

From:
To: [Wethington, David M LRC](#)
Cc:
Subject: Inventory of Available Controls for Aquatic Nuisance Species of Concern - CAWS
Date: Wednesday, February 08, 2012 9:29:33 AM

Mr. Wethington,

We are submitting the attached letter in response to the December 21, 2011 Federal Register requesting comments on the Inventory of Available Controls for Aquatic Nuisance Species of Concern - CAWS. We previously shared these comments on the COE sharepoint for the project; however, we wanted to ensure that you received the comments.

Shawn

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IN REPLY REFER TO:
FWS/AES-CIFO

November 22, 2011

John Wethington
GLMRIS Technology Team
Geotechnical & Survey Section
U.S. Army Corps of Engineers
111 N. Canal Street, 6th floor
Chicago, Illinois 60606-7206

Dear Mr. Wethington:

This letter provides the U.S. Fish and Wildlife Service (Service) comments on the draft Review of Available Controls for High-Risk Aquatic Nuisance Species in the Chicago Area Waterway System (October 2011 Draft). The paper identifies available options and technologies that may be applied to prevent aquatic nuisance species (ANS) transfer between the Great Lakes and Mississippi River basins via aquatic pathways. These options and technologies, called controls, are being considered for their utility as management measures for the Chicago Area Waterway System (CAWS).

We provide comments on the draft document as requested in the U.S. Army Corps of Engineers (USACE) November 1, 2011, e-mail. We provide the requested review on the following three (3) points: 1) did USACE miss an available aquatic nuisance species control, 2) are the fact sheets accurate, and 3) was an important technical/scientific source not identified? In addition, we also reviewed the paper and associated control fact sheets to identify potential adverse impacts to fish and wildlife resources, including the Service's trust resources (e.g., Federally listed species and migratory birds), and provide additional comments regarding concerns and factors that should be considered in evaluating the identified control options.

Primary Review Objectives

Did the Tech Team miss any controls?

There are no controls missing that the Service is aware of.

Are the contents of each Fact Sheet accurate?

The fact sheets were generally well written. We only had a few comments:

Accelerated Water Velocity

Lines 61-63 – A secondary cost.... – This cost is overstated. This area is a natural basin

divide. There would be few, if any, migratory fish species that need to migrate through the area. If a channel was constructed in the right place, it would have little, or no, effect on any migratory fishes. Question – would “Accelerated Water Velocity” require substantially greater Great Lakes water withdrawals? If so, please include that in your consideration of this potential control.

Alteration of Water Quality

Line 57 – “breath” should be “respire.”

Hydrologic Separation

Lines 72-77 – This paragraph should be removed. It deals primarily with mitigation and should be under the “Mitigation” section of Cost Considerations. In addition, the rest of the fact sheets state that it is too early to determine necessary mitigation for a given alternative. This one should be no different.

Pheromones

Lines 2-4 – “Pheromones are a viable control method for fish....” are not consistent with the statement in Line 34 that says “Pheromone deterrents are still in the research phase.”

Secondary Objectives:

Consider the range of possible locations and conditions for implementation. Is the control/technology: Implementable, Operable, O&M issues, Effective

Given the number of available controls and locations, we will withhold comments until USACE has developed more specific alternatives to consider. Many of the listed controls will likely not be effective over the long term.

Is the control or technology environmentally acceptable?

Many of the controls (especially chemical) will likely be environmentally unacceptable at the scale and time horizon required. We will withhold specific comments until USACE has developed more specific alternatives to consider, however we offer the following general considerations.

Chemical Controls

For all chemical controls that may pose a potential hazard to threatened and endangered species and migratory birds, the level of risk is dependent on the exact formulation of the product used (toxicity of active and inactive ingredients and degradation products), as well as the concentration, manner, and timing of application. The most likely potential impacts are to migratory birds. Impacts during high water flows are also possible to the endangered Hines emerald dragonfly, the endangered leafy prairie clover and threatened decurrent false aster. The decurrent false aster is located downstream of the Chicago waterway system.

The three algaecides listed present a potential hazard to federally threatened and endangered species and migratory birds.

The two "solids used to alter water quality" present a potential hazard to federally threatened and endangered species and migratory birds. The experimental status of sodium thiosulfate may mean that limited toxicity information is available for non-target organisms.

The three "gases used to alter water quality" are unlikely to pose a hazard to federally threatened and endangered species and migratory birds.

The six aquatic herbicides listed present a potential hazard to federally threatened and endangered species and migratory birds. Four of the six listed aquatic herbicides have reported incidents in the Avian Incident Monitoring System.

The twenty-six "biocides for industrial control" listed present a potential hazard to federally threatened and endangered species and migratory birds. Two of the twenty-six listed biocides have reported incidents in the Avian Incident Monitoring System. The experimental status of seven of the biocides and the alternate registration for the remaining nineteen may mean that limited toxicity information is available for non-target organisms.

The two "irrigation water chemicals" listed present a potential hazard to federally threatened and endangered species and migratory birds.

The three molluscicides listed present a potential hazard to federally threatened and endangered species and migratory birds. Two of the twenty-six listed biocides have reported incidents in the Avian Incident Monitoring System.

The piscicides listed present a potential hazard to federally threatened and endangered species and migratory birds. Rotenone has a reported incident in the Avian Incident Monitoring System.

Non-chemical Controls

Non-chemical controls that could impact migratory birds, waterbirds in particular, include seismic deterrents and possibly electric barriers.

“Hydrologic Separation” could potentially affect species listed as threatened or endangered under the federal Endangered Species Act. Hydrologic separation, as described, would separate one or more watersheds in the CAWS. If this hydrologic separation results in changes to water volume or hydrologic regimes in a watershed or subwatershed where Federally-listed species occur, further analysis of potential impacts will be warranted. Federally listed species that have specific water requirements during critical parts of their life cycles include the endangered Hine’s emerald dragonfly and the threatened eastern prairie fringed orchid. Both the Hine’s emerald dragonfly and the eastern prairie fringed orchid occur in floodplain-influenced habitats that could potentially be affected if hydrologic separation in the Chicago waterway system results in changes to timing and volume of flows in those watersheds.

If you have any questions on these comments, please contact Mr. Shawn Cirton at 847/381-2253, ext. 19.

Sincerely,

A handwritten signature in black ink that reads "Louise Clemency". The signature is written in a cursive, flowing style.

Louise Clemency
Field Supervisor