Pilon, Janet

Subject: Can we please do a better job about telling people about the highly PFAS contaminated "do not eat" fish that live in the upper Welland River?

From: Joseph Minor
Sent: September 22, 2022 5:40 PM
To: clerk@hamilton.ca; clerks@hamilton.ca
Subject: Can we please do a better job about telling people about the highly PFAS contaminated "do not eat" fish that live in the upper Welland River?

To: The Mayor and All Members of Council c/o the Clerk

Can we please do a better job about telling people about the highly PFAS contaminated "do not eat" fish that live in the upper Welland River?

I am writing about the highly PFAS contaminated "do not eat" fish in the upper Welland River (Hamilton and Niagara, including Binbrook Conservation Area). A professional study (dated March 2022) concluded that children and women of childbearing age should limit their consumption of PFAS in contaminated fish to 14% of the levels currently in the Guide to Eating Ontario Fish. This major 86% (7.1-fold) reduction means that most of the fish that would be caught in the upper Welland River are so highly PFAS contaminated that they are designated "do not eat" fish.

This "high level advisory" was sent to "property owners and stakeholders" on the upper Welland River in June. This information is not being shared with newcomers and visitors to the area. In particular, the NPCA is not currently sharing information regarding the highly PFAS contaminated "do not eat" fish that currently swim in the Binbrook Conservation Area with the visiting public.

Please do what you can to increase public knowledge about the highly PFAS contaminated "do not eat" fish in the upper Welland River.

Thank you for your time,

Joe Minor

Background Information

The highly contaminated areas are downstream from the former fire-fighting practice pad at the Hamilton International Airport. In order to comply with directives from Transport Canada, fire fighters sprayed large amounts of AFFF (aqueous film-forming foam) on practice fires in order to train with the use of AFFF. A popular type of AFFF had PFAS/PFCs/PFOS as a major ingredient, and the PFAS ran off the airport site and contaminated many kilometers of waterway downstream in the upper Welland River. The zone of high contamination is so long that it extends across Hamilton and on into Niagara. The Binbrook Conservation Area has highly contaminated fish and wildlife.

Many of the fish in this stretch of river are so highly contaminated with PFAS they are designated "do not eat" fish. According to the "current" online version of the Guide to Eating Ontario Fish:

In the upper Welland River (upstream of the Binbrook Reservior):

"Women of child-bearing age and children under 15 years old" should not eat any pike, green sunfish, carp, or brown bullhead because they are highly contaminated with PFAS.

In the Binbrook Reservior (Lake Niapenco, including but not limited to Binbrook Conservation Area):

“Women of child-bearing age and children under 15 years old” should not eat any black crappie, largemouth bass, smallmouth bass, channel catfish, pike (over 24”), white crappie (over 10”), carp (over 12”), or brown bullhead (over 12”) because they are highly contaminated with PFAS.

In the stretch of the Welland River past the Binbrook dam down to Port Davidson:

“Women of child-bearing age and children under 15 years old” should not eat any white crappie, largemouth bass, or rock bass because they are highly contaminated with PFAS.

As bad as this PFAS contamination is, recent scientific studies have indicated that the amounts of PFAS/PFCs/PFOS that were deemed “advisable” to eat in the Guide were set too high.

Transport Canada hired consultants to conduct a study called the “Hamilton Offsite Risk Assessment of Perfluorinated Compounds”. The ongoing million dollar study is currently in its eighth year.

In March of this year (2022) the Transport Canada’s second team of consultants (Arcadis) released a “plain language” Summary of their results to date. (The summary and two supplementary reports have been released as pdfs. If you would like a copy please let me know and I will send them to you.)

Scientists with Arcadis, Transport Canada, Health Canada, and the Ontario Ministry of the Environment, Conservation, and Parks (MECP) reviewed the scientific literature and agreed that the amounts of PFAS used in the current “Guide to Eating Ontario Fish” are set way too high:

“Specifically, the Stage 2 HHRA recommended that individuals consuming fish from the RA area consume only:

- 30% of the recommended number of meals per month in the MECP fish advisory for the general population, for each fish species, and

- 14% of the recommended number of meals per month in the MECP fish advisory for sensitive populations, which include women of child-bearing age and children under 15, for each fish species.”

(Plain Language Summary of the Detailed Quantitative Risk Assessment for PFAS – Welland River Watershed Downstream of the Hamilton International Airport, Hamilton, Ontario, page 24)

These are major reductions in the amount of PFAS that is “advisable” to eat. Children and women of childbearing age need to reduce their consumption of PFAS in contaminated fish by 86% from the levels currently “recommended” in the Guide. This is a huge reduction – you need to divide the numbers recommended in the Guide by a factor of 7.1 in order to get them down to levels consistent with the current scientific literature.

It is not known when this 86% (7.1-fold) reduction will be incorporated into the Guide to Eating Ontario Fish.

To see what applying this correction would look like for the fish in the upper Welland River, please see the pdf labelled “ERRATA_Tables”.

Please do not be misled by the proposed format change to the Guide (in the “ERRATA_Tables”) being promoted by Transport Canada’s consultants. In the current Guide (as well as all previous versions dating back to 1995), fish advisories are listed as the “advisable” number of meals of contaminated fish that can be eaten PER MONTH. The consultants propose that the Guide extend this to “advisable” meals PER YEAR. This major format change proposed for the Guide discards a safety factor of twelve that has been consistent in the Guide for the last 27 years. If the proposed format change is adopted, it is not known if people using the Guide will be able to track their fish consumption across different contaminants and different water bodies over the course of an entire year with sufficient accuracy.

It would generate compounded confusion to introduce a major format change to the Guide at the same time as the major reduction in the “advisable” amount of PFAS that should be consumed is also being brought in. To avoid this compounded confusion, the current Guide format (i.e., advisable meals per month) should be maintained.

To make an “apples to apples” comparison, it is necessary to maintain the current format of the Guide.

If the Guide format is maintained, applying the scientifically recommended 86% (7.1-fold) reduction will mean:

In the upper Welland River (upstream of the Binbrook Reservior):

“Women of child-bearing age and children under 15 years old” should not eat any pike, green sunfish, carp, or brown bullhead because they are highly contaminated with PFAS.

In the Binbrook Reservior (Lake Niapenco, including but not limited to Binbrook Conservation Area):

“Women of child-bearing age and children under 15 years old” should not eat any black crappie, white crappie, largemouth bass, smallmouth bass, channel catfish, pike (over 18”), carp (over 8”), or brown bullhead (over 12”) because they are highly contaminated with PFAS.

In the stretch of the Welland River past the Binbrook dam down to Port Davidson:

“Women of child-bearing age and children under 15 years old” should not eat any black crappie, white crappie, largemouth bass, rock bass, carp, or drum because they are highly contaminated with PFAS.

Please note that not all species of fish from these various locations were tested. Given the pervasive nature of the high level PFAS contamination in this area, it would be imprudent to consume any fish species that have not been tested.

Lack of disclosure from the NPCA about the highly PFAS contaminated “do not eat” fish in the Binbrook Conservation Area

Recent scientific studies have indicated that PFAS are a problem at much lower concentrations than previously thought. But since the fish in the upper Welland River are so highly contaminated with PFAS, many of the fish in the upper Welland River were known to be “do not eat” fish when PFAS advisory levels were first added to the Guide to Eating Ontario Sport Fish in 2011.

This simple fact has withstood the test of time for 11 years. Despite this fact, it is really difficult to find any information about the highly PFAS contaminated “do not eat” fish in any of the NPCA’s public communications about the Binbrook Conservation Area.

When asked about this lack of disclosure, the reply is:

“As per the NPCA Fishing Policy for Binbrook Conservation Area, Catch and Release has been in firm effect since January 1, 2020, although it has been highly encouraged to all visitors dating back to 2012. Additionally, the Ministry’s guidelines booklet has been available at the gatehouse and the custom fish consumption advisory for Lake Niapenco and the surrounding area is available on the NPCA’s Binbrook landing page: https://npca.ca/parks-recreation/conservation-areas/binbrook . NPCA is also currently working on updating their sign which is intended to clearly communicate the catch and release policy using graphics, as Binbrook does welcome visitors from diverse communities each year.”

(excerpt from eMAIL to me from the Niagara Region Chairman, dated September 1, 2022)

Superficially, this statement looks like efforts were made. I decided to spend a good part of the next day (September 2, 2022) checking the statements above for accuracy.

I started by going to the website:

"the custom fish consumption advisory for Lake Niapenco and the surrounding area is available on the NPCA's Binbrook landing page: https://npca.ca/parks-recreation/conservation-areas/binbrook"

A quicker way to get to the "Binbrook landing page" is to Google "Binbrook CA". The top result is the same as the link above.

If you do go to the "Binbrook landing page", you will not see ANYTHING that even remotely resembles a "custom fish consumption advisory for Lake Niapenco and the surrounding area". It is not there. There is ZERO mention of PFAS, and there is ABSOLUTELY NO MENTION about contaminated fish at all.

So that got me curious about this statement:

"the Ministry's guidelines booklet has been available at the gatehouse"

I was wondering what this "guidelines booklet" could be. So, I got into my car and drove out to the Binbrook CA Main Gate. I paid the gate fee and said that I was thinking about doing some fishing. I said that I had heard that the fish in the lake were contaminated, and I asked if there was any information available. The response was that there was "no information specific to Binbrook". I said that I had been told that there was a "Ministry guideline booklet" "available at the gatehouse". Could I please see it?

I was handed three documents:

1) "Dive in for a better understanding of Beach Water Quality". City of Hamilton. One page. (No mention of the highly PFAS contaminated "do not eat" fish.)
2) "Discover NPCA". Eight page pamphlet, with one page for Binbrook CA. (The Binbrook page says "Fishing", but says nothing about: highly PFAS contaminated "do not eat" fish, or "Catch and Release".)
3) 2022 Fishing Ontario Recreational Fishing Regulations Summary. 152 pages. (No mention of "Catch and Release" fishing at Binbrook, and ZERO use of the words "contaminated", "contaminant", "eating" or "PFAS" anywhere in 152 pages.)

So when I asked about contaminated fish in Binbrook CA, I was given 161 pages of "information", and in that 161 pages there was ZERO information about the contaminated fish at Binbrook, and ZERO mention of the Catch and Release "policy".

So having paid the gate fee, I continued into Binbrook CA.

There is no shortage of signs at Binbrook CA – they are everywhere. What you can't find are any signs that say anything about the highly PFAS contaminated "do not eat" fish at Binbrook CA. I was not able to find a single sign that said anything about contaminated fish at all. After looking really hard, I was able to find two signs that said:

"In an effort to sustain a healthy fish population at Binbrook Conservation Area, please be advised that a Catch and Release Policy for all fish is in full effect. Please be sure to follow additional Binbrook Fishing Rules and all provincial fishing regulations."

(What are the “additional Binbrook Fishing Rules”? Where would you find them?)

More on the “Catch and Release Policy” below.

Please note that there is no mention of the highly PFAS contaminated “do not eat fish” at all. It would be really helpful if the NPCA would show more concern for the health of their paying customers (and their children) by disclosing this information.

An example of a proper sign:

Another honest and straightforward sign:

According to the NPCA:

"As per the NPCA Fishing Policy for Binbrook Conservation Area, Catch and Release has been in firm effect since January 1, 2020, although it has been highly encouraged to all visitors dating back to 2012."

Many other PFAS contamination hotspots also have "Catch and Release" policies, but the effectiveness of those policies is strengthened by including information about the "do not eat" fish (e.g., see signs above).

This honest disclosure helps anglers understand why it is important to not eat the fish (and more importantly to not feed highly PFAS contaminated fish to their children). Honest disclosure also helps anglers to understand what to do when Binbrook "policies" are at odds with Ontario regulations.

Compare the Binbrook "policy" that "a Catch and Release Policy for ALL fish is in FULL effect" with the following 2022 Ontario Fishing Regulations:

"This rule does not apply to invasive species (e.g., goby), which should be destroyed and not released back into any waters." (page 11)

"allowing fish to waste is an offence" (page 11)

"In Ontario, it is illegal to: Abandon fish or permit the flesh to spoil, if the fish is suitable for human consumption." (page 12)

"Catch and Retain Rules. Only fish that are in such a condition that they will survive may be released. Releasing a fish that will not survive and allowing the flesh of that fish to be wasted is an offence." (page 13)

"In Ontario, it's illegal to import, possess, deposit, release, transport, breed/grow, buy, sell, lease or trade these species: Bighead Carp, Black Carp, Grass Carp, Prussian Carp, Silver Carp, Snakeheads (all species in the snakehead family), Stone Moroko, Tench, Wels Catfish, Zander." (page 21)

"Additionally, it's against the law to possess, transport or release live Round Goby, Tubenose Goby, Rudd or Ruffe in Ontario" (page 21)

"If you happen to catch a prohibited fish, invertebrate or plant, you must immediately destroy it in a way that ensures it cannot reproduce or grow" (page 22)

"Anglers should know how to identify Round Goby since these aggressive fish are easily caught by hook and line. If you catch a Round Goby (or any invasive species) it should be destroyed as it cannot be released live into any waters." (page 22)

In contrast with the 140 pages of Ontario Fishing Regulations, all we know about the Binbrook CA "Catch and Release Policy" is contained on the sign:

"In an effort to sustain a healthy fish population at Binbrook Conservation Area, please be advised that a Catch and Release Policy for all fish is in full effect. Please be sure to follow additional Binbrook Fishing Rules and all provincial fishing regulations."

(Where would one find "additional Binbrook Fishing Rules"?)

Since the Binbrook "Catch and Release Policy" fails to mention the highly PFAS contaminated "do not eat" fish, anglers have no basis for deciding what to do when Binbrook's "policies" conflict with the Ontario regulations. What anglers need to hear (and what they are not being told by the NPCA) is: DO NOT EAT THE FISH BECAUSE THEY ARE HIGHLY CONTAMINATED WITH PFAS.

The NPCA says: "Catch and Release has been in firm effect since January 1, 2020, although it has been highly encouraged to all visitors dating back to 2012."

What does "in firm effect" mean, and what specific measures were started in Jan.1, 2020 that make "firm effect" better than the "highly encouraged" that was in effect for the previous eight years? Why weren't "in firm effect" measures started in 2011?

Considering that it has been known since 2011 that many of the fish were highly contaminated with PFAS, how many anglers (and their children) ate "do not eat" fish because the NPCA refused to adequately disclose the contamination?

In the real world, it doesn't really matter whether the "Catch and Release Policy" is "highly encouraged" or "in firm effect", because both the NPCA and at the Ontario NDMNRF lack the staffing to monitor compliance with the policy. There are very few Conservation Officers and most anglers will go many years without seeing one. And the limited staffing at Binbrook CA is insufficient to monitor whether or not anglers are keeping fish.

Because of the limited staffing, it is important that anglers be given the information about the highly PFAS contaminated "do not eat" fish.

The NPCA is failing to share that information.

We have known about the highly PFAS contaminated "do not eat" fish at Binbrook CA for 11 years, but you will not see any indications of the PFAS problem on:

1) The web page for the NPCA's Binbrook Conservation Area
2) Signage at the NPCA's Binbrook Conservation Area
3) NPCA literature (e.g., "Discover NPCA")
4) Information given to people at the Main Gate of the NPCA's Binbrook Conservation Area

Now that provincial and federal experts have reviewed the recent scientific literature and concluded that PFAS are "a concern" at much lower levels than we knew before, the time has come to correct the NPCA's failure to communicate about the highly PFAS contaminated "do not eat" fish that are currently swimming around in the Binbrook Conservation Area.