

# Opponents critique Nordic's proposed carbon emissions

BY KENDRA CARUSO

AUGUSTA — Upstream Watch held a press conference Thursday in a Maine State House media room to release carbon emission findings on Nordic Aquafarms' land-based fish farm proposal.

The organization developed data on the project's embedded carbon:total emissions from material extraction to construction and distribution. To do this, it used one real-world model and three computer models used by some high-profile companies seeking to be more environmentally conscious, according to Upstream programmer George Aguiar.

He and Upstream electrical engineer James Merkel ran the models using information in Nordic's application, Aguiar said. The models predict that Nordic's carbon emissions will be more than double what the company has found in its models filed with city and state agencies.

Upstream states that the facility will generate about 23 pounds of carbon emissions per fish, according to its models. Nordic has said it will produce just over 5 pounds of carbon emissions per fish, according to the company's models.

The first model the opposition group used was based on a study of a land-based aquaculture

facility in China smaller than Nordic's, but Merkel said they could scale the numbers up.

Nordic refutes Upstream's model based on the study in China because that facility is using more mixed energy (including coal), longer transportation distances for eggs, a higher feed factor, higher energy use per pound of fish and a decreased facility lifetime, according to a press release from Nordic Executive Vice President Marianne Naess.

According to Naess, four ounces of salmon is equivalent to about 1.4 pounds of carbon emissions, which is comparable to locally raised and distributed chicken.

Upstream's three other industrial carbon models

looked at how much carbon is released throughout the process of development, from extracting the building and packaging materials to marketing the end product, according to Aguiar. It is a fuller picture of the carbon that goes into everything related to the project, he said.

Naess would not say whether Nordic's carbon emission numbers reflect embedded carbon. She said the company's calculations were conducted using reputable studies and that there are a number of factors Upstream is not considering in its models, but did not specify which factors the group is missing. "The difference is not the model you use," she wrote in an email, "but which

assumptions you use."

The press conference came the morning of Jan. 15, with the last public hearing on Nordic's application with the Planning Board

that evening. Upstream submitted its results to the Board of Environmental Protection, which will start its public hearing on the application in early February.



Upstream Watch member Amy Grant starts off a press conference Jan. 15 at the Maine State House by introducing the two authors of studies on Nordic Aquafarms' proposed land-based fish farm's projected carbon emissions. PHOTO BY: KENDRA CARUSO

# Game Lofters unfazed by impending zombie apocalypse

BY FRAN GONZALEZ

BELFAST — In the midst of a zombie apocalypse Sunday, several community agencies worked together at the Waldo County Sheriff's Office to inform residents about how to prepare for emergencies, and how to survive the mayhem.

The Jan. 19 event was funded by a grant from Volunteer Maine, a community service organization, and Maine Masonic Charitable Foundation, as a way to help students better understand Martin Luther King Jr.'s legacy, impact and vision of the "Beloved Community." The term refers to King's global vision, in which all people can share in the wealth of the earth.

The Maine Youth Act Selection Committee authorized each grant of up to \$750 to support planning and carrying out a student-driven service project.



Approximately 25 students and parents attend an emergency preparedness event at the Sheriff's Office Jan. 19. The exercise was aimed at giving students a better understanding of Martin Luther King Jr.'s legacy, impact and vision of the "Beloved Community," as well as practical emergency-related tips. PHOTO BY: FRAN GONZALEZ

The Game Loft received the grant and members of its "I Know ME" program, along with two AmeriCorps volunteers who are currently serving at the Game Loft, organized the project.

The I Know ME program works with students in the Mount

View school system to raise the aspirations of rural students by allowing them to explore and learn more about the state. They visit all of the state parks, attend food festivals and have met with representatives at the State House, according to the Game Loft website.

Patricia Estabrook, co-

founder of the Game Loft, said the reason they chose to do a zombie apocalypse preparedness program was "If you are prepared for zombies, you are prepared for anything." Educating kids in this way, she said, will help them retain the practical information at a much higher rate.

Dale Rowley, director of the Waldo County Emergency Management Agency, spoke about the importance of having an emergency escape route, to know how to exit your house, and also how to exit your neighborhood.

A pre-stocked emergency kit with items such as matches and candles stored in a plastic bag is a good idea, he said, along with bleach to disinfect water. Having contact information written down is important he said, because, for many emergencies, there are power outages.

Rowley said in emergencies, cell towers can become overloaded with too much traffic, "but it usually is local communications." Agreeing on a contact out of state, an aunt or a grandparent, to call in an emergency can help in this situation.

Libby Fairfield-Phelps, a nurse at Waldo County General Hospital, said the

best preventive medicine in an emergency is to stay fed and hydrated. To remedy a cut or abrasion, clean rags for bandages in boiling water, clean the wound, wrap the area and keep in place with duct tape.

For someone with broken bones, splint the affected area with anything hard available, such as a metal wrench, then wrap and secure with duct tape. For burns, she said, "keep it moist, keep it clean and keep it cool." For wounds, keep pressure on the area, close it up and bind it tightly, she said. Rinse it out using clean, sterile water and bandage with clean bandages.

Author Ron Tufo of Searsport read excerpts from his zombie apocalypse novel "Stronghold" while members of the audience ate a "bucket of brains" (spaghetti with sauce), salad and dessert. Approximately 25 kids and parents attended the event.

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3 Superintendent Charles Brown had asked other schools in the Central Maine League if there has been any interest from boys wanting to play, and more specifically, what other schools' positions were. Brown said there was not another school in their league that had any boys request to play field hockey.

Officials at the other schools said they follow the Maine Principals Association rules in regard to participation in field hockey, he said, whether at the high school or middle school level.

The MPA is a nonprofit association that sponsors invitational athletic competitions and tournaments in the state for its member high schools and establishes rules. While the MPA governs high school sports, Brown said previously, it does not have jurisdiction over middle school sports; but, he added, "the majority of middle schools in the state form their rules based off of MPA."

"The MPA governs high school athletics and every middle school athletics (program) I've ever been involved with follows the MPA rules, because why reinvent the horse? The MPA did all

the work, we're just going to adopt their policies," Brown said. "We (Mount View Middle School) don't have a formal policy; it's just been the past practice of following MPA rules."

Several parents of field hockey players told Brown they were against the idea of boys playing because of the physicality of the sport. Parents worried the sport would become even more physical with boys playing and might elect not to have their child play if boys were to participate.

"I have heard the opposite side, with letters from middle school students saying I don't understand why he can't play, please let him play, he's my friend," Brown said.

MPA's decision to exclude boys stems from a 1999 Cumberland County Superior Court ruling that said, "given the physiological differences in the sexes, (it) would change the way the sport is played and decrease the opportunities for female athletes."

Margot Hayes, junior varsity field hockey coach at the middle school, disagrees with the court's decision and said if anything, the rule decreases opportunities for her son, who wishes

to play on the team. Hayes said her daughter who plays on the varsity team heard from several colleges that have taken an interest in her abilities on the field — something that she would never have had, if not for field hockey.

"She's talking with St. Andrews University in Scotland, she's got coaches from Delaware, University of Mount Olive; she is going to have 14 coaches that are going to be watching her while we are in Florida, and field hockey is her access to a further education, because I am not rich," she said. "So if we say no here, you are in reality limiting the potential of what he could have available to him."

Junior high field hockey coach Frances Stevens said she was "taken aback" when she was told by Athletic Director Thomas Lynch the league Mount View participates in has a "girls-only" rule and that Hayes' son would not be allowed to play. "Girls can play football," she said. "Why can't this boy play field hockey?"

"He would still go to practice, smiling, ready to play," Stevens said. "He was more ready to play than some of my girls were. ..."

Previous discussions concerned where boys would change in preparation for games and also the idea that for every boy playing field hockey, a girl will not be playing.

Addressing those concerns, Stevens said "for changing purposes, they all change in their separate locker rooms. It is the same across the board for practices or games. If they are not comfortable with who's in the locker room, they come up to me and ask if they can change in the bathroom."

As for playing time, Stevens said, "If they want to play, they play. If they tell me, I want to go in, I will do everything in my power to put them in. I don't see how a male can make it so people don't get to play, don't have as much fun. I think it's important

that he (the Hayes boy) plays."

Brown said since the previous board meeting, he has received an email from the president of the Central Maine League, who requested the topic be put on the agenda for their next meeting, which is in March. "They will discuss it as a league, rather than a bunch of separate emails," he said.

Board member Terri Church said a "logical first step" would be to draft a letter saying "our board supports this and we would like to see that changed."

Director Jesse Hargrove asked Hayes pointedly, "What happens after middle school? We don't have an integrated soccer or basketball (team), and I'm assuming it is because of the physicality. I'm assuming the MPA rules is because of the physicality. So what happens to a male student who is involved in field hockey for three years and then there is no high school program?"

Hayes said the accommodation made in other states that have boys playing field hockey, such as Massachusetts, is the team is precluded from post-season play.

"That is the consequence if you play a boy on your team," she said. "You can make the choice to play a boy on your team, and teams are doing that. Numbers are pretty static ... I don't think the dynamic would shift measurably for a guy joining our team. I think the conversation needs to be had with the team. Are you OK with precluding post-season play?"

"... I want the dialogue to be why are we shutting off opportunities for kids. If a girl can wrestle, and a girl can play football, why can't we explore the concept of allowing a boy to play field hockey? If it goes horribly sideways and it turns into a giant nightmare, we can make adjustments going forward to make sure it stays appropriate for all, but to not explore it at all I feel is short-sighted."

HEARINGS, from page A1

Project Manager Ed Cotter refuted opposing testimony by going through originally submitted slides from past hearings and pointing out that there had been minimal changes to the company's application.

As 8 p.m. rolled around, the Planning Board moved into its public hearing on traffic. Nordic hired the James W. Sewall Co. to evaluate traffic during and after construction. Sewall Traffic Engineer Diane Morabito requested that the city ask the Maine Department of Transportation to lower the speed limit in the area to 40 mph because of construction and traffic.

Cotter said there could be up to 45 trucks at peak hours coming in and out of the property. There will be between 50 and 60 one-way traffic trips a day during development, averaging about one truck every 12 minutes.

Morabito found three high-crash areas near the development and suggested adding a right turn lane into Nordic's property so large trucks do not back up traffic. She looked at sight distances and found that sight lines in both directions are clear for more than 500 feet.

Cotter said construction will occur during the winter, so it should not interfere too much with summertime tourist traffic.

Intervenor Larry There was concerned that there is not enough of a sight line to have large trucks coming in and out of the property. Other speakers also voiced concerns about traffic, reduced tourism and lower property values during the construction.

The meeting ended the public hearing portion of Nordic's application review. Upstream Watch was to be allowed to speak at the Jan. 22 board meeting because the group did not get to rebut Cotter's earlier testimony.

The city is still accepting written comment at 131 Church St., or by email at public@cityofbelfast.org.

## CORRECTIONS

In the Jan. 16 edition of The Republican Journal, the story headlined "Nordic opponents mark one-year anniversary" inadvertently misquoted Joanne Moesswilde. The quote should have read, "There is no way Nordic Aquafarms can do any kind of conservation act that would undo the harm they will do to Belfast. ... There was talk of donating money to a conservation project to purchase the 84 acres of the upper reservoir. It will never make up for the terrible mess." The mistake resulted from a reporting error.

Also in the Jan. 16 edition, the guest column "Republican challenger in House District 98" should have given Jessica Connor's contact email as JessConnor@MaineHouse@gmail.com. The column was submitted with incorrect information.

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