Public Input Process for Creating or Updating Manual Code –
Summary of Changes Based on Public Comments

Thank you to all of the three individuals and groups that provided feedback on the Department of Natural Resources (Department) proposed new guidance titled "Boat, Gear and Equipment Decontamination and Disinfection Manual Code 9183.1". Also thank you to the commenters identifying that these protocols are already followed. Included in this document are all of the public comments received.

The Department made the following changes based on the feedback:

1. Made disinfection while working in wetlands on foot mandatory after returning to the vehicle.
2. Clarified that while working in wetlands must be cognizant of open water.
3. We will incorporate riparian and wetland species into the literature review.

These following provide explanation for why changes were not made:

1. The manual code states that it applies to Department employees, agents, Department contracted service providers, and also advised to be made a condition of related permits. The manual code will also be made a condition of agreements with sub-contractors supported with Department funds. Please see #5 in the Q&A.
2. Unverified occurrences provide guidance on what could be present to inform disinfection and reporting needs so no changes have been made.
3. By law, decontamination (i.e. inspect, remove, drain, and never move) is required when equipment is removed from the water and prior to reentering water, including when crossing a barrier in both directions. Disinfection remains mandatory when moving upstream.
4. The best management practices provide additional guidance on sampling to reduce the risk of spreading invasive species (i.e. sampling areas without invasive species first and are with invasive species documented last).

The final manual code was approved on 6/16/16.

Prepared by:

- Community Financial Assistance – Diane Conklin;
- Environmental Analysis and Sustainability – Mike Halsted;
- Facilities and Lands – John Olson;
- Fisheries Management – David Rowe;
- Law Enforcement – Steve Sisbach and Todd Schaller;
- Legal Services – Quinn Williams and Mike Kowalkowski;
- Parks and Recreation – Craig Anderson and Janet Hutchens;
- Safety and Risk Management – Marsha Present;
- Science Services – Matt Mitro and Dreux Watermolen;
- Water Quality - Maureen Ferry, Amanda Perdzock, Tim Campbell, Bob Wakeman, Mike Sorge, Sue Graham, Carroll Schaal and Julia Riley;

- Watershed Management (Dams and Floodplains) - Cheryl Laatsch;
- Watershed Management (Runoff Management) – Jim Bertolacini;
- Watershed Management (Waterways) – Martye Griffin; and
- Wildlife – Dan Hirchert.

The following questions were received through the 21 day public review regarding the Boat, Gear, and Decontamination MC9183.1.

Questions:

From: Woods, Brock - DNR
To: Ferry, Maureen - DNR
Cc: Trochlell, Patricia A - DNR
Subject: Decon/disinfection of gear in wetland work
Date: Thu 04/14/2016 6:26 PM

Maureen,

I have read the information supplied for the 21 day review. Here is some feedback. You guys have obviously done some nice extensive work on all this, and I can see great benefit for most aquatic work, especially where movement includes actual wetting of gear in the process.

Basically, I agree that anyone going into the field should check to see what AIS are reported to be in waterbodies (inclusive of wetlands) expected to be visited. And any activity that includes moving from within one waterbody (that is, when feet/gear are actually wetted by that waterbody) with known AIS to another (same specific conditions) should accomplish both decontamination and disinfection steps. In fact, this could result in changing an expected field itinerary (even in wetland work) if the proper steps cannot be taken in such situations, including adjusting a trip so as to move to a disinfection site (etc.) between waterbodies (inclusive of wetlands).

In all wetland situations I can think of, the general decontamination steps all make great sense as well when moving from one to another. However, disinfection with any of the listed options (hot water, bleach, virkon, etc.) will be very impractical, if not impossible, when moving "on foot" from one wetland to another, and in my view will be unnecessary when no true aquatic (as described above) AIS exposure is expected. Therefore, I suggest that the code be modified somehow to officially segregate the types of movements of the kind described in the paragraph above from situations where no actual contact with open water will occur in the field, especially when on foot, and require only decontamination steps in the latter case.

I think this would address most of Pat's problems with the code, as well as remove rather impossible complications for much of the wetland work the rest of us do. But she can speak for herself about this if she hasn't already.

Brock

Brock Woods

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Question:

From: Todd Hanke
To: Ferry, Maureen - DNR
Cc: Tim Hoyman, Eddie Heath
Subject: RE: 21 day public review for the boat, gear and equipment decontamination and disinfection manual code
Date: Mon 04/18/2016 3:37 PM

Hi Maureen,

Onterra staff have reviewed the Manual Code 9138.1 Guidance Document and offer the following comments:

-The Decontamination and Disinfection Protocol Guidance is consistent with Onterra's usual practices already being implemented and we find the proposed guidance to be reasonable.

-The Guidance document lacks clarification in defining whether the protocols apply to natural resource consultants, dock installation companies, and other common industry professionals working on lakes.

-The online list of known AIS within waterbodies should be improved if it is to be referenced when determining the BMP that will be required when conducting work on the lake. Having unverified AIS listed on the online database degrades the quality of the list. When unverified AIS are listed for a lake, would following the BMP for that species still be required?

Sincerely,

-Todd
Todd Hanke

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Question:

Dear Maureen,

Please receive the following comments from the River Alliance of Wisconsin pertaining to the Department of Natural Resources Manual Code #9183.1 Boat, Gear, and Equipment Decontamination and Disinfection Protocol, currently in the public comment stage. Because invasive species pose a significant threat to the health and function of our waterways, it is integral that resource managers who work in and around water take the utmost care in ensuring their work does not spread invasives. The significant amount of research that went into the development of this manual code shows the department's commitment to this goal, however there are still a few gaps staff of the River Alliance of Wisconsin would like to acknowledge. Comments henceforth will be organized by manual code sections.

I. Scope- The scope of this manual code only applies to individuals who are moving from "downstream to upstream on the same waterbody or a connected waterbody". The goal of this manual code is to slow the spread of invasive species, however, it is being applied to only one direction of movement. The premise behind this is the idea that once established in a waterbody, an invasive will continue to move downstream of it's own accord. While this is not necessarily false logic it is flawed in one regard. It does not take into account the fact that part of resource management is to not just slow the spread of invasives for the sake of slowing the spread, but to slow for the sake of giving resource managers time to prepare for the movement of an invasive into their work area. The speed which staff may use while conducting work in a watershed greatly enhances the rate of spread for invasive species when compared to the natural rate of spread, and decreases the time that resource managers have to coordinate cross boundary efforts, whether the boundaries are caused by the landscape or political boundaries. By being conscious of the movement of invasive species from both directions, resource managers will give downstream parties more time to prepare for the eventual arrival of the species. On flowage and large river systems, it will give associations in downstream waters more time to gather funds for treating when the species arrives or creating a response plan for the new species. It will also give researchers more time to study the baseline conditions of the downstream environment before the species invades, what impacts the new species has upstream, and what response methods are more effective on a new species. If staff are not required to consider the transport of species downstream, they run the risk of spreading the species out into multiple populations down the watershed before the initial upstream

population is even recorded. To remedy this issue, the River Alliance recommends detailing situations that would warrant decontamination when moving downstream.

III. Definitions- Defining a "connected waterbody" as a series of lakes or flowages which… have a common water level" may alleviate some of the concerns addressed in the first comment, as it implies that once a dam or lock is crossed, whether one is moving up or downstream, the staff member will be in a different waterbody. This means the distance a staff member will be able to move a species downstream will be dependent on how much distance is traversed before water levels in the system change. If staff are required to decontaminate when moving downstream, this definition of a "connected waterbody" may contradict the exclusion of dams and locks from the definition of barriers for the purpose of letting staff move downstream without decontaminating, since locks are used in situations where the water levels on either side vary. This definition also doesn't clarify how far staff may travel through river systems where water levels may gradate subtly or imperceptibly as staff members move up or down a system. How much of a change in water levels is required before staff are required to pause and decontaminate? Furthermore, this definition, the code and supplemental materials do not specify how staff can even determine the water levels of the waterbodies they are traversing, thus it does not give staff the proper guidance to be able to judge whether two waterbodies or segments of a waterbody meets this definition.

IV. Procedure- The procedures written out in this manual code are due to an extensive literature review that comprehensively analyzed the impacts of decontamination methods on a wide range of submerged aquatic invasive species. Unfortunately, this literature failed to analyze the impacts of the required decontamination methods on wetland and terrestrial species. Emergent and shore species such as *Glyceria maxima*, Japanese hops, and Phragmites can over take native communities quickly, significantly altering a streams hydrology and morphology. Streams also provide a corridor for many terrestrial invasives, causing individuals who work on rivers to be a vector for terrestrial species as well as aquatic. Since there can be a great difference in dormancy periods for different species, as well as lengths of viability periods for reproductive structures, a wider range of species should be studied to determine whether this manual code is effective enough for species that can be spread along streams.

This concludes the comments being submitted by the River Alliance of Wisconsin. To restate what was said earlier, this code represents a significant effort on the part of the department to reduce their impact on the state's waterways. While this code is not dictating methods that are required by the public, it does raise a standard and sets precedence for those seeking to protect the waters of Wisconsin. And so, this manual code should still seek to meet the highest standards possible within the limitations set by today's decontamination technology and knowledge of invasive species.

We thank you for consideration of our comments for the official record.
Sincerely,
Amanda Perdzock
Statewide AIS Program Director