



**GREAT LAKES UNITED**

STATEMENT OF BRUCE KERSHNER

TO

STANDING COMMITTEE ON RESOURCES DEVELOPMENT

TORONTO, ONTARIO

January 31, 1991

Good Morning. My name is Bruce S. Kershner, and I am Field Coordinator of Great Lakes United, a binational coalition of over 180 groups from throughout the Great Lakes - St. Lawrence River ecosystem. Our membership -- which includes environmental organizations, community groups, city and county governments, unions, small businesses, academic and scientific groups, hunters, anglers and boaters -- extends from Duluth at the western end of the basin to Quebec City along the St. Lawrence River outflow of the system. This statement is made on behalf of this community of organizations who are deeply concerned about the condition of the Great Lakes ecosystem.

I would like to thank this committee for the opportunity to testify here today. During this presentation, I would like to convey three essential messages. The first of these is that there is an urgent need to prevent the introduction of more exotic species into the Great Lakes. Secondly, the provincial government must provide funding and cost sharing for research programs that are investigating solutions to control the mussels and prevent future invasions. And, third, it is imperative that in controlling the zebra mussels, we do not introduce "cures" that are worse for the Great Lakes environment than the scourge we are trying to manage.

I would like to address each of these three main points in turn.

This hearing should not be just about the zebra mussel, but about all those future exotic species that will invade our waters unless we legislate prevention methods now. There is the real potential that some future species may be actually more destructive than even the zebra mussel and the lamprey.

*An international organization dedicated to conserving and protecting the Great Lakes and St. Lawrence River"*

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The introduction of the zebra mussel into the Great Lakes was preventable. Once in the Great Lakes, the zebra mussel and other exotic species are difficult if not impossible to control. The best and most effective method of addressing the problem of introduction of exotic species into the Great Lakes is to simply prevent them from ever getting here. While the door cannot be shut on the zebra mussel, the door can be shut on other potentially damaging organisms that could be introduced to the Great Lakes. The zebra mussel dilemma we are now faced with can and should be a powerful message to us of the difficulty of addressing problems once they are in the lakes. Like toxic chemicals which cannot be mopped up once they are in the lakes, exotic species must be prevented from entering the system.

To prevent introductions or spread of exotics, foreign ships have been asked to voluntarily exchange their ballast water in the open seas or in the Gulf of St. Lawrence. According to the Canadian Coast Guard, the 83% voluntary compliance rate is encouraging (but 173 ships annually are not complying). It only takes one ship to introduce a pest such as the zebra mussel. It is therefore imperative that there be a mandatory ballast exchange program and rigorous monitoring system to ensure compliance. Such a program must be coordinated with Canadian shipping authorities. Only through prevention will we truly be able to protect the Great Lakes from the damaging impacts of exotic species.

My second point is that the government must be in the forefront spearheading research into solving this problem. The government approach should be legislation, not just policy statements. And, it must provide adequate funding and cost sharing for local municipalities.

Finally, I would like to stress that it is imperative that the solutions adopted must not contribute to or create, other equally or more damaging impacts elsewhere in the ecosystem. According to a 1990 statement by the Ontario Ministry of Natural Resources, "There is no known environmentally sound way to get rid of zebra mussels". We must not lose sight of the fact that control must not damage the ecosystem in other ways. We cannot approach the zebra mussel dilemma with a "kill the clams-but damn everything else" attitude.

For example, chlorination and other chemical control methods have been proposed for water intakes and other problem areas. These approaches should be treated cautiously. Available evidence indicates that chlorination of water intakes may cause the formation of trihalomethanes. These halomethanes are potentially carcinogenic and could affect the quality of drinking water. Furthermore, the chlorination method works most effectively only with continuous release of that toxic element. And, in response to

those who say there could be an environmentally safe method of administering chlorine (which is highly unlikely), there is certainly no known way to guarantee safe transport and storage of liquid chlorine. Toxic spills and explosions are always a possibility with this unstable chemical.

Another example of an environmentally unsound approach is the use of toxic paints such as TBT. These release pesticides that are just as toxic to all kinds of beneficial, native organisms, and amount to nothing less than an uncontrolled toxic chemical discharge.

You may also be told about clamtrol, a clam-killing substance that is being used by some power plants. If a special filter mechanism is installed, this pesticide can kill the mussels without being discharged into the lake again. Our concern about this is that even if it were 100% environmentally safe, it offers only a solution for power plants, not drinking water intakes, boat engines and boat hulls. Lastly, the manufacture of such pesticides almost always results in the production and release of toxic discharges at the chemical plant that produces the pesticide.

Three methods that hold promise for being both effective and environmentally sound are:

- 1.) Potassium ion solutions (prevention one).
- 2.) Ultrasound attachments (prevention) ( brand name is Hulltrasonic).
- 3.) Steam jets to kill and remove the mussels.

These may not be the only environmentally promising methods, but the government should certainly support research into them.

In conclusion, I would again like to thank this committee for the opportunity to present this testimony and look forward to the success of our collective efforts to conserve and protect the Great Lakes ecosystem.