

Subject: Islander East Opposition

Resent-From: Islandereast.Comments@noaa.gov

Date: Thu, 20 Nov 2003 16:52:07 +0000

From: robtcbuchanan@comcast.net

To: islandereast.comments@noaa.gov

Please support our CT DEP and deny Islander East's appeal.

The health of Long Island Sound, as an economic and recreational resource, is important to Connecticut. Any benefits of the Islander East pipeline are far outweighed by the environmental harm done to water quality, shellfish beds and coastal wetlands. Please uphold the decision by the CT DEP to deny Islander East Pipeline Company a "coastal consistency determination" under the Coastal Zone Management Act."

Regards,

Bob Buchanan
Branford, Connecticut

Viviane Briggs
William Briggs
278 Pine Orchard Road
Branford, CT 06405

November 20, 2003

To Whom It May Concern:

I am writing to ask that you uphold the decision by the Connecticut DEP to deny Islander East Pipeline Company a coastal consistency determination under the Coastal Zone Management Act. As a recreational fisherman/lobsterman, my husband is very concerned about the impact that the pipeline will have on the water quality and shellfish beds in Long Island Sound. As citizens, we are both concerned about the environmental harm that this project poses to not only the water quality and shellfish beds, but to the coastal wetlands and wildlife as well.

The risks involved in this project far outweigh any suggested benefits. Please deny Islander East's appeal.

Sincerely,

Viviane and Bill Briggs

Subject: Deny Islander East's appeal

Resent-From: Islandereast.Comments@noaa.gov

Date: Thu, 20 Nov 2003 17:29:52 +0000

From: astroguy67@comcast.net

To: IslanderEast.comments@noaa.gov

I care about Connecticut's environment and Long Island Sound. The current route of the Islander East Pipeline will do long-term environmental damage to Long Island Sound's water quality, shellfish beds and coastal wetlands. Since there is a less environmentally-damaging feasible route alternative, please do not allow Islander East to use their current "preferred" route. I wholeheartedly support the decision of the CT DEP to deny Islander East a "coastal consistency determination". Please deny Islander East's appeal.

James McKay
14 Whitewood Drive
Branford, CT

Subject: Islander East Comments

Resent-From: Islandereast.Comments@noaa.gov

Date: Thu, 20 Nov 2003 14:07:48 -0500

From: "c.lyons" <c.lyons@snet.net>

To: IslanderEast.comments@noaa.gov

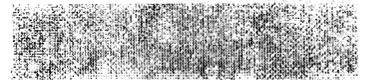
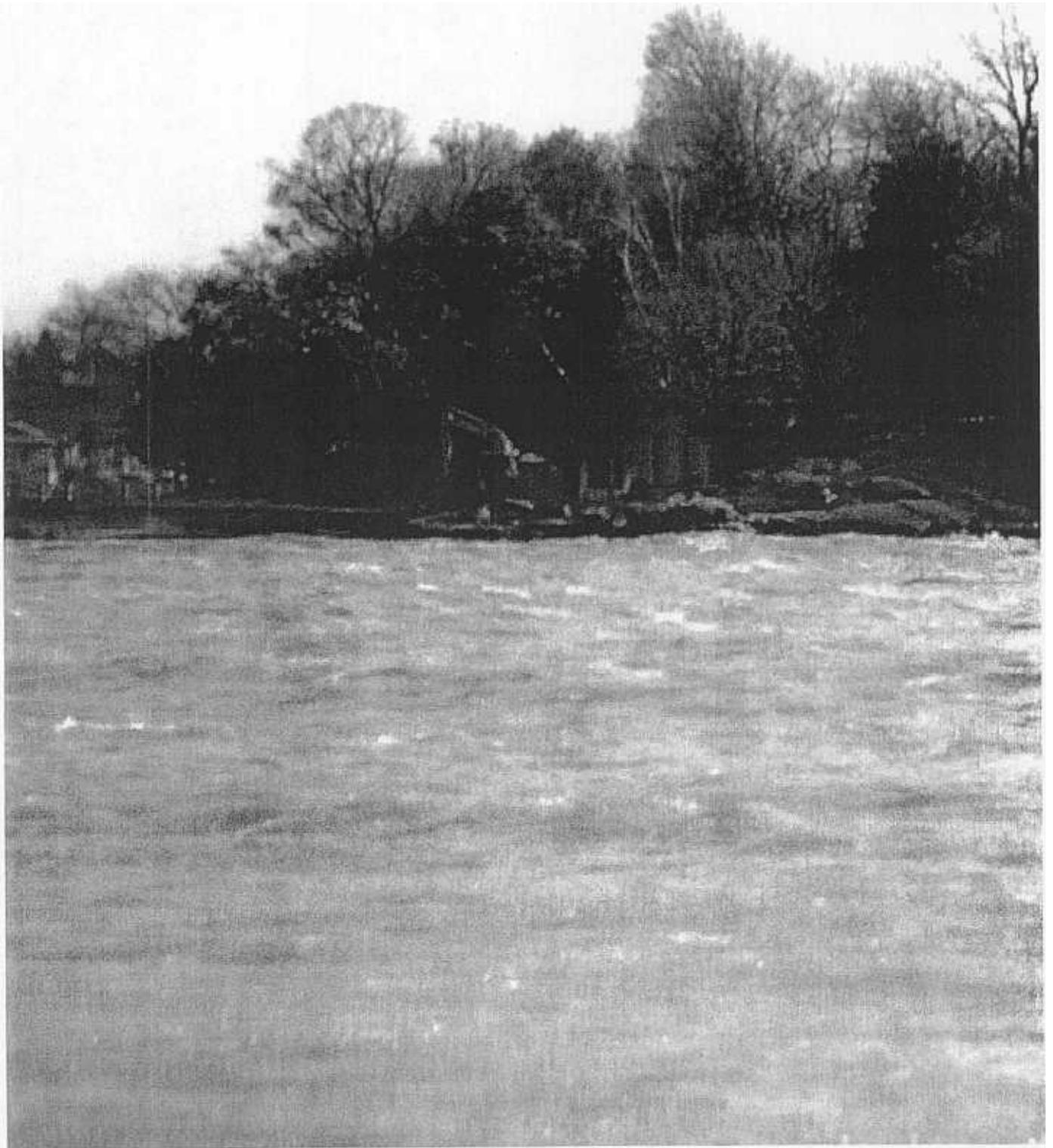
I care about Connecticut's environment and Long Island Sound. The current route for the Islander East Pipeline will do long-term environmental damage to Long Island Sound's water quality, shellfish beds and coastal wetlands. Since there is a less environmentally-damaging feasible route alternative, please do not allow Islander East to use their current "preferred" route. I urge the Connecticut DEP to deny Islander East's application for a permit to determine the route.

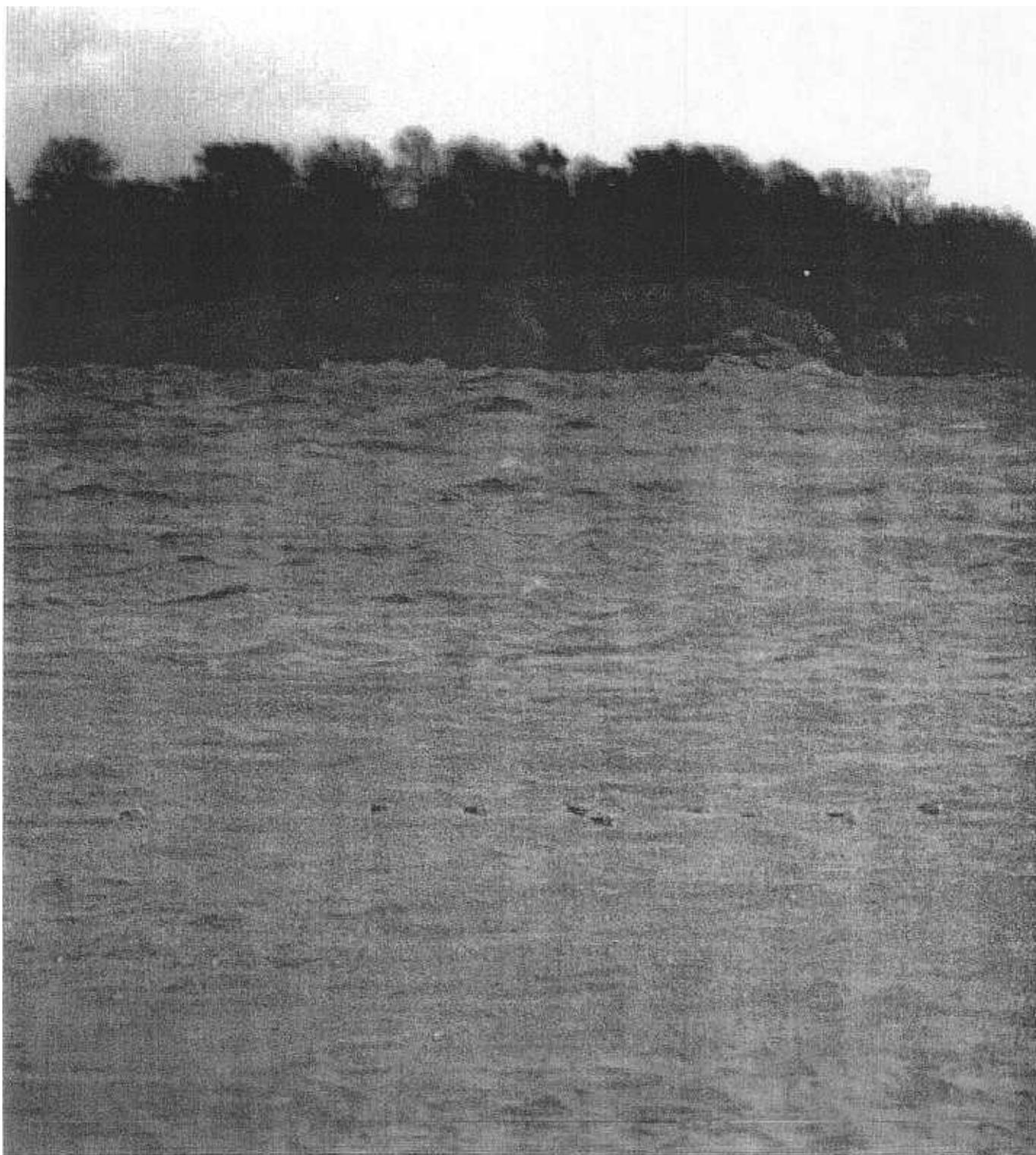
I attended the NOAA public hearing in New Haven but I chose not to speak. I decided not to speak because I believed that all of the key issues would be covered by those who signed up. As you know, over 100 people spoke out against this pipeline project. A few spoke out for the project with flimsy justifications. The opposition rings clearly in our community against this project. The presentations were comprehensive and eloquent. This is a project that has brought out many community leaders and experts. Please review their testimony very carefully. There is a strong message there.

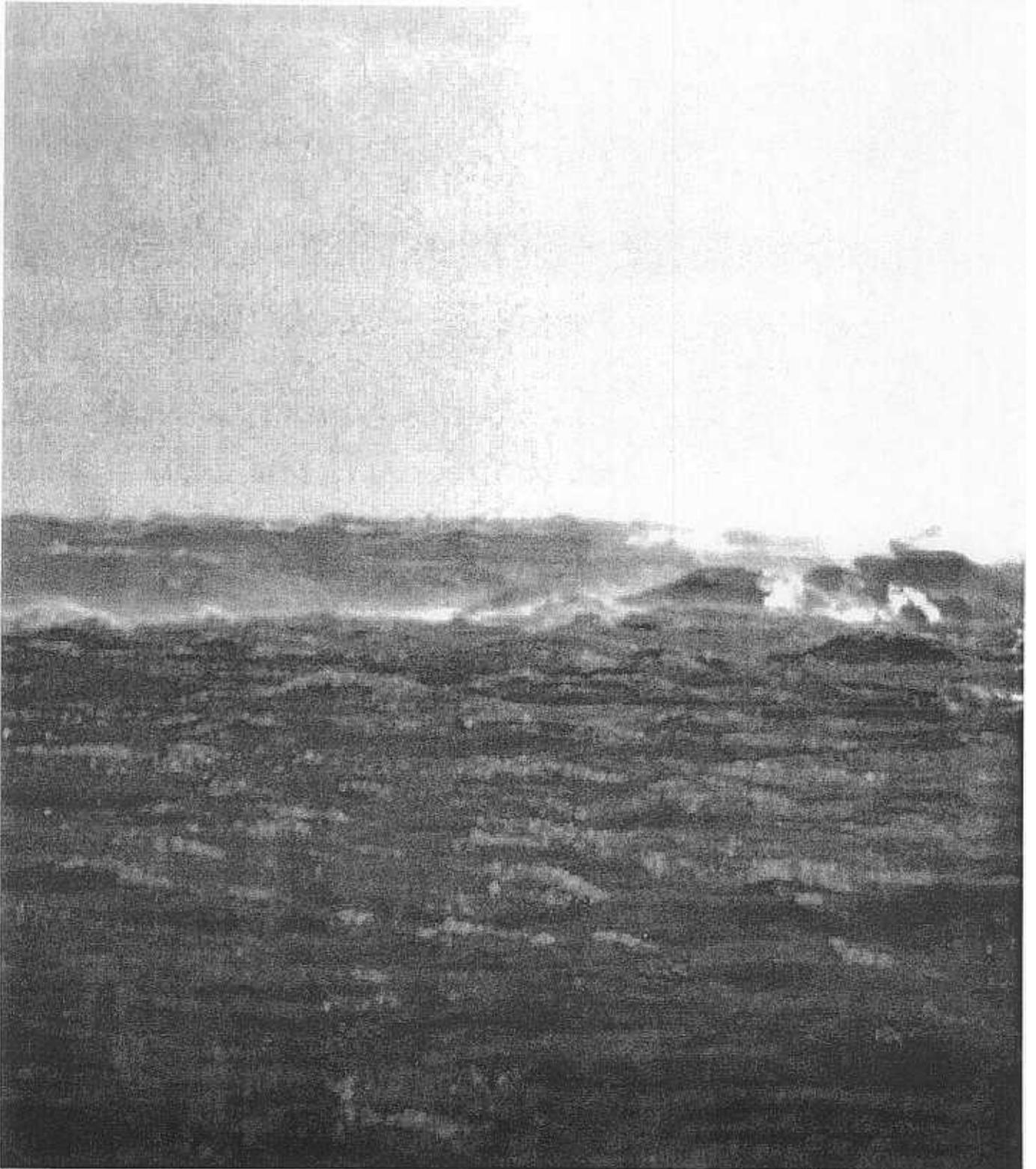
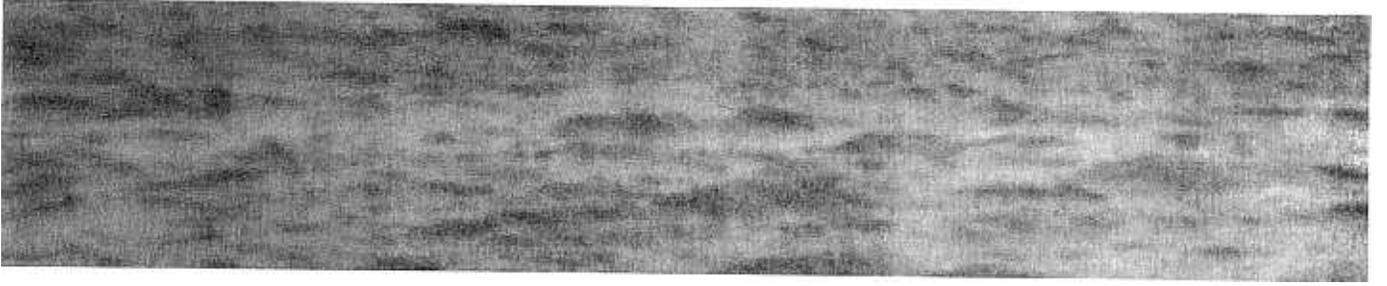
Photos of the area where the pipeline is planned are attached. I took these photos last Thursday when a Fall storm passed through the region. Islander East had plans to work during Fall months. The rough water you see would add significantly to the risk of such a project. The wind direction at the time of these photos was West Northwest. Some of the attached photos are also good examples of the uniqueness of Branford's coastline. All photos were taken on or near the projected path of the Islander East pipeline.

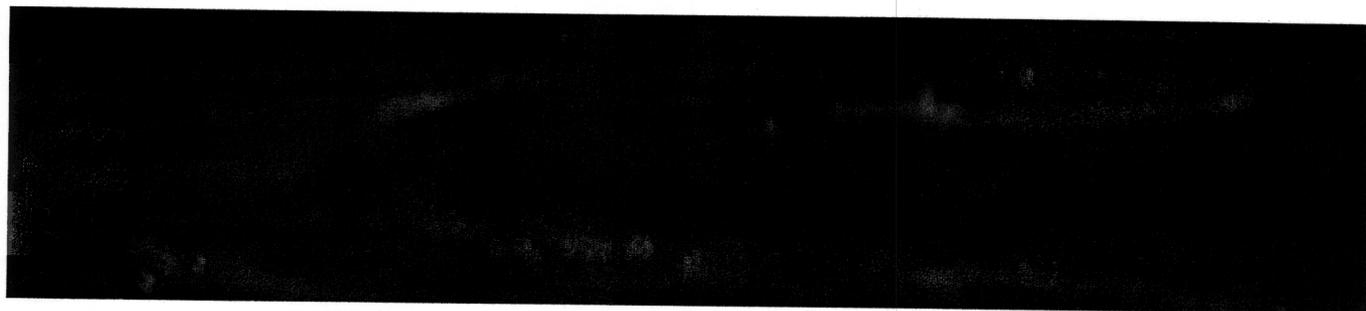
Please let me know if you need any more photos.
Chad M. Lyons
Branford, CT

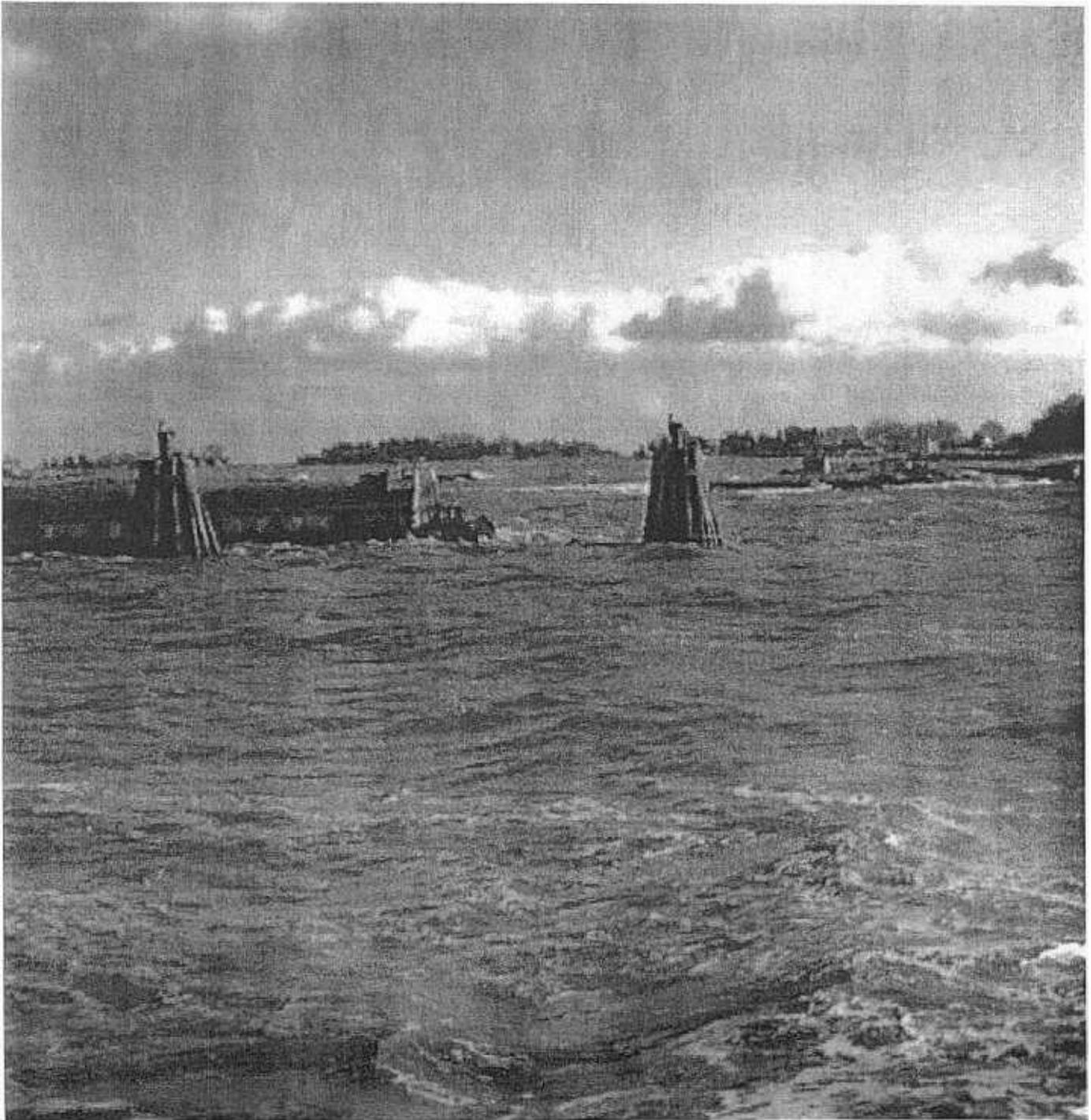
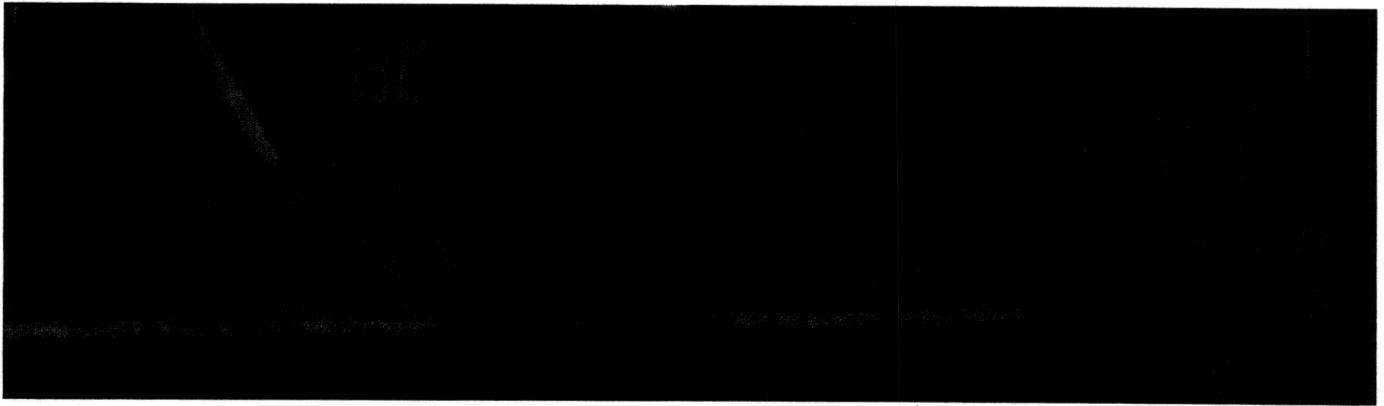
Chad M. Lyons
Branford, CT

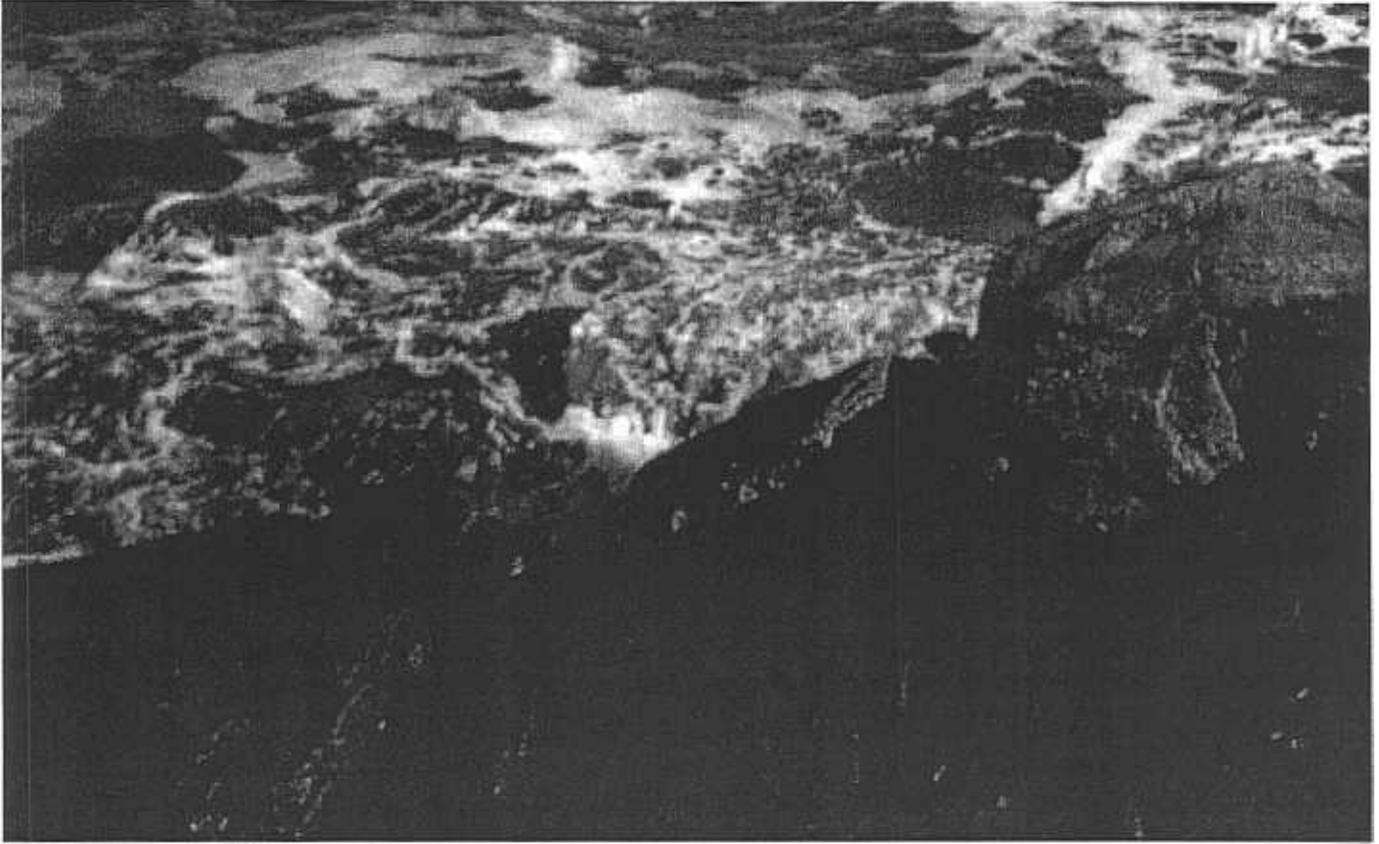


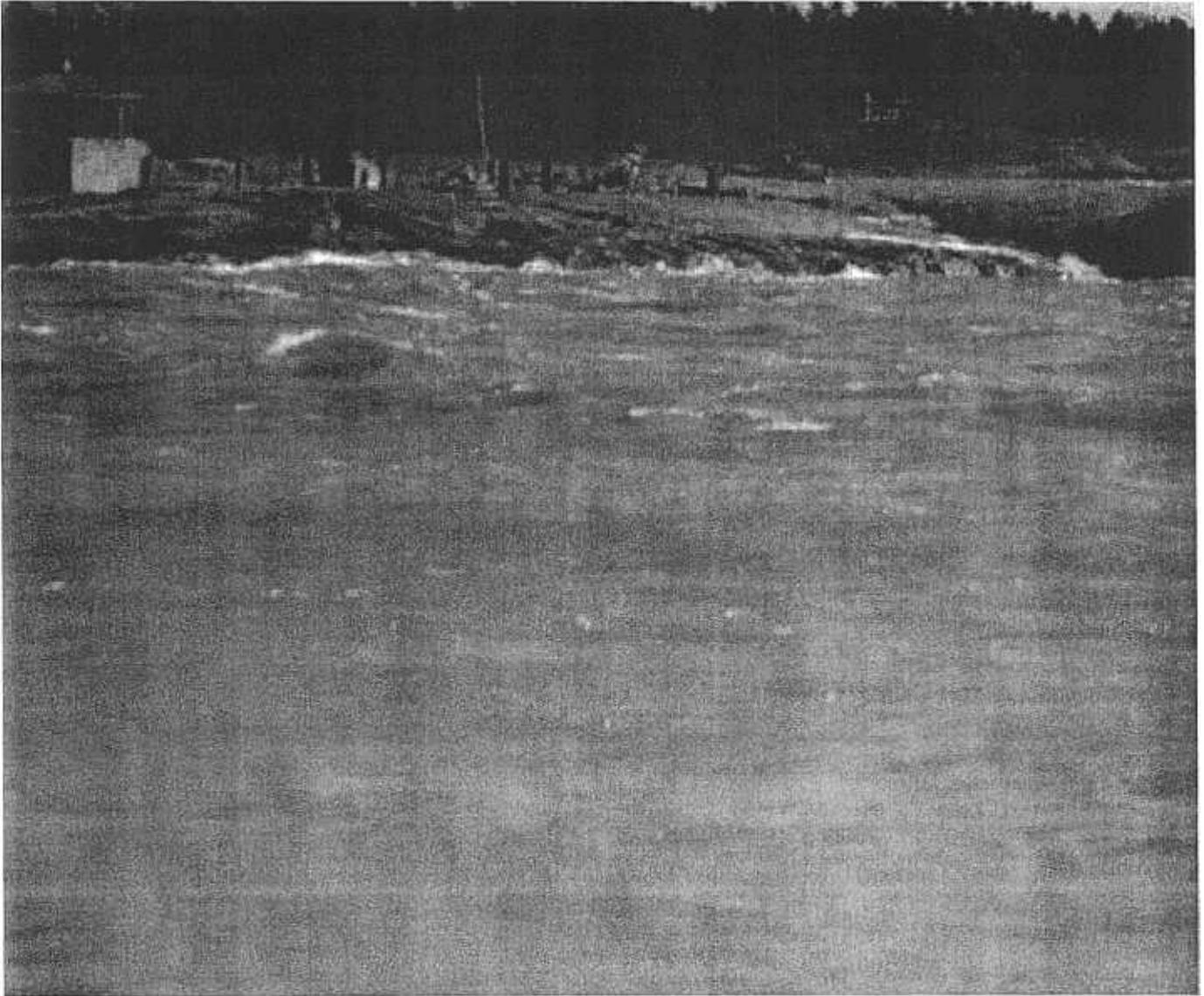




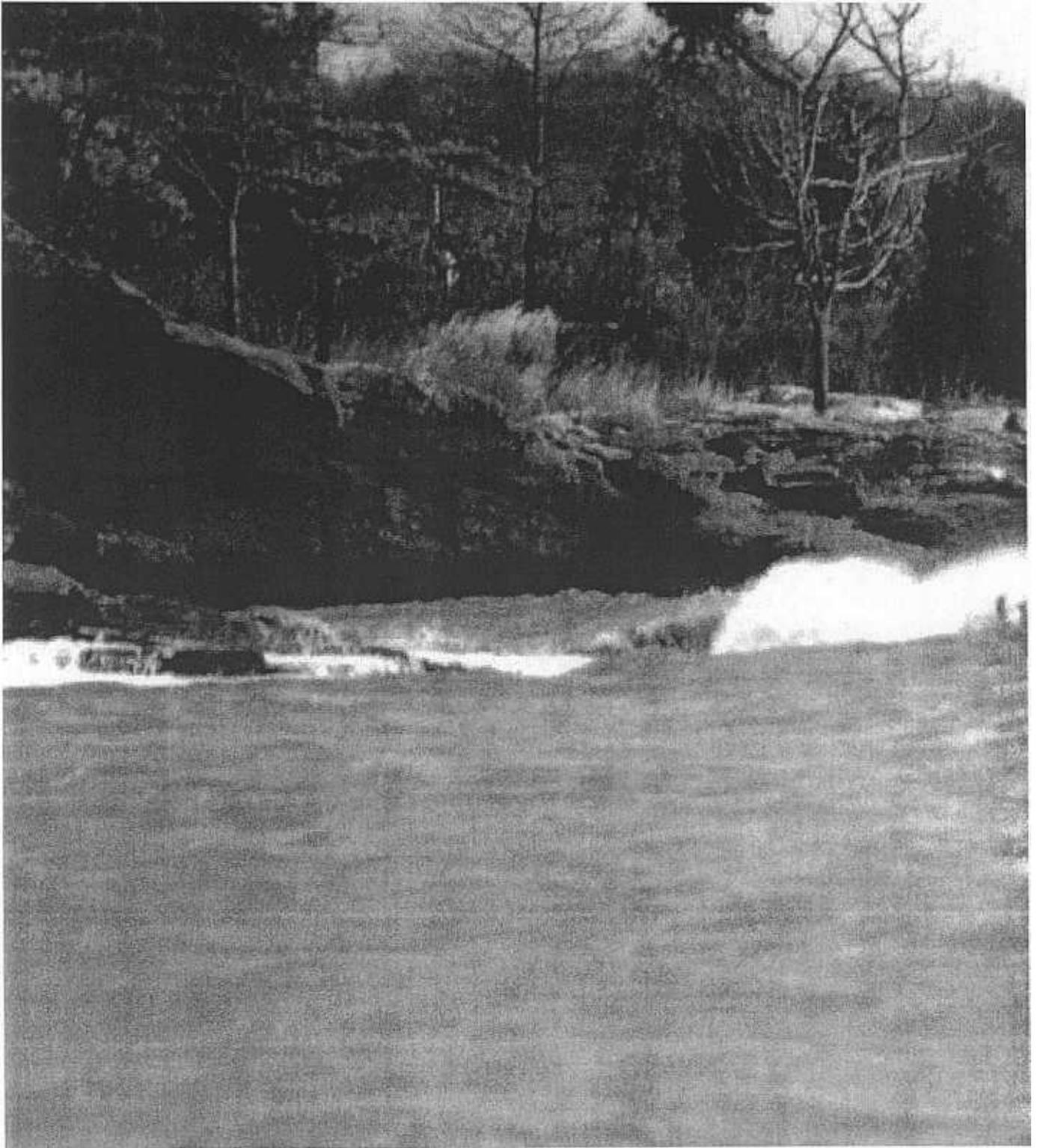


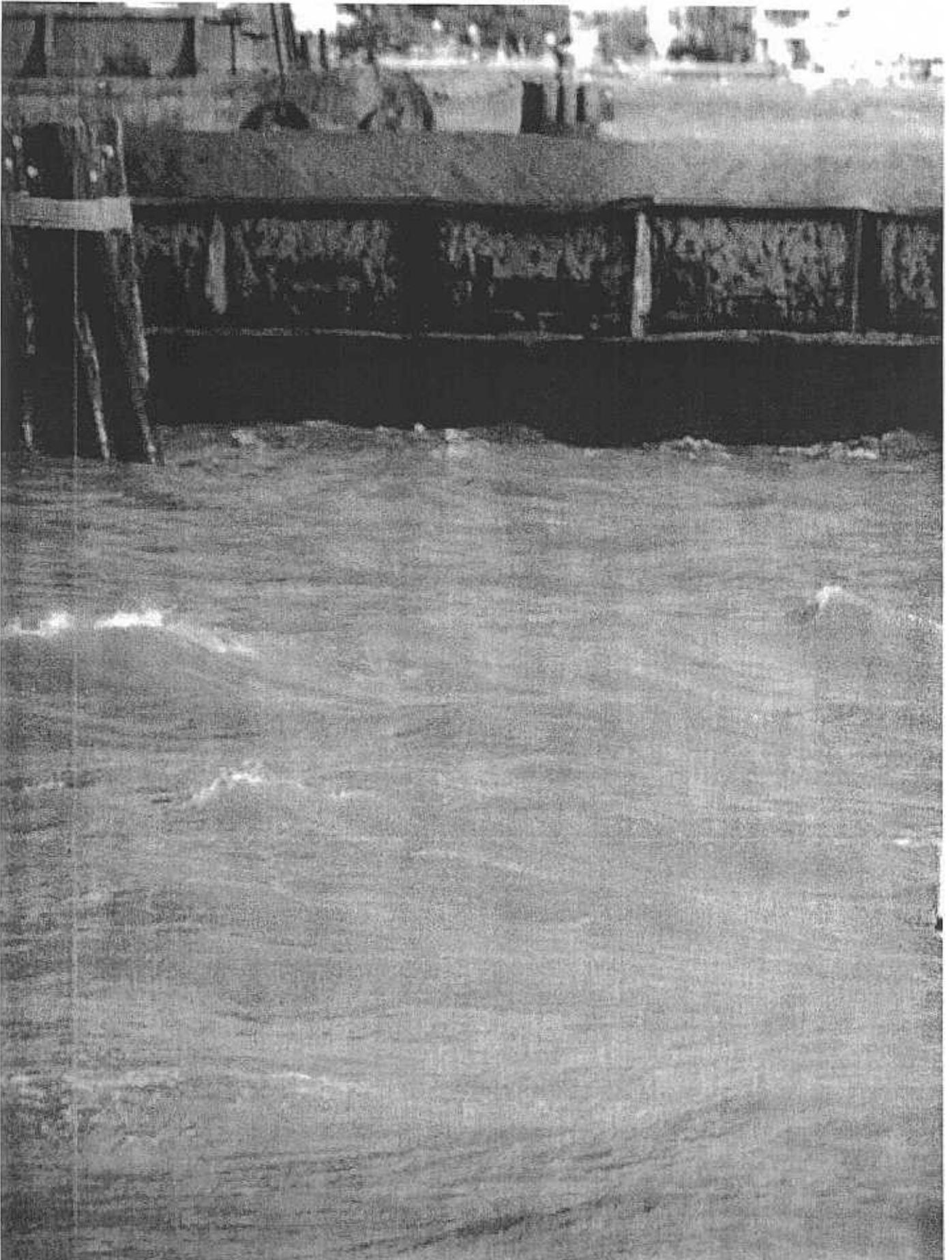














Subject: Save Branford's Coast and Wetlands!

Resent-From: Islandereast.Comments@noaa.gov

Date: Thu, 20 Nov 2003 15:27:56 -0500

From: "Lisa Thomas" <lisa.thomas@snet.net>

To: <IslanderEast.comments@noaa.gov>

I care about Connecticut's environment and Long Island Sound, and I am terribly concerned about my Town of Branford and preserving what's left of its pristine shoreline and wetlands. The current route of the Islander East Pipeline will do long-term environmental damage to Long Island Sound's water quality, shellfish beds and coastal wetlands. Since there is a less environmentally-damaging feasible route alternative, one can only surmise that it all comes down to economics. Theirs, not ours. Given the alternatives, the unilateral choice to run this pipeline through Branford is not only ludicrous, but avaricious.

Please do not allow Islander East to use their current "preferred" route which basically turns Branford into New York's welcome mat. I wholeheartedly support the decision of the CT DEP to deny Islander East a "coastal consistency determination".

Please deny Islander East's appeal. Thank you for your consideration.

Sincerely

Lisa M. Thomas
Branford, CT

Subject: The Pipeline & Our Village/Our Town & Democratic Accountability

Resent-From: Islandereast.Comments@noaa.gov

Date: Thu, 20 Nov 2003 16:26:27 -0500

From: Lawrence Lifschultz <lawrence.lifschultz@yale.edu>

To: IslanderEast.comments@noaa.gov

A Copy of Letter Mailed To NOAA

16 November 2003

General Counsel for Ocean Services
National Oceanic & Atmospheric Administration
1305 East-West Highway
Silver Spring, Md. 20910
Email: IslanderEast.comments@noaa.gov

Ref The Question of Islander East's Pipeline & Our Democratic Consensus

Dear Sir/Madame,

It is said we live in "democracy". We even go to war it is said these days to protect rights within this country. Yet, many of our citizens feel disenfranchised. They speak but feel they are not listened to. After great effort they persuade some key officials to look seriously at their concerns and yet higher authorities ignore the conclusions of those closest to the facts.

My family lives in the village of Stony Creek which is part of Branford. Our home is a few hundred yards from the proposed Islander East Pipeline. We know the area like the back of our hands. We have walked there. We have fished along the proposed route. We have gone swimming there. We know the environment where this company intends to route its pipeline. We are angry that institutions ignore evident facts that will cause irreparable damage to our community.

The Connecticut Department of Environmental Protection has been unequivocal about these facts. Yet, a commercial interest at variance with the public interest breaks the bounds of a democratic consensus and seeks to bulldoze its way through our village and town. Tom Paine reminded us we should have "Common Sense" and we should use it to fight for rational goals that benefit the "commonwealth". But, increasingly America has become a country where commercial imperatives prevail, even if they are irrational and are opposed by the citizenry they affect. Their only rationality is the financial profit of a distant few who will not be affected by the actions their company inflicts upon others. We are facing such instance in our small town.

In our village and in Branford of which our village is a part, I have never seen so many people so distressed by a single issue. Come walk our streets and talk to people? Why haven't you done this? Instead, we must come down to see you at the Omni Hotel or write to you in Maryland.

We appeal to you to listen to the heart of democracy and to use good sense. We appeal to you to acknowledge the facts about safety, environmental damage, and logical alternatives to this pipeline that stare us in the face. If we can see it and can understand it, why can't you?

Or, are you simply members of a distant and indifferent bureaucracy that is really part of the problem and not part of the solution to

this country's crisis? Clearly, your decision will answer this question.

Yours sincerely

Lawrence Lifschultz

P.O. Box 3056
Stony Creek, CT 06405

Subject: Testimony 11-5-03 NOAA

Resent-From: Islandereast.Comments@noaa.gov

Date: Thu, 20 Nov 2003 16:59:48 -0500

From: "Elizabeth M. Dock" <edock@sprintmail.com>

To: <IslanderEast.comments@noaa.gov>

Please include this in yours submitted public comments against the Islander East gas pipeline. Thank you.
E>M> Dock

My name is Elizabeth Dock, 249 Pleasant Point Road, Branford, CT. My home overlooks the land-to-water entry site of the pipeline. I believe that prevailing currents will bring sediments, including the drilling materials and heavy metals, directly into the healthy salt marshes of Long Creek. Those salt meadows, owned by the State, the Town, Tilcon and the Branford Land Trust, provide productive breeding sites for fish and shellfish of the Sound. I am a co-owner of an adjacent sand beach which will be similarly degraded. Active commercial harvesting of shellfish in the proposed pipeline area is visible from my home and the known damage, if we learn from the Milford site, will render those sites unusable for years. Connecticut is justifiably proud of its shell fishing production and to allow an unproven drilling project, that could be located at the alternative site in Milford, to tunnel under and through these beds, would create an unacceptable risk to the health of the local shell fishing industry. Those beds are owned by the Town and leased out. And, we citizens are shocked at reports of "buyoffs" of the watermen by Islander East.

At previous hearings on this pipeline, we have heard scores of experts from Yale, Wesleyan, UConn, the Connecticut Department of Environmental Protection (including its head), and our elected officials, both from local and state level, testify that the pipeline would be environmentally damaging. The private sector has also weighed in with virtually unanimous opposition, making it clear that a comprehensive plan to control and consolidate pipeline crossings is desperately needed for this fragile Sound. If this project is permitted, the fear is well warranted that a flood of applications for individual crossings will quickly follow, if no overall plan is in place for proactive control.

It is the prevailing belief of the citizens of the shoreline that this hearing is only for show, that NOAA will bend to the politics and bow to big business, that it will ignore the science, that it will ignore the State, that it will ignore *us*. Please prove us wrong. . The fact that a line item has been added to the Federal Energy bill before the legislature to bypass the NOAA decision is shocking. We fervently plea that NOAA protect our fragile Long Island Sound, stand firm and deny this project

Subject: Please DENY Islander East appeal

Resent-From: Islandereast.Comments@noaa.gov

Date: Thu, 20 Nov 2003 17:39:22 -0500

From: Catherine Jackson <cathjax@comcast.net>

To: <IslanderEast.comments@noaa.gov>

As Connecticut residents we are extremely concerned about preserving the health of our Long Island Sound, both for economic and recreational reasons

Certainly all citizens need access to adequate power, but it is our responsibility to guard against wasting the precious resources left in this highly developed and industrialized corner of the country. For our future and for our children's future.

Any benefits of the Islander East pipeline are far outweighed by the environmental harm done to water quality, shellfish beds and coastal wetlands.

Please uphold the decision by the CT DEP to deny Islander East Pipeline Company a "coastal consistency determination" under the Coastal Zone Management Act.

Sincerely,

Catherine and Peter Jackson
54 Killam's Point
Branford CT 06405
203-481-9385

Subject: Proposed Islander East Pipeline/Ct DEP determination

Resent-From: Islandereast.Comments@noaa.gov

Date: Thu, 20 Nov 2003 17:54:17 -0500

From: "Charles E. Tiernan,III" <CTiernan@LTKE.com>

To: <IslanderEast.comments@noaa.gov>

CC: <KKennedyMD@aol.com>

Dear Sir/Madam:

As a lifelong resident of Branford, CT I care deeply about its environmentally fragile areas and the health of Long Island Sound. The proposed pipeline would do irreparable harm to both.

It is obvious that there is a less environmentally damaging route which presents a feasible

alternative to the proposed pipeline. The decision of the CT DEP is both thoughtful and well reasoned. It is clear that the alleged benefit of the proposed pipeline is far outweighed by the harm that will result environmentally to the water quality, shellfish beds, fishing areas and coastal wetlands. In short, it just does not make sense. I support the decision of the CT DEP
And would respectfully request that Islander East's appeal be denied.

Very truly yours

Charles E. Tiernan, III

Subject: Opposition to Islander East Pipeline

Resent-From: Islandereast.Comments@noaa.gov

Date: Thu, 20 Nov 2003 19:26:42 -0500

From: Sandra Reiners <sandra.reiners@comcast.net>

To: IslanderEast.comments@noaa.gov

I support our Connecticut DEP and urge you to do so by not permitting Islander East to build a gas pipeline across the fragile oyster beds and coastline of Branford. There are other far more ecologically sound and economically feasible alternative routes which should take precedence over the one through Branford. The damage to the Sound, the beds and the fisheries are immense. This damage cannot be taken lightly by an organization such as yours.

Sincerely,
Sandra K. Reiners
42 Stannard Ave.
Branford, CT 06405

Subject: Islander East in Connecticut
Resent-From: Islandereast.Comments@noaa.gov
Date: Thu, 20 Nov 2003 20:21:19 -0500
From: "Kelly Brownell" <kelly.brownell@yale.edu>
To: <IslanderEast.comments@noaa.gov>

Dear NOAA Committee,

I write in hopes that you will support the position of the Connecticut Department of Environmental Protection and deny Islander East's request to lay a gas pipeline through Branford, Connecticut into Long Island Sound.

I object to this pipeline on the grounds that:

- 1) It poses a significant environmental hazard, seeing that it passes close to a school, past railroad tracks that could undermine its integrity, and moves through shellfish beds and other environmentally fragile parts of Long Island Sound that stand to suffer by the construction of the pipeline, much less any accident that may occur later.
- 2) State and federal officials have declared that a less environmentally hazardous site is available and should be used.
- 3) The limited liability nature of Islander East places Connecticut residents at risk of having little recourse should some catastrophe occur.
- 4) All local officials, our elected state representatives, our state Attorney General (Richard Blumenthal), our U.S. House Representative (Rosa DeLauro), and our two U.S. Senators (Joseph Lieberman and Christopher Dodd) are all opposed strongly to the pipeline. This suggests to me that the pipeline is a project fraught with danger.

Thank you for considering my input.

Kelly Brownell

Kelly D. Brownell, Ph.D.

Professor and Chair of Psychology

Professor of Epidemiology and Public Health

Director, Yale Center for Eating and Weight Disorders

Department of Psychology, Yale University

2 Hillhouse Avenue, Box 208205

New Haven, CT 06520-8205

203-432-7790, 203-432-7788 (fax)

kelly.brownell@yale.edu

Residence at 60 Island View Ave., Branford, CT

Subject: Fw: The Honorable Magalie Roman Salas, Secretary
Resent-From: Islandereast.Comments@noaa.gov
Date: Thu, 20 Nov 2003 21:49:09 -0500
From: "Lemmon" <lemmon@snet.net>
To: "Branden Blum" <IslanderEast.comments@noaa.gov>

Sent: Thursday, November 20, 2003 8:58 PM
Subject: The Honorable Magalie Roman Salas Secretary

>
>
>
> 20 November, 2003
>
> Mr.Branden Blum
> Senior Counselor
> Office of the General counsel for Ocean Services
> National Oceanic and Atmospheric Administration
> U.S. Department of Commerce
> 1305 East-West Highway,
> Silver Spring, MD 20910
>
> Dear Mr. Brandon:
>
> Attached are letters to various state and federal officials giving data
> about the damage the proposed gas pipeline that Islander East is trying to
> put in Branford, CT and under Long Island Sound. Although they are
> addressed to other officials they contain information that may be
important
> in your final decision.
>
> Please deny this appeal, and insist that Islander East use a less damaging
> alternate route or method (liquid natural gas) to transport natural gas to
> Long Island, if and when there is a market for it.
>
> Carol R. Lemmon
> 12 Coachman Drive
> Branford, CT. 06405
> 203-488-7813
>
>
>

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15 May 2002

Mr Paul Aresta
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

RE: **Docket No. 221** - Islander East Pipeline Project and Algonquin Gas
Transmission Company

Analysis of FERC's Draft Environmental Impact Statement

Please accept this analysis of the Draft Environmental Impact Statement (DEIS) for the proposed gas transmission pipeline described in the application by Islander East, LLC.

I am a Duly Authorized Inland Wetlands and Watercourses Commissioner in the Town of Branford. In addition, (for my credentials, but not speaking for), I am employed as the Deputy State Entomologist at the Connecticut Agricultural Experiment Station and am currently vice president of the Connecticut Botanical Society, former treasurer and 30 year member of the New Haven Bird Club, board member of the CT Ornithological Association, president and co-founder of the CT Butterfly Association, which additionally supports the preservation of dragonflies, member of the CT Herpetological League, member of the State of Connecticut Invasive Plant Work Group, member of Citizens of Branford's Environment, and advisor to The Branford Land Trust.

My analysis of the DEIS lies only in the scope of my expertise; I will leave engineering and other analysis to my colleagues.

My analysis of this DEIS is based on **Section 1-2, PURPOSE AND SCOPE OF THIS STATEMENT**. The FERC document was to be prepared to comply with the requirements of the National Environmental Policy Act (NEPA). Within this section FERC states its four principal purposes in preparing this EIS are to:

- 1. Identify and assess potential impacts on the natural and human environment that would result from the implementation of the proposed project.**
- 2. Assess reasonable alternatives to the proposed action that would avoid or minimize adverse effects on the environment.**
- 3. Identify and recommend specific mitigation measures to minimize environmental impacts.**
- 4. Encourage and facilitate public involvement in identifying significant environmental impacts.**

The DEIS fails to meet any of the four principles for the reasons discussed below.

1. Identify and assess potential impacts on the natural and human environment that would result from the implementation of the proposed project.

FERC has failed wretchedly in this DEIS report concerning its first principal purpose. FERC has received a *Report and Recommendations by the Branford Blue Ribbon Commission* regarding the proposed Islander East Natural Gas Pipeline of the detrimental impact on the natural and human environment that would result from the implementation of the proposed project. In addition, FERC has received numerous letters and testimony from the Branford Land Trust, marine businesses that would be affected, and from citizens of our town. Descriptions of the destructive impacts on our towns' non-renewable wetlands, was submitted by scientists, the occurrence of state-listed nesting and migratory bird populations by a notable ornithologist, testimony of the permanent destruction of habitats and ecosystems by the proposed right-of-ways will have on this open space green corridor as well as data concerning our valuable shellfish, fishing and lobster beds have all been forwarded to FERC. Incredibly, the DEIS reports under Conclusions and Recommendations, that the Islander East Pipeline project would result in limited adverse environmental impacts based on all of the above mentioned reports and testimony and by two short, one day drive through visits that covered five Connecticut towns, and is labeled, unbelievably, as field investigations. FERC ignored this material, data and testimony from scientists, businesses, town officials, citizens, and the Branford Land Trust. With a few minor changes, the DEIS is essentially an official endorsement of Islander East's original application.

FERC reports, under environmental consequences (3.4.3.2), that the project would result in temporary and permanent alteration of wildlife habitat, as well as direct impact on wildlife such as disturbance, displacement, or mortality. In addition, the less mobile species, such as small mammals, reptiles, and amphibians and bird nests located in the proposed right-of-way, could be destroyed by construction activities. Although written testimony was sent to FERC with data on species which nest there that are state listed, they chose to not to accept or verify this data, and made no substantial mitigation changes in the Islander East application. In fact, the staff concludes that approval of the proposed project with appropriate mitigating measures as recommended, would have limited adverse environmental impact. The DEIS report has failed to identify and protect state-listed Endangered, Threatened, and Species of Special Concern that utilize this open space wetlands and forested buffer corridor along the Tilcon railroad. How can an environmental impact statement possibly be written without an inventory of the plants, birds, mammals, amphibians and reptiles that occur, nest and breed there and make up the environment. There is no mention of vernal pools or the impact on its inhabitants. Changes in hydrology by opening the forest canopy can kill the plants and animals in wetlands. Nor was there any field investigation completed to determine if any of the 7 state listed vernal pool species occur here. I question the scientific merit of such a document and perhaps the credentials and qualifications of those writing it.

The DEIS failed to provide a plan of environmental mitigation that adequately protects these fragile ecosystems according to the standards set by the regulations of the Town of Branford's Inland Wetlands and Watercourse Agency (IWWA) and the State of Connecticut Department of Environmental Protection.

The DEIS has accepted and approved Islander East's Wetland Construction and Mitigation Procedures although they do not even meet FERC's standards (3.74 VI.D.5) for all forested wetlands affected). This DEIS also ignores the fact that in 1985, The Clean Water Act incorporated a law of "no net loss" of wetlands, which federal agencies have taken to mean no loss of acreage or of ecological function. The accumulative effects across the country of wetland losses alone over the past decade add to significant loss of habitat. Although the rate of wetland destruction has slowed, nearly 1.2 million acres were lost during the 10 years ending in 1995 as reported by the Department of Interior in 1997. (Associated Press Story September 1997 –"Rate of Destruction Slowing " by H. Josef Hebert, Associate Press Writer).

2. Assess reasonable alternatives to the proposed action that would avoid or minimize adverse effects on the environment.

I realize that the DEIS report was compiled in March and Iroquois Gas Transmission System filed a "Motion to Consolidate Proceedings and for Comparative Evidentiary Hearing" on 8 April 2002. I hope that this lack of information was the reason the DEIS report is so very **biased** toward the Islander East Proposal. Now that FERC has the Iroquois motion they can compare the merits of the two proposals. This comparison of reasonable alternatives that would avoid or minimize adverse effects on the environment for the final EIS is very important in the following ways:

- a. It is important that the applications be consolidated to determine whether either or both projects are needed.
- b. If they are mutually exclusive, which project will best provide the necessary service to the public with the least adverse impacts?
- c. Although the Iroquois project may move gas to Long Island a year later than Islander East, FERC must take into account that energy that will be available to Long Island, within a month, by the approved Cross Sound Cable Co. And that California has solved its energy problem with conservation measures. It should also be noted that on the 7th of May 2002 the Connecticut senate unanimously passed HB 5609 creating a one year moratorium and study of energy transmission projects crossing Long Island Sound. FERC should honor this moratorium, allowing studies to be determined how these energy projects will affect some of the finest shellfish beds on the east coast, as well as determine our energy needs and the environment cost to the citizens of Connecticut.
- d. FERC also needs to take into account the cumulative environment impact to Long Island Sound of multiple undersea projects.

f. **The Iroquois project is clearly a superior alternative to Islander East** as the crossing of Long Island Sound is 5.5 miles shorter and this project would avoid shellfish beds along the Connecticut coast.

3. Identify and recommend specific mitigation measures to minimize environmental impacts

FERC has been negligent in doing this with the Islander East project. There is a paucity of mitigation measures that differ from the original application. There are numerous small mitigation measures that are very important in the restoration of disturbed areas such as recommending native grasses, sedges and rushes to be planted in disturbed wetlands as opposed to rye grass. The DEIS does not even insist that the proposed Islander East project meet their own FERC standards in replanting forested wetlands. There are many ways to lessen the impact on rights-of-ways and construction. The DEIS appears to officially sanction the crossing of wetlands as opposed to uplands and the destruction of dedicated open space as opposed to disturbing a small section of a golf course where the original turf can be replaced daily as the pipeline gets laid. DEIS has ignored that fishing, lobstering and shellfish businesses may be more than temporarily disturbed, if contaminated soil settles in this area, perhaps killing invertebrates and smothering shellfish larvae.

In section 3.4.2.2, under Environmental consequences (3-60) the DEIS states that in order to minimize disturbances to the nesting birds, no routine vegetation maintenance clearing would occur between April 15th and August 1 of any year. There is no designated time frame in the DEIS to protect nesting birds, nursing mammals or other breeding, lactating and immature species by prohibiting the pipeline from being installed during April 15th to August 1. This oversight would compound the mortality of immature species of birds, mammals, reptiles, and amphibians as the nursing and immature young would be abandoned and be incapable of caring for themselves. This time frame is an absolute critical time for wildlife species in Connecticut. Most mammal species mate in February and have a gestation period of about 63 days. Both birds and mammals have immature offspring that are entirely dependent on the sustenance and protection of their parents during this time frame from April 15th to August 1st.

No construction work should be done in wetlands until late July, August and September, as they are drier and less susceptible to construction impacts.

4. Encourage and facilitate public involvement in identifying significant environmental impacts.

FERC can have further meetings with the town of Branford when all reports are in and before the final EIS is adopted. We should see and approve the final EIS before it is adopted as well as be part of planning and agreeing to the final mitigation measures

before any construction is started. FERC should inventory the species that will be impacted by any proposed gas pipeline project.

This DEIS report is premature, inadequate and incomplete

This report is missing many studies, reports and data, and it is unfair to the citizens of our town that they are not available before the FERC hearing in our Town of Branford on 8th of May 2002, so that we might comment on them. Missing are the offshore contaminated sediment report and sediment deposition and other reports that were to be turned in by Islander East. This DEIS has insufficient data and does not allow the public to read and question FERC about the impacts to our shellfish bed and fishing and lobster industry that may be contained in these reports.

When FERC makes statements that the destruction of our wetlands and open space habitats in the long run will be insignificant, I fully disagree. I find it deplorable that FERC finds no significant impact by the proposed project but then states that recovery of temporary workspaces may take 25 to 150 years. The DEIS is premature and incomplete and should not have been published until all data was in, so that a scientific evaluation could be made.

Very truly yours,

Carol R. Lemmon
12 Coachman Drive
Branford, CT 06405

203 488-7813

Biological Inventory of Branford Land Trust Holdings Adjacent to Tilcon Railroad, in Branford, CT

Carol Lemmon

Based on personal observations during several visits between July and Early November, 2001

4 November, 2001

Goss (NLV-194): The property is a classic example of the oak-hickory forest community that appears on the coastal plains in Connecticut and is an important habitat for our wildlife. This climax hardwood community has an overstory of co-dominant oaks and hickories. There are numerous large scarlet, chestnut, black, red and white oaks. Large hickories include pignut and mockernut. Other trees which are present include a nice beech clone, black birch, sassafras, tulip-tree, and ash. Additionally, there is an important diverse understory of herbaceous plants and woody shrubs such as mapleleaf viburnum and blueberries, both highbush and low, that provide food and shelter to wildlife. The oaks and hickories provide acorns and nuts, the major part of the hard mast crop of this community which serves as the principal food source for a variety of mammals such as fox, chipmunks, squirrels and other rodents, and for birds, such as wood ducks, wild turkeys, woodpeckers, pheasants, ruffed grouse, blue jays and thrashers. An important aspect of these communities is the slow decay of the leaf fall due to the tannic acids, creating a heavy leaf litter that provides food and shelter to small rodents, amphibians, insects and arthropods. These in turn provide food for larger mammals, hawks and owls. (2,3,4,10).

The route of the pipeline on the Goss property runs up and across an eastward facing slope, studded with many enormous boulders, that appears to be underlain by a continuous rocky ledge to the crest of the slope. At the base of the slope is a biologically diverse fresh water pond, approximately 210 feet in length and approximately 35 feet wide. Great blue and green herons, black ducks, mallards and egrets (both great and snowy) were observed using the pond. There is an abundance of aquatic plants, dragonfly and damselfly larvae, aquatic insects such back-skimmers and water striders, and green frogs. It most likely serves as a vernal pool in the spring.

This woodland preserve and the pond lie across the Tilcon railroad track from a large salt marsh. A fringe of forested habitat much improves the wildlife support function of salt marsh for wildlife such as fox, raccoon, and wetland birds such as the great blue herons that roost in upland trees. It also enhances the functions of the pond. A wooded buffer protects disturbance-sensitive wildlife from loud traffic noise and lights, as well as providing dens, cover, and food to those species that feed and breed in these green corridors and salt marshes tucked in between developed sterile suburban areas. Its

presence is particularly important here because the property on the other side of the Goss property from the marsh is a golf course, a relatively sterile open area, where pesticides and fertilizers are applied.

The following species of mature trees provide the overstory of this area of the Goss preserve:

Red Oak, *Quercus rubra*,
American Beech, *Fagus grandifolia*
White Ash, *Fraxinus americana*
Black Birch, *Betula lenta*
Eastern Hemlock, *Tsuga canadensis*
Chestnut Oak, *Quercus prinus*
Scarlet Oak, *Quercus coccinea*
Sassafras, *Sassafras albidum*
Tulip-tree, *Liriodendron tulipifera*
Mockernut Hickory, *Carya tomentosa*
Pignut Hickory, *Carya glabra*

The understory is composed largely of the following species:

Maple-leaf Viburnum, *Viburnum acerifolium*
American Chestnut, *Castanea dentata*
Low Blueberry, *Vaccinium spp.*
Highbush Blueberry, *Vaccinium corybosum*
Mountain Laurel, *Kalmia latifolia*
Christmas Fern, *Polystichum acrostichoides*
Spotted Wintergreen, *Chimaphila maculata*
False Solomon's Seal, *Smilacina racemosa*
Jack-in-the-Pulpit, *Arisaema atrorubens*
Horsebalm, *Collinsonia canadensis*
White Baneberry, *Actaea pachypoda*
Canada Mayflower *Maianthemum canadense*
Indian Pipe, *Monotropa uniflora*

Birds seen at pond,

Green Heron
Tree Swallow,
Mallard,
Great Egret (**Threatened**)
Snowy Egret (**Threatened**)
Great Blue Heron
Black Duck
Sharp-tailed Sparrow (across from pond) (**Species of Special Concern**)

Broadwinged Hawk

Birds seen or heard on location

Crows

Mockingbird

Catbird,

Pair of Red Shouldered Hawks (**Species of Special Concern**)

Turkey Vulture

Song Sparrow

Red Bellied Woodpecker

Blue Jay

Red-Tailed Hawk

Broad Tailed Hawk

Phoebe

Chickadees

Great Horned Owl

Cooper's Hawk (**Threatened**)

Birds seen in salt marsh across from Goss pond

Great Egret (**Threatened**)

Snowy Egret (**Threatened**)

Glossy Ibis (**Species of Special Concern**)

Sharp-tailed Sparrow (**Species of Special Concern**)

Least Bittern (seen frequently during migration) (8) (**Threatened**)

King Rail (mated with clapper rail; nested 2001) (8) (**Endangered**)

Marsh Wren, (8)

Migratory dragonflies in the vicinity of the Goss pond

Common Green Darner *Anax junius*

Canada Darner *Aeshna canadensis*

Lance-Tipped Darner *Aeshna constricta*

Ruby Meadow Hawk *Sympetrum* spp.

Mammals

Eastern Chipmunk

Gray Squirrel

Red Fox

Opossum

Coyote

Rabbit

Reptiles

Eastern Box Turtle *Terrapene c. carolina* (Species of Special Concern)

Anderson Wilcox (NHV-175, NHV-182): At the southern end of this preserve (NHV-182) is a significant red maple-tussock sedge swamp with a mixed shrub swamp border of alder, sweet pepper bush, winterberry, willows and standing water. Red maple swamps are significant habitats to wildlife, especially for nesting birds. More than 40 species of birds breed in red maple swamps including black ducks, wood ducks, catbirds, ovenbirds, and a variety of warblers. These swamps often contain vernal pools that are breeding sites for spotted salamanders and wood frogs, and foraging sites for larger mammals. A watercourse flows through a 24 inch culvert from red maple swamp on the west side of the railroad tracks and flows into and throughout this property, often flooding low lying areas. The vegetation of this red maple swamp indicates that in addition to seasonal flooding there is frequent standing water present causing organic matter to accumulate (Application to Siting Council, Appendix 6, 4.2.7.9 Wetland CT-A32 reports the organic material is 36" deep at this site.) This organic matter supports the mixed shrubs that form a layer surrounding and beneath the tree canopy of the red maples. These wetlands are highly dynamic ecosystems and a change in the hydrology can significantly alter changes in plant and animal populations, to the point of causing the wetland forest to die. (6,7).

Species present in the red maple swamp include:

Red Maple, *Acer rubrum*
Speckled Alder, *Alnus rugosa*
Winterberry, *Ilex verticillata*
Spicebush, *Linera benzoin*
Northern Arrowwood, *Viburnum recognitum*.
Willow, *Salix spp.*
Sweet Pepperbush, *Clethra alnifolia*
Poison Sumac, *Rhus vernix*
Spotted Jewelweed, *Impatiens capensis*
Skunk Cabbage, *Symplocarpus foetidus*
Tussock Sedge, *Carex stricta*
Cinnamon Fern, *Osmunda cinnamomea*
Interrupted Fern, *Osmunda claytoniana*
Common Reed, *Phragmites australis*

Birds seen within and north of the red maple swamp on Land Trust property

Song Sparrow
Yellow-rumped Warbler
Song Sparrow
Ruby-crowned Kinglet
Field Sparrow

Flicker
Phoebe
Brown-headed Cowbird
Northern Parula
Common Yellow-throat
Starling
Blue Jay
Catbird
Bluebird
Junco
White-throated Sparrow
Tufted Titmouse
Brown Creeper
Carolina Wren
Mourning Dove

The wetland continues along the railroad track to about 350 feet north of Route 146, (NHV 175) here it narrows to about 25 feet from the track and the land rises into an oak hickory forest community. At approximately 500 feet, rock out cropping and ledges become obvious. Mountain laurel, witch hazel and viburnums become prominent in the understory. At approximately 700 feet north of route 146, the land rises abruptly into large boulders and nearly solid ledges for approximately 100 feet or more, then along the railroad track at 900 feet, it becomes a large wetland basin with a watercourse that is draining from the north and crosses at about at this point to the west side of the track where it wends its way through a large red maple swamp, south, to cross back, under the tracks to the east at NHV 182, as described earlier in this report. The wetland basin is low and saturated, seasonally flooded, with skunk cabbage, royal fern, alder and winterberry. The wetland is about 50 feet wide and rises to an oak-hickory forest dominated with beech. At approximately 1200 feet the watercourse frequently overflows in a low basin creating saturated soil, and supports obligate wetland plant species such as skunk cabbage, and royal fern. This low-lying wetland swamp basin is typical habitat throughout the next 600 feet to the end of property NHV 175. The basin is about 40 to fifty feet wide and the property rises to an oak hickory community.

Gould Lane (NHV-169) (visited on November 2 and 3, 2001): The property consists mostly of a forested swamp between I-95 and three houses on Gould Lane. A kidney-shaped pond approximately 400 feet long by 250 feet wide at its widest point lies between the houses and the Tilcon track. The pond is buffered from Interstate-95 by approximately 200 feet of oak-hickory forest on the north side. On the west and south, a dense thicket of trees and shrubs, 10 to 25 feet wide and interspersed by occasional short stretches of herbaceous border, edges the pond. The area between the track and the trees and shrubs at the edge of the pond contains a sanitary sewer line and is regularly mowed. The proposed pipeline construction path encroaches on the western edge of the pond, removing the entire woody edge.

The pond and wetland provide habitat for ducks, birds and wetland edge animals, and storage and purification of storm water runoff. The pond has lily pads and emergent aquatic plants in the shallow areas. On two visits to the pond on November 2 and 3, 2001, 10 mallards and 13 Canada geese were in the pond. The mallards were actively feeding on the aquatic vegetation. Flocks of birds (Carolina wren, robins, song sparrows, white-throated sparrows, juncos, yellow-rumped warblers) were moving through the thickets, feeding on the abundant seeds and fruits provided by the trees and shrubs. Raccoon prints and coyote droppings were seen near the pond edge.

Within the 450 foot-long thicket on the west side of the pond there were 11 bird nests that were easily seen because of the leaf drop at this time of the year. One was the woven hanging nest of a Baltimore Oriole. Two nests were the distinctive flat, frail 12-inch open nests of interwoven twigs built by green herons. Eight other nests on the west side of the pond, built by unidentified species, were at various heights in the trees and shrubs. In a tree next to the north side of the pond was a large nest approximately 1.5 feet across constructed of heavy twigs. The wooded area around the pond, which provides an abundant food source, is clearly an important nesting area for a variety of birds. This area should be reexamined in the spring for nesting birds and other wildlife species. Disturbance of the narrow thicket on the west side of the pond, and the displacement of the birds that use it, should be avoided.

Species found along the edge of the pond:

Red Maple, *Acer rubrum*
Red Oak, *Quercus rubra*
Scarlet Oak, *Quercus coccinea*
Black Cherry, *Prunus serotina*
Crab Apple, *Pyrus spp.*
Red Cedar, *Juniperus virginiana*
Flowering Dogwood, *Cornus florida*
Winterberry, *Ilex verticillata*
Staghorn Sumac, *Rhus typhina*
Autumn Olive, *Eleagnus umbellata*
Willow, *Salix spp.*
Silky Dogwood, *Cornus amomum*
Red-osier Dogwood, *Cornus stolonifera*
Northern Arrowwood, *Viburnum recognitum*
Highbush Blueberry, *Vaccinium corybosum*
Burning bush, *Euonymus alatus*
Multiflora Rose, *Rosa multiflora*
Grape, *Vitis spp.*
Common Greenbriar, *Smilax rotundifolia*
Japanese Honeysuckle, *Lonicera japonica*
Asiatic Bittersweet, *Celastrus orbicularis*

Common Reed, *Phragmites australis*
Mugwort, *Artemisia spp.*
Goldenrods, *Solidago spp.*
Common mullein, *Verbascum thapsus*
Soft Rush, *Juncus effusus*
Tussock Sedge, *Carex stricta*
Sensitive Fern, *Onoclea sensibilis*
Marsh Fern, *Thelypteris palustris*

Impact of gas pipeline on biological value of Land Trust preserves

The Goss property (NHV-194) is an important oak-hickory community, while the south end of the Anderson-Wilcox property (NHV-182) is a significant red maple swamp. Both habitats complement each other and support many species of birds and other wildlife. **To permanently create a cleared 50 foot right of way through the center of these properties would destroy this currently sustainable, species-rich ecosystem.** These properties are components of a green buffer corridor, spanning the Tilcon quarry railroad, that consists of complex ecosystems that sustain large numbers of flora and fauna that utilize these refuges for food and shelter, for breeding, as over-wintering grounds and as refueling migratory stop-overs. These forest buffers are often not more than 250 to 500 feet wide. A 50-foot right of way across the slope of the Goss property, by reducing and fragmenting the buffer, would reduce its value to the wildlife using it for nesting and for shelter. Studies indicate that the amount of wildlife in clear-cut stands have a direct relationship with the age of the clear-cut. Those of less than 10 years old have a lower abundance of wildlife species than older stands (11, 12). One of the major reasons that clear-cut stands are unsuitable for some wildlife is the absence of overstory trees and snags. These clear-cuts are not used by birds that need to mark territory by singing, cavity nesters, and there is a major loss of food and shelter. Small mammals that utilize forested canopies for food and nests are in lower numbers in clear cuts (5,9,10,13). These smaller rodents and birds are low on the food chain that supports larger species that feed on them.

A maintained clear-cut right-of-way throughout this property will lower its diversity and affect the aesthetic value to those people who use walk the trails on this property to enjoy the troves of infinite beauty and variety that occurs there.

In conclusion, the preservation of coastal open space is especially important for the migrating species, which use it for refueling before long migrations south, and as a stopover and food source for exhausted birds on the way north (1), making each preserve even more important than it would be inland. Oak-hickory forests are important woodlands and support many species of wildlife, providing high quality nutrition for a relatively small outlay of foraging energy. These green corridors provide a way for wildlife to move from one area of open space to another and these woodlands offer food and shelter. Our coastal region supports the largest human population in Connecticut and the limited amount of preserved open space is fragmented and tucked between

developments. Each preserve is more important, therefore, than a similarly sized area in a less highly developed area. These protected refuge corridors are lynchpins linking together communities of ecosystems that sustain our wildlife.

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1 November 2001

Mr. Danny Shapiro, Chair
Blue Ribbon Commission
Branford Town Hall
Branford, CT.06405

Re: Islander East Pipeline Company

Dear Chairman Shapiro,

Please accept this analysis of the environmental impact of the gas transmission pipeline described in the application by Islander East, LLC, to the Connecticut Siting Council. I have performed this analysis as a Duly Authorized Inland Wetlands and Water Courses Commissioner in the Town of Branford.

In addition, I am employed as the Deputy State Entomologist at the Connecticut Agricultural Experiment Station and am currently vice president of the Connecticut Botanical Society, former treasurer and 30 year member of the New Haven Bird Club, board member of the CT Ornithological Association, vice-president and co-founder of the CT Butterfly Association, which additionally supports the preservation of dragonflies, member of the CT Herpetological League, member of the State of Connecticut Invasive Plant Work Group, member of Citizens of Branford's Environment, and advisor to The Branford Land Trust.

The Inland Wetland and Watercourses Agency in the Town of Branford is mandated by the State of Connecticut General Statutes (Sec 22a-45c) to "make provisions for the protection, preservation and maintenance of inland wetlands and watercourses with the highest standards set by federal, state or local authority, preventing the loss of fish and other beneficial aquatic organisms, wildlife and vegetation and the destruction of the natural habitats thereof. Our Inland wetland regulations are based on a model provided by the general statutes that follows:"

The State of Connecticut Inland Wetland Statutes. Sec. 22a-36 , :

"Inland wetlands and watercourses. Legislative finding. The inland wetlands and watercourses of the state of Connecticut are an indispensable and irreplaceable but fragile natural resource with which the citizens of the state have been endowed. The wetlands and watercourses are an interrelated web of nature essential to an adequate supply of surface and underground water; to hydrological stability and control of flooding and erosion, to the recharging and purification of groundwater, and to the existence of many forms of animal, aquatic and plant life. Many inland wetlands and watercourses have been destroyed or are in danger of destruction because of unregulated use by reason of the deposition, filling or removal of material, the diversion or obstruction of water flow, the erection of structures and other uses, all of which have despoiled, polluted and eliminated wetlands and watercourses. Such unregulated activity has had, and will continue to have, a significant adverse impact on the environment and ecology of the state of Connecticut and has and will continue to imperil the quality of the environment thus adversely affecting the ecological, scenic, historic, and recreational values and benefits of the state for its citizens now and forever more."

Disregard for Branford's Inland Wetlands Regulations.

Islander East's application to FERC displays a blatant disregard for our town's natural resources, especially our non-renewable inland wetlands. The objectionable features include, but are not limited to:

- a. a failure to provide a plan of environmental mitigation that adequately protects these fragile ecosystems according to the standards set by the regulations of the

Town of Branford's Inland Wetlands and Watercourse Agency (IWWA) and the State of Connecticut Department of Environmental Protection.

- b. a failure to identify and protect state-listed Endangered, Threatened, and Species of Special Concern that utilize this open space wetlands and forested buffer corridor along the Tilcon railroad for food, shelter and nesting, as an overwintering site, and as a valuable coastal refuge for migratory birds, butterflies and dragonflies..
- c. a failure to provide for "no net loss policy of inland wetlands" as required by federal, state and town inland wetland regulations.
- d. a failure to provide the IWWA with the required 2-foot contour interval maps with designated wetland delineation marker flags so that the Inland Wetland Commission may conduct a thorough evaluation of the potential damage to the wetlands.
- e. a failure to provide an environmental impact study to the Town of Branford, the Conservation Commission and to the IWWA that would allow these agencies to determine the extent of environmental impingement of our wetlands, wildlife and other natural resources.
- f. a failure to consider sufficient alternate routes to, or variations within, the Tilcon railroad corridor.
- g. a failure to consider feasible and prudent alternatives to the permanent destruction of inland wetlands and upland ledges and preserved open space.
- h. failure to consider the Town of Branford's Inland Wetland Regulations' standards concerning impacts to wetlands, avoidance of wetlands, no net loss, feasible and prudent alternatives, 2 to 1 wetland compensation for wetland disturbances and best management practices.

An appeal was made to Islander East's representatives, by me, at the end of a public hearing held by the Town's Blue Ribbon Committee (10 October, 2001) to comply with the Town of Branford's Inland Wetland Regulations, which are based on the CT Department of Environmental Protections Model (please see attached copy). In addition, I asked them to work with the Inland Wetland Commission to find alternatives to lessen the impact of their proposals. Islander East has failed to improve or to offer mitigation for wetland crossings that would permanently alter and perhaps destroy the dynamic functions of these ecosystems.

The proposed route along the Tilcon railroad line criss-crosses the rail line, avoiding uplands and ledges and keeping the pipeline purposefully in the wetlands. No justification for this practice has been given and no feasible and prudent alternatives were forthcoming from Islander East, despite numerous complaints about the proposed destruction of wetlands and vernal pools.

The following are three particularly egregious examples of unacceptable pipeline crossings that would destroy high quality fragile wetland ecosystems consisting of wetland shrub swamps, vernal pools and forested wetlands with flowing watercourses.

1. A proposed wetland and vernal pool crossing occurs just north of Pleasant Point Road and east of the railroad tracks, in a large red maple-tupelo forested swamp (wetland A34). Numerous tree buttresses provide evidence of significant seasonal flooding and are often 2 to 3 feet in height. Sphagnum moss often occurs on the roots at this height, indicating long periods of standing water. Many large depressions contained gray-stained leaves that are indicative of vernal pools. The EPA considers vernal pools to be of such importance that individual permits are required from the Army Corps of Engineers "regardless of the size of the impact because of the significant wildlife functions provided by vernal pools". On the west side of the tracks, there is a wide (30-40 feet) grassy strip that borders the tracks with wooded upland to the north. This wooded area is not a wetland area and was not considered as a feasible and prudent alternative.
2. An unacceptable proposed wetland infringement is at the midpoint between Route 146 and Gould Lane, on the west side of the track. This wetland occurs adjacent to the

railroad track. On Sunday October 7, 2001, I observed pools of standing water more than 1.5 feet deep and flowing watercourses more than 1 foot deep within 25 feet of the track.

3. A third proposed wetland crossing that failed to consider a nearby alternate route is where the pipeline crosses Route 1 on the east side of the track, continues around the east side of building where Islander East has its offices and crosses the Branford River and a shrub swamp and a cattail marsh on the river's north side at the absolute widest point possible. An alternate route is to cross Route 1 on the west side of the track and go over a field and cross Branford River where there are no adjoining wetlands.

This application indicates crossings of other wetlands that would also be severely impacted. However, these three examples of deliberate disregard for Branford's non-renewable wetland resources stand out because of the glaring feasible and prudent alternatives that can be utilized by merely crossing over the railroad tracks.

In many cases Islander East's proposal of a 40-foot open canopy corridor would totally eliminate some of the narrower wetlands that occur along the raised bed of the Tilcon railroad. This raised quarry railroad bed was created in the early 1900's and has created a viable functioning wetland ecosystem in these low depressions within the last 90 or more years. Islander East proposes a 10-foot wide herbaceous strip in the wetlands and watercourses. In addition, they propose to cut the wetland canopy 15' on either side of this border to stumps that would be allowed to grow into small shrubs. The wetland would be additionally disturbed and maintained by cutting any new growth every 3-4 years. This 40 foot open canopy with its 10-foot wide herbaceous strip would disrupt the hydrological functions of the wetland by increasing the soil temperature, enhancing evaporation and detrimentally impacting the plants and animals that currently occupy these shaded closed canopy wetlands and watercourses. This disturbance and additional light conditions would allow invasives species to take over, replacing the native flora and the wildlife that depend on them and reducing the overall biotic diversity.

The argument provided by Islander East for such a wide disturbed area is that it is necessary for routine surveillance of the pipeline. However, the US Department of Transportation Research and Special Programs Administration states in 49 CFR, 192.705, "Transmission lines: Patrolling: (c) Methods of patrolling include walking, driving, flying or other appropriate means of traversing the right-of-way." There are no regulations that stipulate the width of the pipeline right of way (ROW). A narrower ROW with a closed canopy, would be less intrusive upon the environment, especially if the pipe itself were 25 feet or less from the railroad track and the width of the cut area was restricted to about 5 feet immediately above.

II. Environmental impact on nesting birds and other wildlife species

The Islander East's application has failed to consider the impact on nesting birds and wildlife that breed within this green corridor that runs the length of the Tilcon tracks in Branford. This green corridor of uplands, ledges and wetlands is along a migratory route for species moving south for the winter and acts a stopover for exhausted northern migrants. On my visits of October 7th and October 25th, I saw the first of the great numbers of northern species that move into these refuges for the winter. There were flocks of hundreds of birds such as Northern juncos, White-throated sparrows, Brown creepers and Yellow-rumps. Species moving south were Phoebes, blue jays, flickers, Purple finches, Cooper's hawks, Red-shouldered hawks, Yellow-rumped warblers, Common Yellowthroats, Northern parulas and Yellow warblers. Because it is a coastal refuge, many of these migrants remain and feed in this area during mild winters. Other migrants moving south along the corridor included Monarch and Red Admiral butterflies and 4 species of

dragonflies. Local year-round species include chickadees, Tufted titmice, Hairy, Downy, and Red-bellied woodpeckers, and White-breasted nuthatches. Spring peepers, responding to the length of daylight that equaled that of their spring breeding season, were calling in great numbers in the wetlands. Turkeys, rabbits, gray squirrel, deer, fox, chipmunks, and coyotes have been observed in these green corridors and use them as a means to travel to other open space areas that are scattered among highly developed suburban and commercial surroundings.

The following list of species seen in this area was derived from:

1. twenty-three years of Christmas Bird Counts in the vicinity of Route 139
2. individual birding field trips by me,
3. personal communication from Dr. Noble Proctor, a 40 year Branford resident, Professor of Ornithology at Southern Connecticut State University, and author of numerous textbooks on ornithology and natural history.

Species of Special Concern American Kestrel Hawks, seen on many Christmas counts near the Tilcon RR corridor near route 139.

Great-Horned Owl seen on the Goss property, these owls are territorial and do not migrate, most likely nest here.

Screech Owls 2 pairs nested spring 2001, one south of the railroad track at Pleasant Point Road and 1 pair approximately 300 yards north of the tracks from route 146.

Species of special concern Red-Shouldered Hawk nested in spring of 2001 in the vicinity of the Tilcon tracks and Pleasant Point Road.

Species of Special Concern, Sharp-tailed Sparrow, 5 birds feeding a few yards north of the Goss property.

Species of Special Concern Glossy Ibis, flock of 12 or more feeding across from Goss property.

Species of Special Concern, Eastern Box Turtle, in uplands on the Goss property.

Threatened Species, Cooper Hawk, a pair nested south of Pleasant Point Road spring of 2001, frequently observed hunting.

Threatened Species, Snowy Egret, seen using pond at the Goss property.

Threatened Species, Great Egret, seen feed across from the Goss property.

Threatened Species, Least Bittern, seen yearly during migration in the salt marsh across from the Goss property.

Endangered Species, King Rail, nested 2001 seen in the salt marsh across from Goss property.

Cutting and maintaining a permanent 50' wide upland ROW within a narrow forested corridor would in fact be detrimental to many species of wildlife. Any possible benefits to certain species of wildlife would be quickly negated by the quick spread invasive species, creating a monoculture and replacing native food sources. The forested upland and inland wetland corridor that spans the Tilcon quarry tracks is often not more than 150 to 200 feet wide in places. Opening a 50 wide swath within this buffer would be detrimental to the wildlife that use it. Studies (Noss 1987; Harris and Gallagher 1989; Lacasse 1994) found that wooded corridors counter the effects of forest fragmentation (commercial and suburban development) by connecting isolated tracts. Small mammals, with limited dispersal ability, will particularly benefit by the protected wooded corridors (Noss 1983, Yahner 1983, Yahner 1995). Forested and wetland corridors maintain connections between populations of forest wildlife that would otherwise be isolated. Corridors may maintain interconnected populations (metapopulations) in the long term, mitigating the negative impacts of inbreeding or genetic drift (Harris 1984, Noss 1987, Bennett 1990, Henein and Merriman (1990). Protecting existing corridors, such as "greenbelts" or "landscape linkages" also adds aesthetic value to the landscape.

These species that live and breed within these wetland corridors, need to be protected. The *Inland Wetlands and Watercourses Regulations of the Town of Branford* and the Connecticut General Statutes that regulate impacts on inland wetland recognize that these ecosystems are essential " to the existence of many forms of animal, aquatic and plant life."

III. Scheduling of Pipeline Installation

Islander East states in its application to the Siting Council that it plans to clear the vegetation of a 50' corridor of uplands and a 40' corridor of inland wetlands during the wet spring season and during migration and nesting season. This would have an unacceptable impact on the affected upland and wetlands. The Branford Inland Wetland Commission often requires any Inland Wetland disturbance to be done in the month of August when there will be the least amount of damage to these fragile ecosystems.

Many people proposing development in wetlands choose July and August to determine wetland species. This is inadequate and not acceptable as it does not consider the spring ephemeral plant species nor the vernal pool salamanders and frogs of which seven species in Connecticut are Endangered, Threatened, or Species of Special Concern.

IV. Vernal Pools:

A publication by EPA New England titled *Vernal Pools and the Federal Wetlands Regulatory Program in New England* reports that " projects that will affect vernal pools are required to obtain an individual permit regardless of the size of impact because of the significant wildlife functions provided by vernal pools."

During the first heavy rainstorm in March, and occasionally as early as mid-February, frogs, salamanders and toads return to vernal pools to breed from the upland forest as far away as 800 yards. Many species of salamanders live to be 15 to 20 years old and return to the same site yearly. Maintaining undisturbed, unfragmented upland forests and undisturbed corridors adjacent to these vernal pools is necessary to support those obligate vernal pool species (Demaynadier and Hunter, 1996). Michael W. Klemens, Ph.D, in "The Proceedings of a Symposium on Vernal Pools in Connecticut", stated that "amphibians dependent on vernal pools are among the most imperiled species in our region."

There are several locations of vernal pools within the forested wetlands that the proposed pipeline crossing or its 40-foot wide-open canopy will severely impact. Islander East has failed to provide an environmental impact study or determine which species of salamanders, frogs or toads breed and develop there. The preservation of these pools, which often dry up in the summer months, is critical to the continued survival of these amphibians. Five species of salamanders and two species of frogs are state listed as either Endangered, Threatened or of Special Concern. Disturbance of these pools could change the fragile balance of microscopic algae and small invertebrate life cycle that these amphibians depend upon for development. The actual installation of a pipeline and/or maintaining an open canopy within a formerly shaded forest can change the hydrology and biology of the vernal pools by raising the temperature and by increasing the evaporation rate. These changes increase the frequency of years when the pools dry out before the larval stages mature to adults in mid-summer and return to the uplands to live and feed on small invertebrates in understory leaf litter.

Many species of migratory birds feed and breed in the areas around vernal pools. Mourning warblers, Yellow warblers and Wood ducks are a just a few of the bird species to utilize these habitats. The Red-shouldered hawk, state listed as Species of Special Concern, nested in mid-April 2001 in the vicinity of the vernal pool along the Tilcon tracks and Pleasant Point Road woodlands. These wooded swamps and vernal pool-areas provide a food supply of snakes, frogs and small birds to feed these hawks and their offspring.

V. Staging Areas and Trench Spoil:

All staging areas and temporary trench spoil areas should be located 100 feet from all wetlands and watercourses. No construction should be initiated until a properly designed soil erosion and sedimentation control plan is approved by the Branford IWWA and is in effect. I am quite concerned about the amount of trench subsoil that will be displaced by 4 miles of 24" pipe. The displacement of this subsoil is 3.14159 cubic feet per 1 linear foot of pipe. Multiply this by 21120 feet (four miles) and divide by 27 cubic feet (1 yard) and you end up with: 2457 yards of soil. To visualize this amount, an average size dump truck holds 15 yards of soil. Therefore, 163 dump trucks of sub-soil need to be removed from this property. Most of the property they have chosen to cross is inland wetlands, where no additional soil can be spread since that would be considered filling, which is illegal by state and town inland wetland regulations. Subsoil spread in uplands would destroy small animal and invertebrate habitat in forests. In ROWs, which are to be replanted, the subsoil would be substandard for the germination of native seed, and would be susceptible to erosion during rainstorms. There are similar concerns about the chipping of limbs of trees. Islander East suggests spreading or burying wood chips on the property. Decaying woodchips remove nitrogen from the soil. IE suggests liming and fertilizing ROWs. This would be detrimental to our native woody plants which like a poor soil and a low pH, and illegal in our wetlands.

VI. Non Native Planting:

All ROWs should be actively revegetated with native (to New England) grasses and wildflower seeds and they should plant native species of shrubs, so that there is no need to continuously cut the ROW. Studies show that a strong planting of native shrubbery and herbaceous grasses and forbs will out-compete invasive plant species (personal communication from Dr. Jeffery Ward, forester, at the Connecticut Agricultural Experiment Station).

Branford Inland Wetland Commission regulations state that all planted areas should have an 85% survival rate after five years. They must remove all invasive species during that time frame. Planting native shrubbery (viburnum, blueberry, hollies, mountain laurel, bayberry, etc.) will save time, money and there will not be a need to continually cut out trees to a level of 15 feet as these natives usually grow less than that. This planting plan could be used in wetlands as well. There are many wetland shrub species, such as sweet pepperbush, spicebush, upland blueberries, buttonbush, and winterberry that grow in hydrated wetland soils. This would preclude the need to continuously disturb the wetland by removing all trees above 15 feet.

VII. Construction time schedule:

There should be no cutting or construction between 1st March and 1st October. This will protect nesting owls and hawks, which nest late February through mid-April, and migratory birds, which are moving in and establishing nesting territories until about mid-May. This is the time vernal pools are being utilized, and the larvae and tadpoles don't mature until mid-summer. During this is time that mammals have their young. Many mammals mate in mid to late February and have a gestation period of about 63 days. They have their young about mid-April, and need to nurture their offspring until they are capable of caring for themselves, which is usually August or late September. Those rocky ledges provide den sites for coyotes, fox and skunks and opossums. Branford is so densely populated, 1000 people per square mile, that there is very little undisturbed open space for the survival of amphibians, birds, and mammals. Actually since this green buffer area is used as a migratory corridor, no construction should occur until after October. In really hydrated soils like the ones I sank up to my knees in, no work should be done except December to early February when the ground is frozen and the owls haven't yet nested. All cutting of trees to open canopy should be done when the ground is frozen to lessen impact of removal the cuttings.

VIII. Feasible and Prudent Alternatives

1. The number one feasible and prudent alternative is to find another route, ideally through Milford, as it is already an energy route that crosses Long Island Sound.
2. Drill under all sensitive ecosystems. If Islander East can propose to drill for more than 4,000 feet through granite to pass under the Tilcon shipping channel and some of the Town's oyster beds, then they can drill under wetlands. Wetlands sustain more life than almost any other ecosystem, including but not limited to rainforests. (Niering, 1991, Lisowski and Williams 1997). The continued existence of these assemblages of flora and fauna in densely populated coastal Connecticut requires that we protect these refuges and migratory corridors.
3. Avoid all wetlands by crossing over the tracks if there is a non-wetland alternative route.
4. Conduct routine surveillance of the pipeline by walking as opposed to flying over. US DOT regulations require inspecting only twice a year in a class 3 suburban neighborhood. A walking route could limit all inland wetland canopy openings to about 5 feet. If the top two feet of fill over the buried pipe were crushed stone, (sold by Tilcon) this would provide an inert, weed free, non floating, non decaying, solid walking area and allow the movement of water through it. Trails could be placed immediately 25 feet off the rail line and often up against ledges which would save money and precious habitat from blasting. Walking trails are more visually efficient, less costly, conserve energy, and save precious refuges.
5. In addition, I propose that the pipeline be installed through the freshwater Phragmites across the tracks from the Goss Property. If this pathway was 5 feet wide, a minimum of two feet of fill were crushed stone, and the operation was completed in the winter months when the soil is frozen, I don't see any serious detrimental effects to that environment. If this is not an acceptable route for CT DEP then I suggest an alternate route of drilling under the pond at the Goss property rather than blasting out a route along the ledge, effectively cutting the property in half by putting in a 50 ROW. The Goss property is a classic Oak-Hickory Community with mature trees and acts as a green corridor for wildlife. A fifty foot cut through the center, as some areas are only 250 feet wide, would fragment it to the point it would have no value for bird nesting or wildlife breeding. That now functioning land preserve serves many species of wildlife. A 50 foot swathe through it would create 4 edges and create a hostile environment for nesting and breeding species. In addition, invasive species that now only occur on the edge near the railroad line, since they are shaded out by a heavy mature canopy would quickly become monocultures in an open canopy. See references under II. Environmental impact on nesting birds and other wildlife species.

Very truly yours,

Carol R. Lemmon
12 Coachman Drive
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VIII. Feasible and Prudent Alternatives

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8 May 2002

The Honorable Magalie Roman Salas, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E
Washington, D.C 20426

RE: Islander East Pipeline Project
Draft Environmental Impact Statement/ FERC/ - 0143D March

Islander East Pipeline Company, L.L.C
Docket No. CP01-384-000

Algonquin Gas Transmission Company
Docket No. CP01-387-000

Dear Secretary Salas:

Please accept this analysis of the Draft Environmental Impact Statement (DEIS) for the proposed gas transmission pipeline described in the application by Islander East, LLC.

I am a Duly Authorized Inland Wetlands and watercourses Commissioner in the Town of Branford. In addition, I am employed as the Deputy State Entomologist at the Connecticut Agricultural Experiment Station and am currently vice president of the Connecticut Botanical Society, former treasurer and 30 year member of the New Haven Bird Club, board member of the CT Ornithological Association, president and co-founder of the CT Butterfly Association, which additionally supports the preservation of dragonflies, member of the CT Herpetological League, member of the State of Connecticut Invasive Plant Work Group, member of Citizens of Branford's Environment, and advisor to The Branford Land Trust.

My analysis of the DEIS lies only in the scope of my expertise; I will leave engineering and other analysis to my colleagues.

My analysis of this DEIS is based on **Section 1-2, PURPOSE AND SCOPE OF THIS STATEMENT**. The FERC document was to be prepared to comply with the requirements of the National Environmental Policy Act (NEPA). Within this section FERC states its four principal purposes in preparing this EIS are to:

- 1. Identify and assess potential impacts on the natural and human environment that would result from the implementation of the proposed project.**
- 2. Assess reasonable alternatives to the proposed action that would avoid or minimize adverse effects on the environment.**
- 3. Identify and recommend specific mitigation measures to minimize environmental impacts.**
- 4. Encourage and facilitate public involvement in identifying significant environmental impacts.**

The DEIS fails to meet any of the four principles for the reasons discussed below.

- 1. Identify and assess potential impacts on the natural and human environment that would result from the implementation of the proposed project.**

FERC has failed wretchedly in this DEIS report concerning its first principal purpose. FERC has received a *Report and Recommendations by the Branford Blue Ribbon Commission* regarding the proposed Islander East Natural Gas Pipeline of the detrimental impact on the natural and human environment that would result from the implementation of the proposed project. In addition, FERC has received numerous letters and testimony from the Branford Land Trust, marine businesses that would be affected, and from citizens of our town. Descriptions of the destructive impacts on our towns' non-renewable wetlands, was submitted by scientists, the occurrence of state-listed nesting and migratory bird populations by a notable ornithologist, testimony of the permanent destruction of habitats and ecosystems by the proposed right-of-ways will have on this open space green corridor as well as data concerning our valuable shellfish, fishing and lobster beds have all been forwarded to FERC. Incredibly, the DEIS reports under Conclusions and Recommendations, that the Islander East Pipeline project would result in limited adverse environmental impacts based on all of the above mentioned reports and testimony and by two short, one day drive through visits that covered five Connecticut towns, and is labeled,

unbelievably, as field investigations. FERC ignored this material, data and testimony from scientists, businesses, town officials, citizens, and the Branford Land Trust. With a few minor changes, the DEIS is essentially an official endorsement of Islander East's original application.

FERC reports, under environmental consequences (3.4.3.2), that the project would result in temporary and permanent alteration of wildlife habitat, as well as direct impact on wildlife such as disturbance, displacement, or mortality. In addition, the less mobile species, such as small mammals, reptiles, and amphibians and bird nests located in the proposed right-of-way, could be destroyed by construction activities. Although written testimony was sent to FERC with data on species which nest there that are state listed, they chose to not to accept or verify this data, and made no substantial mitigation changes in the Islander East application. In fact, the staff concludes that approval of the proposed project with appropriate mitigating measures as recommended, would have limited adverse environmental impact. The DEIS report has failed to identify and protect state-listed Endangered, Threatened, and Species of Special Concern that utilize this open space wetlands and forested buffer corridor along the Tilcon railroad. How can an environmental impact statement possibly be written without an inventory of the plants, birds, mammals, amphibians and reptiles that occur, nest and breed there and make up the environment. There is no mention of vernal pools or the impact on its inhabitants. Changes in hydrology by opening the forest canopy can kill the plants and animals in wetlands. Nor was there any field investigation completed to determine if any of the 7 state listed vernal pool species occur here. I question the scientific merit of such a document and perhaps the credentials and qualifications of those writing it.

The DEIS failed to provide a plan of environmental mitigation that adequately protects these fragile ecosystems according to the standards set by the regulations of the Town of Branford's Inland Wetlands and Watercourse Agency (IWWA) and the State of Connecticut Department of Environmental Protection. The DEIS has accepted and approved Islander East's Wetland Construction and Mitigation Procedures although they do not even meet FERC's standards (3.74 VI.D.5) for all forested wetlands affected). This DEIS also ignores the fact that in 1985, The Clean Water Act incorporated a law of "no net loss" of wetlands, which federal agencies have taken to mean no loss of acreage or of ecological function. The accumulative effects across the country of wetland losses alone over the past decade add to significant loss of habitat. Although the rate of wetland destruction has slowed, nearly 1.2 million acres were lost during the 10 years ending in 1995 as reported by the Department of Interior in 1997. (Associated Press Story September 1997 –"Rate of Destruction Slowing " by H. Josef Hebert, Associate Press Writer).

2. Assess reasonable alternatives to the proposed action that would avoid or minimize adverse effects on the environment.

I realize that the DEIS report was compiled in March and Iroquois Gas Transmission System filed a "Motion to Consolidate Proceedings and for Comparative Evidentiary Hearing" on 8 April 2002. I hope that this lack of information was the reason the DEIS report is so very **biased** toward the Islander East Proposal. Now that FERC has the Iroquois motion they can compare the merits of the two proposals. This comparison of reasonable alternatives that would avoid or minimize adverse effects on the environment for the final EIS is very important in the following ways:

- a. It is important that the applications be consolidated to determine whether either or both projects are needed.
- b. If they are mutually exclusive, which project will best provide the necessary service to the public with the least adverse impacts?
- c. Although the Iroquois project may move gas to Long Island a year later than Islander East, FERC must take into account that energy that will be available to Long Island, within a month, by the approved Cross Sound Cable Co. And that California has solved its energy problem with conservation measures. It should also be noted that on the 7th of May 2002 the Connecticut senate unanimously passed HB 5609 creating a one year moratorium and study of energy transmission projects crossing Long Island Sound. FERC should honor this moratorium, allowing studies to determine how these energy projects will affect some of the finest shellfish beds on the eastcoast, as well as determine our energy needs and the environment cost to the citizens of Connecticut.
- d. FERC also needs to take into account the cumulative environment impact to Long Island Sound of multiple undersea projects.
- f. **The Iroquois project is clearly a superior alternative to Islander East** as the crossing of Long Island Sound is 5.5 miles shorter and this project would avoid shellfish beds along the Connecticut coast.

3. Identify and recommend specific mitigation measures to minimize environmental impacts

FERC has been negligent in doing this with the Islander East project. There is a paucity of mitigation measures that differ from the original application. There are numerous small mitigation measures that are very important in the restoration of disturbed areas such as recommending native grasses, sedges and rushes to be planted in disturbed wetlands as opposed to rye grass. The DEIS does not even

insist that the proposed Islander East project meet their own FERC standards in replanting forested wetlands. There are many ways to lessen the impact on rights-of-ways and construction. The DEIS appears to officially sanction the crossing of wetlands as opposed to uplands and the destruction of dedicated open space as opposed to disturbing a small section of a golf course where the original turf can be replaced daily as the pipeline gets laid. DEIS has ignored that fishing, lobstering and shellfish businesses may be more than temporarily disturbed, if contaminated soil settles in this area, perhaps killing invertebrates and smothering shellfish larvae.

In section 3.4.2.2, under Environmental consequences (3-60) the DEIS states that in order to minimize disturbances to the nesting birds, no routine vegetation maintenance clearing would occur between April 15th and August 1 of any year. There is no designated time frame in the DEIS to protect nesting birds, nursing mammals or other breeding, lactating and immature species by prohibiting the pipeline from being installed during April 15th to August 1. This oversight would compound the mortality of immature species of birds, mammals, reptiles, and amphibians as the nursing and immature young would be abandoned and be incapable of caring for themselves. This time frame is an absolute critical time for wildlife species in Connecticut. Most mammal species mate in February and have a gestation period of about 63 days. Both birds and mammals have immature offspring that are entirely dependent on the sustenance and protection of their parents during this time frame from April 15th to August 1st.

No construction work should be done in wetlands until late July, August and September, as they are drier and less susceptible to construction impacts.

4. Encourage and facilitate public involvement in identifying significant environmental impacts.

FERC can have further meetings with the town of Branford when all reports are in and before the final EIS is adopted. We should see and approve the final EIS before it is adopted as well as be part of planning and agreeing to the final mitigation measures before any construction is started. FERC should inventory the species that will be impacted by any proposed gas pipeline project.

This DEIS report is premature, inadequate and incomplete

This report is missing many studies, reports and data, and it is unfair to the citizens of our town that they are not available before the FERC hearing in our Town of Branford on 8th of May 2002, so that we might comment on them. Missing are the offshore contaminated sediment report and sediment deposition and other reports that were to be turned in by Islander East. This DEIS has insufficient data and does not allow the public to read and question FERC about

the impacts to our shellfish bed and fishing and lobster industry that may be contained in these reports.

When FERC makes statements that the destruction of our wetlands and open space habitats in the long run will be insignificant, I fully disagree. I find it deplorable that FERC finds no significant impact by the proposed project but then states that recovery of temporary workspaces may take 25 to 150 years. The DEIS is premature and incomplete and should not have been published until all data was in, so that a scientific evaluation could be made.

Very truly yours,

Carol R. Lemmon
12 Coachman Drive
Branford, CT 06405

203 488-7813

cc: U.S. Representative Rosa DeLauro
cc: Attorney General Richard Blumenthal

19 May 2002

The Honorable Magalie Roman Salas, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E
Washington, D.C 20426

RE: Islander East Pipeline Project
Draft Environmental Impact Statement/ FERC/ - 0143D March

Islander East Pipeline Company, L.L.C
Docket No. CP01-384-000

Algonquin Gas Transmission Company
Docket No. CP01-387-000

Dear Secretary Salas:

Please accept this SUPPLEMENT to my analysis of the Draft Environmental Impact Statement (DEIS) for the proposed gas transmission pipeline described in the application by Islander East, LLC.

The FERC DEIS has not directed Islander East to complete thorough soil testing within the area adjacent to the Tilcon Railroad Beds where it proposes to install a 24-inch gas pipe, five feet deep. The Tilcon Railroad Line has been operating in this location for nearly 100 years. The use of diesel fuel and its accompanying particulate toxic exhaust emissions as well as heavy wood preservative treatments for the railroad ties creates a high probability that the soils around these tracks may be contaminated. Information concerning the components of these petroleum hydrocarbons is listed below:

Diesel fuel – and its components consist of varying amounts of several different compounds including alkanes, mono-aromatics, and poly-aromatic hydrocarbons (PAHs). Aromatics are petroleum components with a molecular structure based on carbon rings and include benzene, toluene and xylene. PAHs occur naturally in crude oil and are produced as part of the refining process. Polycyclic aromatic hydrocarbons contribute significantly to particulate emissions and are associated with causing cancer and birth defects. Studies investigating the anaerobic biodegradation of petroleum hydrocarbons (octane, decane, diodecane, benzene, toluene, ethylbenzene and xylenes (BETX) in various sediments, (Phelps, Craig et al. 1998), reports that in the environment, PAHs are among the most persistent of the hydrocarbons. In tests for toxicity/teratogenicity in embryonic inland silversides, *Menidia beryllina*, PAHs caused significant embryo

toxic or teratogenic responses, (Middaugh et al. 1991) Other diesel fuel components are listed below.

Sulphur – is present to a greater or lesser extent in all crude oils. Sulphur in diesel fuel tends to produce emissions in the form of particulates which have a tendency to produce acidic by-products.

Benzene – is the simplest aromatic compound and is a known carcinogen.

Manganese - is a component of the octane-improving petrol additive MMT.

MTBE is an octane-increasing petrol additive that is soluble in water. It can taint the smell and taste of groundwater even at very low concentrations.

Olefins – are created during the refinery process and the combustion of fuel. Olefins contribute toxic pollutants.

Diesel Exhaust – Toxic particulate emission from the combustion of diesel fuel can contribute particulate matter as a form of localized air pollution. (EPA, 1995). Laboratory tests have shown diesel exhaust to be toxic, mutagenic, and carcinogenic, (NIOSH 1988; California EPA, 1994; EPA, 1940). Diesel exhaust is a complex mixture of combustion products of diesel fuel, dependent upon the type of engine, operating conditions, lubricating oil, additives emission control system, and the composition of the fuel used, (IARC, 1989). Exhaustive studies link diesel exhaust and mutations in chromosomes and damage to DNA, (Mauderly, J.L. 1992; Dawson, et. al 1998).

Forty-two substances were listed in diesel exhaust by California EPA as *Toxic Air c.* Some, but not all, of these toxins are listed here: arsenic, benzene, mercury compounds, cadmium, chlorine, chlorobenzene, chromium compounds, cobalt compounds, cyanide compounds, dioxins and dibenzofurans, ethyl benzene, formaldehyde, phenol, toluene, xylenes, (California EPA, 1994). Many of these substances that are constituents of diesel exhaust are harmful to humans, animals and organisms. Toluene, lead, cadmium and mercury are known to cause birth defects and reproductive problems, (Rosenstock, L and Cullen, M, 1994). Dioxins are endocrine disrupters, interfering with the hormone system and are toxic to the immune and reproduction system, (Bimbaum, L, 1995).

Cresote and Wood Preservatives:-.Railroad ties in the early 1900's were treated with zinc chloride, mercury chloride, or creosote. It is not known how recently the Tilcon railroad tracks have been replaced, nor if ties they purchased were treated with new wood preservatives such as pentachlorophenol, arsenic compounds or copper naphthenate. Most railroad lines were treated primarily with creosote since the turn of the century therefore the following will include information on the toxicity of creosote.

Although creosote treated wood is meant to last for approximately 50 years, it is degraded by microbes in a process called biotransformation . This is the primary process by which creosote constituents are degraded in soils, surface waters, and groundwater. Creosote is a oil-type wood preservative. It is made from coal tar and contains a chemically complex mixture of organic molecules containing some 300 organic constituents, most of which are polycyclic aromatic hydrocarbons (PAHs).

Creosote constituents may be slowly released from the surface of treated wood products by oil exudation, and leaching by rain water,(Leach and Weinert 1976) Constituents of creosote such as phenols can leach into ground water and creosote has been detected in groundwater samples collected at 25 of the 59 NPL sites and in surface water samples collected at 9 of the 59 sites, HazDAT2000). Coal tar creosote may be released to soils as a result of bleeding of the product from treated timber. Rain water may also wash the soluble components directly from the surface of treated timber and into the soil,(Henningsson 1983). Compounds initially released to the atmosphere may undergo atmospheric deposition and reach surface water directly or through runoff carrying soil-bound compounds.

In an investigation of coal-tar contaminated surface sediments, PAHs were observed to have moved 400 meters in groundwater from buried subsurface coal tar: persistence of the PAHs, naphthalene in particular, was partially attributed to anoxic conditions, (Madsen et al. 1996). Additionally, sediment-bound creosote components may be released over time.

Limited uptake of some creosote constituents has been detected in plants exposed to creosote-treated wood in nearby soil. In addition, voles, crickets, snails pill bugs and worms have exhibited the capacity to assimilate radiolabeled creosote components in terrestrial microcosm studies. The greatest amount of creosote components were found to bioaccumulate in the vole. (Gile, et al. 1982). Bioaccumulation has been found in fish and aquatic organisms, indicating that bioaccumulation may be an important in the fate of some components of coal tar creosote.

In Conclusion,

Islander East has proposed a pipeline beside the Tilcon railroad track in Branford, Connecticut. This railroad track, in many cases, is a raised bed that has been in existence for nearly 100 years. The diesel fuels, and localized particulate materials from the diesel exhaust and the heavy wood preservatives that have been used on the railroad ties for nearly 100 years makes creates a high probability that perhaps PAHs, heavy metals, dioxins, and other toxic materials may be imbedded within the soil within the vicinity of the railroad tracks. Contaminated sediments can have direct toxic effects on aquatic life, such as the

development of cancerous tumors in fish exposed to polycyclic aromatic hydrocarbons (PAHs) in sediments, The bioaccumulation of toxic contaminants in the food chain can also pose a risk to humans, wildlife, and aquatic organisms. This area needs to have stringent, EPA guidelines soil testing before Islander East is given permission to dig 7 foot deep trenches of possibly contaminated soil near wetlands and wells. If in fact, this soil has contaminates then this would create additional mitigation measures to insure that wetlands and wells are not contaminated. In addition, a location that should be tested for PAHs and heavy metals is where the HDD enters in near-shore waters and could possibly spread contaminants into Long Island Sound where the lower food chain of invertebrates may be affected and possibly bioaccumulate in the higher food chain including those of us who eat fish and shellfish.

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Very truly yours,

Carol R. Lemmon
12 Coachman Drive
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15 May, 2002

Mr. Paul Aresta
Connecticut Siting Council
10 Franklin Square.
New Britain, CT 06051

Re Docket No. 221 – Algonquin Gas Transmission Company and Island East Company

I am including three documents to the Siting Council for your information. Two of these was written by me and were included in the Blue Ribbon Report issued by the town of Branford. My third report, to FERC, is an analysis of the premature, inadequate and incomplete DEIS that was published by FERC.

This DEIS was a shock to my sense of what is right and fair. The DEIS report was essentially written by one woman, Laura Turner. It is simply a rewrite of Islander's East's original application with a few minor alterations. I do not think that her geology degree gives her the credentials to make a scientific judgment on so many issues. Especially, wetlands and the engineering aspects of putting this pipeline through sensitive shellfish beds that are considered the finest on the eastcoast.

Our FERC hearing in the town of Branford took place on 8 May 15, 2002. Not all of us had a chance to speak, as so many were signed up. The DEIS was incomplete and did not contain the most important information we needed to assess the environmental impact of this gas pipeline especially since she did not have soil contamination studies included in the DEIS report. Laura Turner, the writer of the DEIS, remained in the front foyer all evening , and chose not to hear the testimony of marine scientists from UConn, The Branford Land Trust, the town of Branford, The Branford Inland Wetland Commission, our Attorney General, nor the hundreds of citizens and the owners of marine businesses who were there. She chose not to hear passion of the people describing the impact this pipeline will have on their lives and our environment. It seems incredible to me, as a scientist, that one woman, without any special knowledge or credentials, will basically determine the fate of our lives, the energy drain from Connecticut to Long Island by jeopardizing pressures necessary for our gas companies to provide service to Connecticut, the impact to our non renewable inland wetlands, vernal pools, state listed species, and dedicated open space. And this person will give the weapon of eminent domain to a company who can and will take through condemnation, wetlands, backyards, habitat of state-listed species, and dedicated land trust open space to make money for its stockholders and benefit Long Island Sound.

The DEIS report was premature, as it did not have all of the reports on contamination and disposition of sediments that Islander East was suppose to submit. Therefore we as citizens of this state were denied the right to comment on the very issues that may decide whether this pipeline project will or will not have a severe environmental impact. as we will no longer have a comment period after the reports come in and before the final EIS is issued. Nor did The DEIS have a requirement that soil testing take place along the Tilcon Steam Railroad beds. These railroad tracks are raised about 10 to 15 feet above the surrounding landscape. This railroad is about 100 years old. The railroad ties in the early 1900's were treated with zinc, mercury chloride, or creosote or possibly arsenic. The early crude diesel fuels were contaminated with heavy metals such as mercury. These are endocrine disrupters in humans and wildlife. The early diesel fuel was crude and full of heavy metals and hydrocarbon derivites that are not present in current petroleum products. It may be likely that these old engines may have leaked for decades. There were certainly train disrailments at times. The railroad is often within 25 feet of wetlands. Digging six foot trenches of possibly contaminated soil near wetlands and wells would create additional mitigation measures to insure that wetlands and wells are not contaminated. Also a location that should be tested for petroleum and heavy metals is where the HDD enters in near-shore water and could possibly spread contaminants into Long Island Sound where the lower food chain of invertebrates may be affected and possibly bioaccumulate in the higher food chain including those of us who eat fish and shellfish.

I am not stating as a fact that the soil along the Tilcon tract is definitely contaminated, only that the probabilities could be high considering the circumstances. And since I am sure that Tilcon would not permit me to have it tested, then Islander East should be required to do so in order to prove that the laying of their pipeline is as safe as they report, and that they won't be jeopardizing the lives of humans and wildlife by not testing this potentially contaminated site.

Sincerely yours

Carol R. Lemmon
12 Coachman Drive
Branford, CT, 06465
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Subject: In Protest of the Islander East Proposed Pipeline

Resent-From: Islandereast.Comments@noaa.gov

Date: Thu, 20 Nov 2003 22:33:58 -0500

From: Jason Melaragno <jmelaragno@csj.edu>

To: IslanderEast.comments@noaa.gov

Hello -

As a resident of Fairfield, CT, and a concerned environmental citizen, I want to voice my disagreement to the Islander East proposed pipeline.

This pipeline provides no service to the areas for which it will effect adversely. Furthermore, the benefits of this pipeline have not been presented in a convincing manner. I am environmentally aware, but at the same time economically prudent. The economic benefits do not apply to residents of CT or NY (Long Island). Moreover, it has been argued that the creation of this pipeline may actually increase natural gas rates in CT, further destabilizing what have already proven to be volatile rates. There is no reason to effect the habitats of mammals and aquatic life alike, in addition to residents as economic and aesthetic consideration apply.

I urge you to NOT approve this proposal and put an end to this, and future proposals to cross the Long Island Sound.

Thank you,

Jason Melaragno
1153 Black Rock Tpke
Fairfield, CT 06825