



By Registered Mail

24 June 2010

Secretary of State Hillary Rodham Clinton
U.S. Department of State
2201 C Street NW
Washington, DC 20520
United States of America

Re: Request on behalf of the Great Lakes United, Environmental Defence Canada, Milwaukee Riverkeeper, Silver Valley Waterkeeper (Indiana), Grand Traverse Baykeeper, St. Clair Channelkeeper, Detroit Riverkeeper, Western Lake Erie Waterkeeper, Lake Ontario Waterkeeper, Georgian Baykeeper, Ottawa Riverkeeper, Fraser Riverkeeper, Fundy Baykeeper and Grand Riverkeeper Labrador to the U.S. Secretary of State and to the Administrator of the U.S. Environmental Protection Agency concerning s. 310 of the *Clean Water Act* regarding the need for urgent action to address the threat of migration of Asian bighead, silver, grass and black carp into the Great Lakes

Dear Secretary of State Clinton:

This is a request on behalf of the above-mentioned groups to the U.S. Secretary of State to formally request the Administrator of the U.S. Environmental Protection Agency (EPA) to ensure ecological separation and prevent the migration of Asian bighead, silver, grass and black carp into the Great Lakes basin and for the Administrator to take such actions forthwith by giving formal notification under s. 310 of the *Clean Water Act* to the relevant State water pollution control agencies and to the appropriate interstate agencies to take action. The parties further seek the convening of a public hearing under s. 310 of the *Clean Water Act* to facilitate the consideration of Canadian interests and concerns regarding the transboundary nature of this water pollution issue.

Invasive Asian carp species constitute ‘pollution’ under the definition of that term in the *Clean Water Act*. In the context of this matter, upon request by the Secretary of State, the EPA Administrator is required under s. 310 of the *Clean Water Act* to give formal notification to the relevant water pollution control agency of the State or States in which these invasive species originate where the Administrator has received reports, surveys, or studies from any duly constituted international agency (in this case the International Joint Commission and Great Lakes Fishery Commission) and has reason to believe the pollution is occurring and may endanger the health or welfare of persons in a foreign country (in this case Canada).

This request outlines the key reports and other documents by the International Joint Commission and the Great Lakes Fishery Commission regarding Asian carp, describes the threat that these invasive species present to the health and welfare of Canadians, sets out the need for actions to eliminate this threat, and requests the calling of a public hearing so that Canadian perspectives and concerns regarding this issue may be properly considered.

I. Background

Over the past three decades, bighead, silver and other species of Asian carp have been imported to fish farms in the southern United States. Flooding in the Mississippi basin has caused fish to escape from these aquaculture operations. In the wild, these invasive species have taken hold. Being voracious eaters and prolific, they have devastated both natural habitats and indigenous species populations as they have expanded their ranges northward. The International Joint Commission and the Great Lakes Fishery Commission warn that if these carp enter the Great Lakes basin, its fisheries and aquatic ecosystems may be significantly adversely affected.

The bighead and silver carp have now migrated to the fringe of the Great Lakes, being found in several of the canals and rivers making up the Chicago Sanitary and Ship Canal at the foot of Lake Michigan. Only shipping locks now separate the carp from the Lake. Should these fish enter Lake Michigan they will have direct pathways to migrate into Canadian waters. It is predicted that they will destroy Canadian fish and other wildlife habitat and ecosystems and adversely impact the Canadian Great Lakes sport and commercial fishing sectors.

a. Section 310 of the *Clean Water Act*

Section 310(a) of the *Clean Water Act* states in part that:

SEC. 310. (a) Whenever the Administrator, upon receipt of reports, surveys, or studies from any duly constituted international agency, has reason to believe that pollution is occurring which endangers the health or welfare of persons in a foreign country, and the Secretary of State requests him to abate such pollution, he shall

give formal notification thereof to the State water pollution control agency of the State or States in which such discharge or discharges originate and to the appropriate interstate agency, if any.

The adverse impacts of invasive species have been recognized by the United States federal government. Under Executive Order 13112, the National Invasive Species Council was created to prevent the introduction of invasive species and provide for their control and to minimize the economic, ecological, and human health impacts that invasive species cause. Under section 1(f) of the Order, "invasive species" are defined as those alien species whose introduction does or is likely to cause economic or environmental harm or harm to human health.¹

For the purposes of the *Clean Water Act*, invasive species are included as "pollution". Section 502 of the *Act* provides the following definitions for the terms "pollutant" and "pollution":

(6) The term "pollutant" means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water.

...

(19) The term "pollution" means the man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of water.²
[emphasis added]

U.S. courts have recognized the connection between invasive species and pollution. For instance, the U.S. District Court in *United States Public Interest Research Group v. Atlantic Salmon of Maine* found that "[f]ish that do not naturally occur in the water ... fall within the term "biological material" and are therefore pollutants under the Act".³ The U.S. Sixth Circuit Court of Appeals has also stated that: "[m]illions of pounds of live fish, dead fish and fish remains annually discharged into Lake Michigan ... are pollutants

¹ Executive Order 13112 – Invasive Species, 64 Fed. Reg. 6183 (1999), available at <<http://www.invasivespeciesinfo.gov/laws/execorder.shtml>>.

² *U.S. Clean Water Act* 33 U.S.C. § 1251 *et seq.*

³ *United States Public Interest Research Group v. Atlantic Salmon of Maine, LLC.*, 215 F.Supp.2d 239. See also *Northwest Environmental Advocates v. U.S. Environmental Protection Agency* 2005 WL 756614 (N.D. Cal 2005); *Catskill Mountains Chapter of Trout Unlimited, Inc. v. The City of New York*, 273 F.3d 481; *United States Public Interest Research Group v. Stolt Sea Farm Inc.* 2002 WL 240386 (D.Me.), 32 Env'tl. L. Rep. 20, 537; and *Sierra Club, Lone Star Chapter v. Cedar Point Oil Company Inc.* 73 F.3d 546, 41 ERC 1897, 34 Fed.R.Serv.3d 874, 26 Env'tl. L. Rep. 20, 522.

within the meaning of the CWA [*Clean Water Act*], since they are “biological materials”.⁴

II. Description of the Threat

In a recent report issued by the Environmental Law Institute, it found compelling evidence showing that invasive species have exacted a heavy toll on the environment and the economy: they are responsible for declining fish populations, reduced dissolved oxygen, rising water temperatures, increased sediment and nutrients in the water column, beach closures, impediments to boating and swimming, damage to water intakes, and other degradation. As such, according to the Institute, "it is important for states to recognize impairments associated with invasive species, otherwise, opportunities to protect and restore waters may be overlooked or become disconnected from traditional pollution control efforts focused on the same waters".⁵

As history has demonstrated, non-native species can invade an ecosystem causing the demise of native species and overall biodiversity. Over the past number of decades, the Great Lakes have been assaulted by over 185 non-native species, some at great cost. The invasive sea lamprey, an eel-like fish that attaches and feeds on other fish like a parasite, was blamed for significant damage to the Great Lakes fisheries in the 1960s.⁶ In Canada, the treatment and control of the invasive zebra and quagga mussels in the Great Lakes has cost hundreds of million of dollars each year.⁷ However, experts estimate that none of these has been as devastating as the impact that would occur should Asian carp colonize the Great Lakes.⁸

Asian carp have the ability to reproduce and spread rapidly and become the predominant fish species in an ecosystem, as has occurred in the Mississippi basin over the last two decades. In addition, due to their ferocious appetites, some Asian carp species can grow to over 50 kilograms and longer than a metre. One study of the Mississippi basin near St.

⁴ National Wildlife Federation v. Consumers Power Co., 862 F. 2d 580, 583, 586 (6th Cir. 1988).

⁵ Environmental Law Institute, "The Role of Aquatic Invasive Species in State Listing of Impaired Waters and the TMDL Program: Seven Case Studies" (Washington: Environmental Law Institute, 2008), available at <<http://www.eli.org/pressdetail.cfm?ID=183>>.

⁶ This is according to the Great Lakes Fishery Commission. Before sea lampreys entered the Great Lakes, Canada and the United States harvested about 7 million kg (15 million lbs.) of lake trout in Lakes Huron and Superior annually. By the early 1960s, the catch was only about 136,000 kg (300,000 lbs). See GLFC, *Sea Lampreys: A Great Lakes Invader* (GLFC, undated) , available at <<http://www.glf.org/sealamp/#damage>>. In addition, Lake Trout levels have fallen by 99% from 1930 levels due to the sea lamprey. See Dr. Michael Hansen, Chair, Great Lakes Fishery Commission, *Testimony to House Committee on Transportation and Infrastructure Subcommittee on Water Resources & Environment* (9 February 2010), at 6.

⁷ Environment Canada, *How Are Non Native Species Affecting the Great Lakes* (Environment Canada 2005), available at <http://www.on.ec.gc.ca/greatlakes/How_are_the_Lakes_doing_/Our_Great_Lakes_Report/How_are_Non-Native_Species_Affecting_the_Great_Lakes-WSD5AC1512-1_En.htm>.

⁸ The term ‘Asian carp’ actually refers to several species of carp that are not native to North America that originate from Asia: bighead, silver, grass, and black carp. The Asian carp species of greatest concern regarding invasion into the Great Lakes are the bighead carp and the silver carp.

Louis, Missouri, found that Asian Carp made up over 97 percent of the local ecosystem's biomass.⁹

In November 2009, the IJC reported that the Asian carp were found less than a mile from the electric fish barriers in the Chicago Sanitary and Ship Canal, which have been put in place to try and prevent carp and other invasive species from migrating into the Great Lakes.¹⁰

In January 2010, the US Army Corp of Engineers reported that Asian carp DNA had been detected beyond the electric barriers and in the Calumet River and Calumet Harbour of Lake Michigan.¹¹ According to the Army Corp of Engineers, this is evidence of the likely presence of Asian Carp past the electric barrier, and thus in the Great Lakes watershed. This does not however mean that carp populations have been established yet in these areas. But the threat is there. If established in the Great Lakes basin, there will be no way to control the rapid growth and reproduction of the Asian carp; Asian carp would become a permanent element of the Great Lakes like the sea lamprey.¹²

Approximately 40 percent of the shoreline of the Great Lakes and 36 percent of their waters lie within the boundaries of Ontario, Canada.¹³ If Asian carp were to breach the electric barriers and establish populations in the Great Lakes basin they will be free to invade Canadian waters. The Chair of the Great Lakes Fishery Commission (GLFC), when testifying about the potential impact Asian carp would have on the Great Lakes, explained how some Asian carp species would disrupt the food web by out-competing native fish for their major food source (plankton). He stated:

Little doubt exists that bighead and silver carp would have significant negative impacts on the food web by causing large-scale changes at the low end of the structure.¹⁴

The consequences of the establishment of Asian carp species on ecological and native ecosystems in Canada are significant. A risk assessment study conducted by the Canadian Department of Fisheries and Oceans concluded that if Asian carp successfully colonize the Great Lakes there is a high probability they would spread across the Great Lakes basin and possibly even through Manitoba and Saskatchewan.¹⁵ The study stresses that such an invasion would have a significant impact on the food web and trophic structure

⁹ Mississippi Interstate Cooperative Resource Association, 'Asian Carp Threat to Great Lakes', 11:3 *River Crossings* (May/June 2002).

¹⁰ International Joint Commission, *IJC urges action to protect the Great Lakes against Asian carp* (news release, 19 November 2009).

¹¹ US Army Corp. of Engineers, Agencies accelerate action in response to new test results suggesting Asian carp presence in Calumet Harbor (press release, 19 January 2010).

¹² See Michael J. Hansen, n. 5 above, at 2.

¹³ Brief of Amicus Curiae Her Majesty The Queen In Right of Ontario in Support of the State of Michigan's Motion for a Preliminary Injunction (31 December 2009) (Ontario Amicus Brief).

¹⁴ See Michael J. Hansen, n. 5 above, at 4.

¹⁵ Department of Fisheries and Ocean Canada (Canadian Science Advisory Secretariat), *Risk Assessment for Asian Carp in Canada* (Department of Fisheries and Ocean Canada., 2009), at 19 – 27.

of aquatic systems. The Department of Fisheries and Oceans stated that, unlike the sea lamprey, no control solution exists for the Asian carp; the only hope is to keep them out.¹⁶

Furthermore, the Ontario government has stated that if Asian carp enters the Great Lakes there will be serious adverse impacts on Ontario's recreational and commercial fisheries, which are valued at approximately CAD\$400 million per year.¹⁷ Environment Canada has made a similar assessment.¹⁸

III. Evidence Summary

i. International Joint Commission

The 1909 United States-Canada Boundary Waters Treaty established the IJC to deal with water pollution and other water-use problems. It provides oversight and approval of various uses of boundary waters, which affect their "natural level and flow."¹⁹ It is a "duly constituted international agency" as required for s. 310 of the *U.S. Clean Water Act* to apply.

Former Assistant IJC Commissioner Murray Stein, of the enforcement division of the US Department of the Interior's Federal Water Pollution Control Administration, has unequivocally stated that:

... the International Joint Commission ... is basically an investigative body with authority to study and recommend. It is not vested with regulatory powers. It is, of course, fully within the [Clean Water] Act's definition of a duly constituted international agency and, accordingly, may act to invoke the international pollution enforcement procedures.²⁰

The IJC has been found to be "exactly the type of body to which this provision [Section 310] is addressed."²¹ In *Thomas v. New York*, the Commission was referred to as a "duly constituted international agency" by the EPA and endorsed as such by the District Court of the District of Columbia.²² This reasoning has also been followed by other US Courts as well.²³

¹⁶ Department of Fisheries and Oceans Canada, *Will Asian Carp Invade Canada?* (DFO, undated), available at <<http://www.dfo-mpo.gc.ca/science/Publications/article/2006/01-01-2006-eng.htm>>.

¹⁷ See Ontario Amicus Brief, n. 12 above, at 9.

¹⁸ Environment Canada, *Invasive Alien Species of the Month* (Environment Canada, undated), available at <<http://www.ec.gc.ca/eee-ias/default.asp?lang=En&n=8E8C2C22-1>>.

¹⁹ *Treaty Relating to Boundary Waters, and Questions Arising with Canada*, United States and United Kingdom (11 January 1909), 36 U.S. Stat. 2448, Articles III-IV, VIII-X.

²⁰ Murray Stein, "Aspects of United States and Canadian Water Law" (1970), 20 *U.T.L.J.* 69, at 71.

²¹ Bennett A. Caplan, "The Applicability of Clean Air Act Section 115 to Canada's Transboundary Acid Precipitation Problem" (1983-1984) 11 *B.C. Env'tl. Aff. L. Rev.* 539, at 582.

²² *Thomas v. New York*, 802 F.2d 1443 (D.C. Cir. 1986).

²³ See, for instance, *The Queen ex rel. Ontario v. United States EPA*, 912 F.2d 1525 (D.C. Cir. 1990).

The IJC has made its concerns regarding invasive Asian carp clear in letters to the Governor of Illinois, the U.S Army Corps of Engineers, the U.S. Environmental Protection Agency and the Council on Environmental Quality. In a press release reporting the submission of such letters, the IJC described Asian carp as a “threat to the biological integrity of the Great Lakes”.²⁴ One of these letters from the IJC, dated November 10, 2009, urges preventative action, stating that:

State, local and federal agencies all agree that urgent preventative action is needed to stop the destructive carp from reaching the Great Lakes. Accordingly, we urge you to take immediate action to cut through any and all administrative and bureaucratic obstacles that exist in Environmental Protection Agency, so that the EPA and the other agencies involved can execute the plans without delay. Response personnel must be given every opportunity possible to eliminate the risk of this invasion by Asian carp and avoid almost certain disastrous economic and environmental consequences to the Great Lakes, a unique resource shared between the United States and Canada. This is a battle that we cannot afford to lose.²⁵

The IJC letters support recommendations from the Barrier Advisory Panel to construct a physical separation between the Des Plaines River and the Chicago Sanitary and Shipping Canal. They also support the closing off the Illinois and Michigan Canal and Deep Run Creek in a manner that permits storm water discharge but precludes the upstream passage and barrier bypass of Asian carp.

The IJC Work Group Report on Binational Aquatic Invasive Species Rapid-Response Policy Framework lists bighead and silver carp as species of great concern threatening the Great Lakes.²⁶ The IJC has cited the threat posed by Asian carp in past Biennial Reports on Great Lakes Water Quality,²⁷ but only recently has the threat become so urgent as to garner attention from the IJC outside of its regular reporting cycle.

²⁴ IJC, *IJC urges action to protect the Great Lakes against Asian carp* (news release, 19 November 2009), available at <http://www.ijc.org/rel/news/2009/091119_e.htm>.

²⁵ Letter from IJC Chair US Section Irene Brooks, IJC Chair Canadian Section Rt. Honorable Herb Gray, Commissioner Allen I. Olson, Commission Pierre Trépanier, Commissioner Samuel W. Speck, Jr. and Commissioner Lyle Knott to Mr. Cameron Davis, Senior Advisor to the Administrator, U.S. EPA (10 November 2009), available at <<http://www.ijc.org/rel/pdf/ijc-letters-re-asian-carp.pdf>>.

²⁶ IJC Work Group Report on Binational Aquatic Invasive Species Rapid-Response Policy Framework prepared as part of the Great Lakes Water Quality Agreement Priorities 2007-2009 Series (IJC, August 2009), at 3, available at <<http://www.ijc.org/en/priorities/2009/reports/2009-invasive-species.pdf>>.

²⁷ See 11th Biennial Report on Great Lakes Water Quality: The Challenge to Restore and Protect the Largest Body of Fresh Water in the World (IJC, September 2002), at 32; and 12th Biennial Report on Great Lakes Water Quality (IJC, September 2004), at 16, available at <http://www.ijc.org/en/publications/rpts_bi.htm>

ii. Great Lakes Fishery Commission

The Great Lakes Fishery Commission (GLFC) was established in 1955 by the Canadian/U.S. Convention on Great Lakes Fisheries. The commission coordinates fisheries research, controls the invasive sea lamprey, and facilitates cooperative fishery management among state, provincial, tribal, and federal management agencies. Under Article II (1) of the Convention, the GLFC is to be a joint commission of US and Canadian representatives, and is thus a ‘duly constituted international body’.

The GLFC describes the Asian carp as a ‘significant threat’ to the Great Lakes.²⁸ In testimony before the U.S. House Committee on Transportation and Infrastructure Subcommittee on Water Resources and Environment, GLFC Chair Dr. Michael J. Hansen stated that ecological and economic disaster would result should the Asian carp colonize the Great Lakes.²⁹ Due to lack of control measures, the GLFC Chair reports that the only solution is ecological separation.

A November 2008 GLFC report states that:

The CWS [Chicago Waterway System] presents an imminent threat of introducing a particularly destructive AIS [Aquatic Invasive Species] into the Great Lakes: bighead and silver carp, or ‘Asian carp’.³⁰

The report, which examines the feasibility of ecological separation of the Mississippi River and the Great Lakes Basin, recommends true ecological separation, defined as, “as no inter-basin transfer of aquatic organisms via the Chicago Waterway System at any time – 100% effectiveness” as the only long term solution that will eliminate risk of irreversible ecosystem damage.³¹

IV. Request for a Hearing

Regarding the calling of a public hearing into international pollution matters, section 310(a) of the *Clean Water Act* states in part that:

[The EPA Administrator] shall also promptly call such a hearing, if he believes that such pollution is occurring in sufficient quantity to warrant such action, and if such foreign country has given the United States essentially the same rights with respect to the prevention and control of pollution occurring in that country as is given that country by this subsection. The Administrator, through the Secretary of State, shall

²⁸ GLFC, *Protecting our Fisheries: Exotic Species -- Asian Carp* (GLFC, undated), available at <<http://www.glf.org/fishmgmt/carp.php>>.

²⁹ See Michael Hansen, n. 5 above.

³⁰ Joel Brammeier, Irwin Polls, and Scudder Mackey, Great Lakes Fishery Commission Report (GLFC, November 2008); and see 2008 Project Completion Report, Preliminary Feasibility of Ecological Separation of the Mississippi River and the Great Lakes to Prevent the Transfer of Aquatic Invasive Species (GLFC, 2008), at 1.

³¹ *Ibid.*, at ii.

invite the foreign country which may be adversely affected by the pollution to attend and participate in the hearing, and the representative of such country shall, for the purpose of the hearing and any further proceeding resulting from such hearing, have all the rights of a State water pollution control agency.

Based on the evidence set out above, the migration of Asian carp is occurring in a sufficient degree to warrant strong actions to contain it and prevent its spread into the Great Lakes. Moreover, Canada has given the United States essentially the same rights with respect to the prevention and control of pollution occurring in Canada as s. 310 of the *Clean Water Act*. Canadian legislation provides similar rights under s. 176 of the *Canadian Environmental Protection Act, 1999 [CEPA]*, which states in part:

176. (1) Subject to subsection (4), the Minister shall act under subsections (2) and (3) only if the Ministers have reason to believe that a substance released from a source in Canada into water creates, or may reasonably be anticipated to create,

(a) water pollution in a country other than Canada; or

(b) water pollution that violates, or is likely to violate, an international agreement binding on Canada in relation to the prevention, control or correction of pollution.

...

(4) If the water pollution referred to in paragraph (1)(a) is in a country where Canada does not have substantially the same rights with respect to the prevention, control or correction of water pollution as that country has under this Division, the Minister shall decide whether to act under subsections (2) and (3).³²

This provision has been incorporated into submissions by petitioners to compel the Canadian government to act to address water pollution that has international impacts.³³ In fact, in *Re Ontario Power Generation – Article 15(1) Determination* (2004), the applicants cited s. 310 of the *Clean Water Act*, stating that it "grants Canada the same rights with respect to the prevention, control or correction of cross-boundary water pollution as granted under s. 176 of CEPA".³⁴ This speaks to the equivalency of these provisions for the purpose of this s. 310 request under the *Clean Water Act*.³⁵

³² Canadian Environmental Protection Act 1999, S.C. 1999, c. 33, s. 176.

³³ *Re Ontario Power Generation – Article 15(1) Determination* (2004), "Submission to the CEC" (1 May 2003) SEM-03-001 (CEC), available at <<http://www.cec.org/Page.asp?PageID=2001&ContentID=2380&SiteNodeID=545>>.

³⁴ *Ibid.*, at 3.

³⁵ See also Office of the Auditor General of Canada, *Municipal wastewater discharges and pollution of the marine environment*, Petition No. 112 (27 April 2005), available at <http://www.oag-bvg.gc.ca/internet/English/pet_112_e_28834.html>.

A public meeting on this issue would provide valuable opportunities from the Canadian government, Canadian stakeholders and experts to present Canadian concerns and inputs on formulating effective measures to address the Asian carp problem and mitigate impacts.

Conclusion

Great Lakes United, Environmental Defence Canada, Milwaukee Riverkeeper, Silver Valley Waterkeeper (Indiana), Grand Traverse Baykeeper, St. Clair Channelkeeper, Detroit Riverkeeper, Western Lake Erie Waterkeeper, Lake Ontario Waterkeeper, Georgian Baykeeper, Ottawa Riverkeeper, Fraser Riverkeeper, Fundy Baykeeper and Grand Riverkeeper Labrador request the U.S. Secretary of State to formally request the Administrator of the U.S. Environmental Protection Agency to ensure ecological separation and prevent the migration of Asian bighead, silver, grass and black carp into the Great Lakes basin and for the Administrator to take such actions forthwith by giving formal notification to the relevant State water pollution control agencies and to the appropriate interstate agencies to take action.

Under s. 310 of the *Clean Water Act*, the Administrator is obliged to give formal notification to the State water pollution control agency of the State or States in which these invasive species originate where the Administrator has received reports, surveys, or studies from any duly constituted international agency and has reason to believe pollution is occurring which endangers the health or welfare of persons in a foreign country.

Given the nature the interpretation of invasive species as pollutants, the evidence provided by written reports of the IJC and GLFC and the nature and extent of the threat posed by Asian carp to the health and welfare of Canadians, the Waterkeepers, Great Lakes United, and Environmental Defence Canada request that the requisite actions, including the holding of a public hearing, as set out in s. 310 of the *Clean Water Act*, be taken forthwith.

Respectfully Yours,



Hugh S. Wilkins
Staff Lawyer
Ecojustice Canada

cc: Administrator Lisa P. Jackson
U.S. Environmental Protection Agency