Nate and Jessica Rice, Residents of Silver Lake, Waukesha County