

HB

365

<TARGET><BILL>HB 365</BILL><SUBJECT>HB
365</SUBJECT><COMM>SFIN27</COMM></TARGET>

SENATE FINANCE COMMITTEE REPORT

DATE: 4/13/12

FURTHER:

DATE TURNED
IN TO OFFICE: _____

Finance Committee considered CS FOR HOUSE BILL NO. 365(FIN)

HB 365-AQUATIC INVASIVE SPECIES

"An Act relating to the rapid response to, and control of, aquatic invasive species."

and recommends:

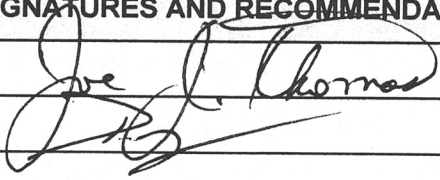

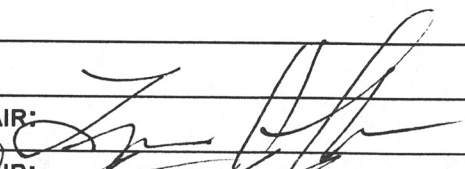
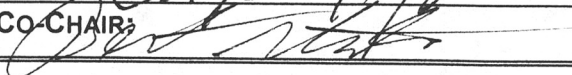
- [] be replaced with SCS _____ (_____) [] Same Title [] Technical Title Change
[] New Title/SCR No. _____
- [] adopt previous SCS _____ (_____) [] Same Title [] Technical Title Change
[] New Title/SCR No. _____
- [] attached amendment(s)
- [] adopt _____ Letter of Intent
- [] further referral to _____ Committee

Dept Abbr.	
ADM	LEG
CED	LAW
COR	LWF
CRT	MVA
EED	DNR
DEC	DPS
DFG	REV
GOV	DOT
DHS	UA

NEW FISCAL NOTE(S)				
Dept.	Fiscal	Indet.	Zero	FN #

PREVIOUS FISCAL NOTE(S)				
Dept.	Fiscal	Indet.	Zero	FN #
DNR	X			7
DFG	X			6
DHS			X	3
DEC			X	2
DEC			X	1

[] APPROPRIATION - no fiscal note

SIGNATURES AND RECOMMENDATIONS:	PRINTED LAST NAME	Do PASS	Do NOT PASS	No REC	AMEND
	THOMAS	✓			
	EGAN	✓			
CO-CHAIR: 		✓			
CO-CHAIR: 		✓			

FISCAL NOTE

STATE OF ALASKA
2012 LEGISLATIVE SESSION

Bill Version CSHB 365(FIN)
Fiscal Note Number 7
(H) Publish Date 4/6/12

Identifier (file name) CSHB365(FIN)-DNR-AG-04-05-12 Dept. Affected Natural Resources
Title Aquatic Invasive Species Appropriation Agriculture
Allocation N. Latitude Plant Materials Center
Sponsor House Resources
Requester (H) FIN OMB Component Number 2204

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

	FY13 Appropriation Requested	Included in Governor's FY13 Request	Out-Year Cost Estimates					
			FY13	FY14	FY15	FY16	FY17	FY18
OPERATING EXPENDITURES								
Personal Services	71.0							
Travel	5.0							
Services	3.7							
Commodities	4.5							
Capital Outlay								
Grants, Benefits								
Miscellaneous								
TOTAL OPERATING	84.2	0.0	***	***	***	***	***	***

FUND SOURCE		(Thousands of Dollars)						
1002	Federal Receipts							
1003	GF Match							
1004	GF	84.2						
1005	GF/Prgm (DGF)							
1037	GF/MH (UGF)							
1178	temp code (UGF)							
TOTAL		84.2	0.0	***	***	***	***	***

POSITIONS								
Full-time								
Part-time								
Temporary	1							

CHANGE IN REVENUES								

Estimated SUPPLEMENTAL (FY12) operating costs 0.0 (separate supplemental appropriation required)
(discuss reasons and fund source(s) in analysis section)

Estimated CAPITAL (FY13) costs 0.0 (separate capital appropriation required)
(discuss reasons and fund source(s) in analysis section)

Why this fiscal note differs from previous version (if initial version, please note as such)

The House Finance committee substitute reinserted language relating to freshwater aquatic invasive species.

Prepared by Franci Havemeister, Director
Division Division of Agriculture
Approved by Daniel S. Sullivan, Commissioner
Department of Natural Resources

Phone 907-761-3867
Date/Time 4/5/12 12:00 PM
Date 4/5/2012

FISCAL NOTE #7

STATE OF ALASKA
2012 LEGISLATIVE SESSION

BILL NO. CSHB 365(FIN)

Analysis

HB 365 establishes a new section in AS 16.05 that directs the Department of Fish & Game to work with the Department of Natural Resources to establish a rapid response and management plan for addressing occurrences of aquatic invasive species in limited or isolated geographical areas.

This fiscal note covers the costs associated with helping the Department of Fish & Game develop a Rapid Response Plan in FY13 and does not cover the costs associated with implementation of that plan. Not knowing what would be required for plan implementation makes it difficult to predict what the cost would be resulting in an indeterminate cost for FY14 and beyond.

It is anticipated that in order to help develop the plans, the Division of Agriculture would need a long-term, non-perm Natural Specialist Range 16, plus mandatory position costs, travel, and computer equipment. It is assumed that assisting with development of an Invasive Species Action Plan would take up to one year and that some travel would be needed in order to coordinate with the Department of Fish & Game.

At this point in time, the only known invasive aquatic plant is Elodea. Elodea can be spread from bodies of water by aircraft, which means that this invasive species is not isolated to a single geographic area. The removal of Elodea would be carried out in the following methods: manual removal by divers, suction dredging, or chemical application.

There have been no prior eradication efforts for invasive aquatic plants in Alaska; but there have been some estimates done in both the Fairbanks and Anchorage area regions for removal of Elodea.

Eradication of aquatic plants are multi-year processes. An estimate for removal of Elodea in Sand Lake in Anchorage was \$210.0 over three years using herbicides. The Fairbanks Soil and Water Conservation District estimated that over a 5 year period it would cost about \$322.4 for mechanical control in Chena Slough.

These are examples of potential costs that may be included in a future plan.

FISCAL NOTE

STATE OF ALASKA
2012 LEGISLATIVE SESSION

cost # codes

Bill Version
Fiscal Note Number
Publish Date

CSHB 365(FIN)
6
4/6/12 (H)

Identifier (file name) HB365CS(FIN)-DFG-SFD-04-04-12

Dept. Affected Fish and Game

Title AQUATIC INVASIVE SPECIES

Appropriation Sport Fisheries

Allocation Sport Fisheries

Sponsor HOUSE RESOURCES COMMITTEE

Requester House Finance

OMB Component Number 464

Expenditures/Revenues

(Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

	FY13 Appropriation Requested	Included in Governor's FY13 Request	Out-Year Cost Estimates					
			FY13	FY14	FY15	FY16	FY17	FY18
OPERATING EXPENDITURES								
Personal Services	176.4		88.2	*	*	*	*	
Travel	28.8		14.4					
Services	281.0		238.0					
Commodities	3.0		1.0					
Capital Outlay								
Grants, Benefits								
Miscellaneous								
TOTAL OPERATING	489.2	0.0	341.6	*	*	*	*	

FUND SOURCE

(Thousands of Dollars)

	FY13	FY14	FY15	FY16	FY17	FY18
1002 Federal Receipts						
1003 GF Match						
1004 GF	489.2	341.6				
1005 GF/Prgm (DGF)						
1037 GF/MH (UGF)						
1024 Fish/Game (Other)						
TOTAL	489.2	0.0	341.6	*	*	*

POSITIONS

	FY13	FY14	FY15	FY16	FY17	FY18
Full-time						
Part-time						
Temporary	1.0	1				

CHANGE IN REVENUES

	FY13	FY14	FY15	FY16	FY17	FY18

Estimated SUPPLEMENTAL (FY12) operating costs _____ (separate supplemental appropriation required)
(discuss reasons and fund source(s) in analysis section)

Estimated CAPITAL (FY13) costs _____ (separate capital appropriation required)
(discuss reasons and fund source(s) in analysis section)

Why this fiscal note differs from previous version (if initial version, please note as such)

The committee substitute adopted by the House Finance Committee reinserted language into HB 365 directing ADF&G to plan for addressing occurrences of freshwater aquatic invasive species.

Prepared by Charles O. Swanton, Director
Division Sport Fisheries

Approved by Kevin Brooks, Administrative Services Director
Department of Fish and Game

Phone 907-465-6184
Date/Time 4/4/12 5:00 PM
Date 4/4/2012

FISCAL NOTE #6

STATE OF ALASKA
2012 LEGISLATIVE SESSION

BILL NO. CSHB 365(FIN)

Analysis

House Bill 365 would require dedicated staff to be hired to:

- 1) Review and update the existing Alaska Aquatic Nuisance Species Management Plan.
- 2) Develop an Invasive Species Action Plan that outlines key agency contacts and communication trees; roles, responsibilities and jurisdictional boundaries; identify species or habitats of concern and potential economic impacts; define early detection methods; and will serve as the foundation from which response plans could be written focusing on specific species or pathways.
- 3) In cooperation with other state, federal and municipal agencies, and stakeholder organizations, develop adaptive rapid response plans for each of the 6 identified (Northern Pike, *D.vexillum*-Tunicate, Elodea-pondweed, Water Milfoil, European Green Crab, *Spartina* Cordgrass) invasive species threats to marine and freshwater environments across the state. These adaptive rapid response plans specific to each species would include vectors of transmission, synthesis of existing background knowledge, documented or perceived distribution and identified threats to specific areas or locations and effective control or eradication methods.

Upon completion, a series of facilitated public meetings would take place to catalog authorities and available resources specific to rapid response in areas where invasive species are known to already exist or are most likely to occur. Implementation of the six adaptive rapid response plans would be the responsibility of all affected parties but coordinated by ADF&G.

We anticipate that these tasks will take 18 months to complete and the full year cost is shown in FY13 and 1/2 year cost is shown in FY14. Personnel for this project would consist of the department's existing invasive species program coordinator (Range 18) for 9 months to supervise and coordinate plan development. One project leader would be a range 18 long term non-perm whom would be responsible for plan development and finalization within an 18 month period. The third project leader would consist of an existing Education Associate II, responsible for assisting with plan revisions and outreach efforts (9 months).

This fiscal note does not reflect the costs associated with implementing any of the plans this legislation directs ADF&G to develop. It would be extremely difficult to estimate rapid response plan implementation costs at this time, resulting in an indeterminate cost for FY15 and beyond.

FISCAL NOTE

STATE OF ALASKA
2012 LEGISLATIVE SESSION

Bill Version CSHB 365(RES)
Fiscal Note Number 3
(H) Publish Date 3/23/12

Identifier (file name) HB365-DHSS-EPI-3-16-12 Dept. Affected Health and Social Services
Title Aquatic Invasive Species Appropriation Public Health
Allocation Epidemiology
Sponsor Resources Committee
Requester House Resources Committee OMB Component Number 296

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

	FY13 Appropriation Requested	Included in Governor's FY13 Request	Out-Year Cost Estimates				
			FY14	FY15	FY16	FY17	FY18
OPERATING EXPENDITURES	FY13	FY13	FY14	FY15	FY16	FY17	FY18
Personal Services							
Travel							
Services							
Commodities							
Capital Outlay							
Grants, Benefits							
Miscellaneous							
TOTAL OPERATING	0.0	0.0	0.0	0.0	0.0	0.0	0.0

FUND SOURCE		(Thousands of Dollars)					
1002	Federal Receipts						
1003	GF Match						
1004	GF						
1005	GF/Prgm (DGF)						
1037	GF/MH (UGF)						
1178	temp code (UGF)						
TOTAL		0.0	0.0	0.0	0.0	0.0	0.0

POSITIONS							
Full-time							
Part-time							
Temporary							

CHANGE IN REVENUES							

Estimated SUPPLEMENTAL (FY12) operating costs _____ (separate supplemental appropriation required,
(discuss reasons and fund source(s) in analysis section)

Estimated CAPITAL (FY13) costs _____ (separate capital appropriation required)
(discuss reasons and fund source(s) in analysis section)

Why this fiscal note differs from previous version (if initial version, please note as such)

Not applicable. Initial version.

Prepared by Ward B. Hurlburt, M.D., MPH / Chief Medical Officer-Director
Division Public Health
Approved by Nancy Rolfzen, Assistant Commissioner
DHSS Finance & Management Services

Phone 269-6754
Date/Time 3/16/12 12:00 AM
Date 3/16/2012

FISCAL NOTE #3

STATE OF ALASKA
2012 LEGISLATIVE SESSION

BILL NO. CSHB 365(RES)

Analysis

This is a zero fiscal note.

This bill would require an unspecified department (presumably the Alaska Department of Fish and Game) to establish a rapid response and management plan for addressing occurrences of aquatic invasive species in limited geographic areas of Alaska. Development of this plan would need to be done in cooperation with other state agencies. For Health and Social Services, this bill would allow a forum to discuss and respond to invasive aquatic species with a direct impact on human health. An example of such a species could be a novel mosquito (which spends part of its life in freshwater) to Alaska that is capable of transmitting diseases (e.g., West Nile virus) not previously experienced locally in the state. There might also be indirect impacts to human health. An example of this may be the introduction of a new predatory fish species that could affect local fish stocks and impact food stability or may contain differing levels of harmful contaminants in the flesh (e.g., mercury in Northern pike). Either situation could ultimately impact human health and would require a multi-agency response, given jurisdictions and expertise. Based on the past work of a similar Council and other related issues (e.g., rat eradication), the department would likely not play a primary role but would be available to provide relevant input as needed. The department anticipates that the involvement in the rapid response and management plan would be accomplished with existing resources and would result in no fiscal impact.

FISCAL NOTE

STATE OF ALASKA
2012 LEGISLATIVE SESSION

Bill Version CSHB 365(RES)
Fiscal Note Number 1
(H) Publish Date 3/23/12

Identifier (file name) HB365-DEC-SWM-03-15-12 Dept. Affected Environmental Conservation
Title Aquatic Invasive Species Appropriation Environmental Health
Allocation Solid Waste Management
Sponsor House Resources Committee
Requester House Resources Committee OMB Component Number 2344

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

	FY13 Appropriation Requested	Included in Governor's FY13 Request	Out-Year Cost Estimates					
			FY13	FY14	FY15	FY16	FY17	FY18
OPERATING EXPENDITURES								
Personal Services	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Travel	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Services	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Commodities	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Capital Outlay	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Grants, Benefits	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Miscellaneous	0.0		0.0	0.0	0.0	0.0	0.0	0.0
TOTAL OPERATING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

FUND SOURCE		(Thousands of Dollars)						
1002	Federal Receipts	0.0		0.0	0.0	0.0	0.0	0.0
1003	GF Match	0.0		0.0	0.0	0.0	0.0	0.0
1004	GF	0.0		0.0	0.0	0.0	0.0	0.0
1005	GF/Prgm (DGF)	0.0		0.0	0.0	0.0	0.0	0.0
1037	GF/MH (UGF)	0.0		0.0	0.0	0.0	0.0	0.0
1178	temp code (UGF)	0.0		0.0	0.0	0.0	0.0	0.0
TOTAL		0.0	0.0	0.0	0.0	0.0	0.0	0.0

POSITIONS							
Full-time	0	0	0	0	0	0	0
Part-time	0	0	0	0	0	0	0
Temporary	0	0	0	0	0	0	0

CHANGE IN REVENUES	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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Estimated SUPPLEMENTAL (FY12) operating costs 0.0 (separate supplemental appropriation required,
(discuss reasons and fund source(s) in analysis section)

Estimated CAPITAL (FY13) costs 0.0 (separate capital appropriation required)
(discuss reasons and fund source(s) in analysis section)

Why this fiscal note differs from previous version (if initial version, please note as such)

Not applicable, initial version.

Prepared by Kristin Ryan, Director
Division Environmental Health
Approved by Lynn Kent
Deputy Commissioner

Phone (907) 269-7645
Date/Time 3/15/2012 14:00 pm
Date 3/16/2012

FISCAL NOTE #1

STATE OF ALASKA
2012 LEGISLATIVE SESSION

BILL NO. CSHB 365(RES)

Analysis

HB 365 has no fiscal impact to the Department of Environmental Conservation. Current Division of Environmental Health staff could absorb the amount of time required to cooperate with the Department of Fish and Game in establishing the plan and responding to invasive species attacks.

FISCAL NOTE

STATE OF ALASKA
2012 LEGISLATIVE SESSION

Bill Version CSHB 365(RES)
 Fiscal Note Number 2
 (H) Publish Date 3/23/12

Identifier (file name) HB365-DEC-WQ-03-15-12 Dept. Affected Environmental Conservation
 Title Aquatic Invasive Species Appropriation Water
 Allocation Water Quality
 Sponsor House Resources Committee
 Requester House Resources Committee OMB Component Number 2062

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

	FY13 Appropriation Requested	Included in Governor's FY13 Request	Out-Year Cost Estimates				
			FY14	FY15	FY16	FY17	FY18
OPERATING EXPENDITURES	FY13	FY13	FY14	FY15	FY16	FY17	FY18
Personal Services	0.0		0.0	0.0	0.0	0.0	0.0
Travel	0.0		0.0	0.0	0.0	0.0	0.0
Services	0.0		0.0	0.0	0.0	0.0	0.0
Commodities	0.0		0.0	0.0	0.0	0.0	0.0
Capital Outlay	0.0		0.0	0.0	0.0	0.0	0.0
Grants, Benefits	0.0		0.0	0.0	0.0	0.0	0.0
Miscellaneous	0.0		0.0	0.0	0.0	0.0	0.0
TOTAL OPERATING	0.0	0.0	0.0	0.0	0.0	0.0	0.0

FUND SOURCE		(Thousands of Dollars)						
1002	Federal Receipts	0.0		0.0	0.0	0.0	0.0	0.0
1003	GF Match	0.0		0.0	0.0	0.0	0.0	0.0
1004	GF	0.0		0.0	0.0	0.0	0.0	0.0
1005	GF/Prgm (DGF)	0.0		0.0	0.0	0.0	0.0	0.0
1037	GF/MH (UGF)	0.0		0.0	0.0	0.0	0.0	0.0
1178	temp code (UGF)	0.0		0.0	0.0	0.0	0.0	0.0
TOTAL		0.0	0.0	0.0	0.0	0.0	0.0	0.0

POSITIONS							
Full-time	0	0	0	0	0	0	0
Part-time	0	0	0	0	0	0	0
Temporary	0	0	0	0	0	0	0

CHANGE IN REVENUES	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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Estimated **SUPPLEMENTAL (FY12) operating costs** 0.0 (separate supplemental appropriation required,
 (discuss reasons and fund source(s) in analysis section)

Estimated **CAPITAL (FY13) costs** 0.0 (separate capital appropriation required)
 (discuss reasons and fund source(s) in analysis section)

Why this fiscal note differs from previous version (if initial version, please note as such)

Not applicable, initial version.

Prepared by Michelle Bonnet, Director
 Division Water
 Approved by Lynn Kent
Deputy Commissioner

Phone (907) 261-7599
 Date/Time 3/15/12 1:20 PM
 Date 3/16/2012

FISCAL NOTE #2

STATE OF ALASKA
2012 LEGISLATIVE SESSION

BILL NO. CSHB 365(RES)

Analysis

HB 365 has no fiscal impact to the Department of Environmental Conservation. Current Division of Water staff could absorb the amount of time required to cooperate with the Department of Fish and Game in establishing the plan and responding to invasive species attacks.

ALASKA STATE LEGISLATURE

House Resources Committee

Rep. Paul Seaton, Co-Chair

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Juneau, AK 99801 – 1182

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Rep.Paul.Seaton@legis.state.ak.us



Rep. Eric Feige, Co-Chair

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Rep.Eric.Feige@legis.state.ak.us

Sponsor Statement

CSHB 365 (FIN)

Didemnum vexillum (Dvex), also known as Sea Vomit, is an aggressive tunicate invader that grows rapidly and has few known natural predators. It creates metabolic toxins that help it smother substrates and other organisms to create monoculture infestations from intertidal, subtidal to deep sea habitats. As demonstrated in a recent infestation in Whiting Harbor near Sitka, the rapid spread of Dvex is a threat to the mariculture industry, commercial fisheries and ecosystem integrity.

HB 365 provides the Alaska Department of Fish and Game (ADF&G) the statutory authority to swiftly address outbreaks of aquatic invasive species such as Dvex.

HB 365 requires ADF&G, in coordination with the Department of Environmental Conservation and the Department of Natural Resources, to establish a plan of coordination and response to an aquatic invasive species outbreak.

HB 365 gives ADF&G the authority to use chemical, biological, mechanical, or physical methods to deal with the outbreak. It allows for expedited review of plans for dealing with invasive species, and directs ADF&G staff to prioritize eradication of the invasive species over other management issues for a specific area.

Sea Vomit and other aquatic invasive species have the potential to seriously impact our lucrative commercial fishing, mariculture, and recreational fishing industries. HB 365 gives Alaska the tools to combat this threat.

ALASKA STATE LEGISLATURE

House Resources Committee

Rep. Paul Seaton, Co-Chair

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Juneau, AK 99801 – 1182

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Rep.Paul.Seaton@legis.state.ak.us



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Changes between HB 365 and CSHB 365 (FIN)

Removed language specifying that the response plans apply to invasive species outbreaks in limited or isolated geographic areas.

Provision inserted requiring language in mariculture leases and permits that holds agencies harmless for an invasive species response action that affects private property on the mariculture lease.

Provision inserted requiring that agencies, in responding to an aquatic invasive species, do so in a manner determined to cause the least amount of harm to noninvasive fish populations.

Didemnum vexillum (Dvex) in Sitka, AK

Prepared for House Resources Committee
1/23/2012

Marnie Chapman

University of Alaska Southeast - Sitka Campus

1332 Seward Ave., Sitka AK 99835

907-747-7702

Acknowledgements

- Alaska Department of Fish and Game
- AmeriCorps
- National Oceanographic and Atmospheric Administration
- San Francisco State University Romberg Tiburon Center for Environmental Studies
- Sitka Tribe of Alaska
- Sitka Sound Science Center
- US Coast Guard and Coast Guard Auxiliary
- US Fish and Wildlife Service
- **All the people in Sitka and outside of Sitka that have come together to support this project**

Dvex in Sitka

- Explosive growth and potential for spread
- Whiting Harbor infestation
 - First contain, then eradicate.
- Reduce possibilities for reintroduction
- Learn more about the biology of Dvex and potential impacts in Alaska

Growth Over 10 Week Period

Appearance on 6/24/11
Whiting Harbor, Sitka, AK



6/24/11



6/24/11



6/24/11

7/9/11



7/22/11



8/5/11



8/16/11



9/1/11





6/24/11
(10 weeks previous)



9/1/11

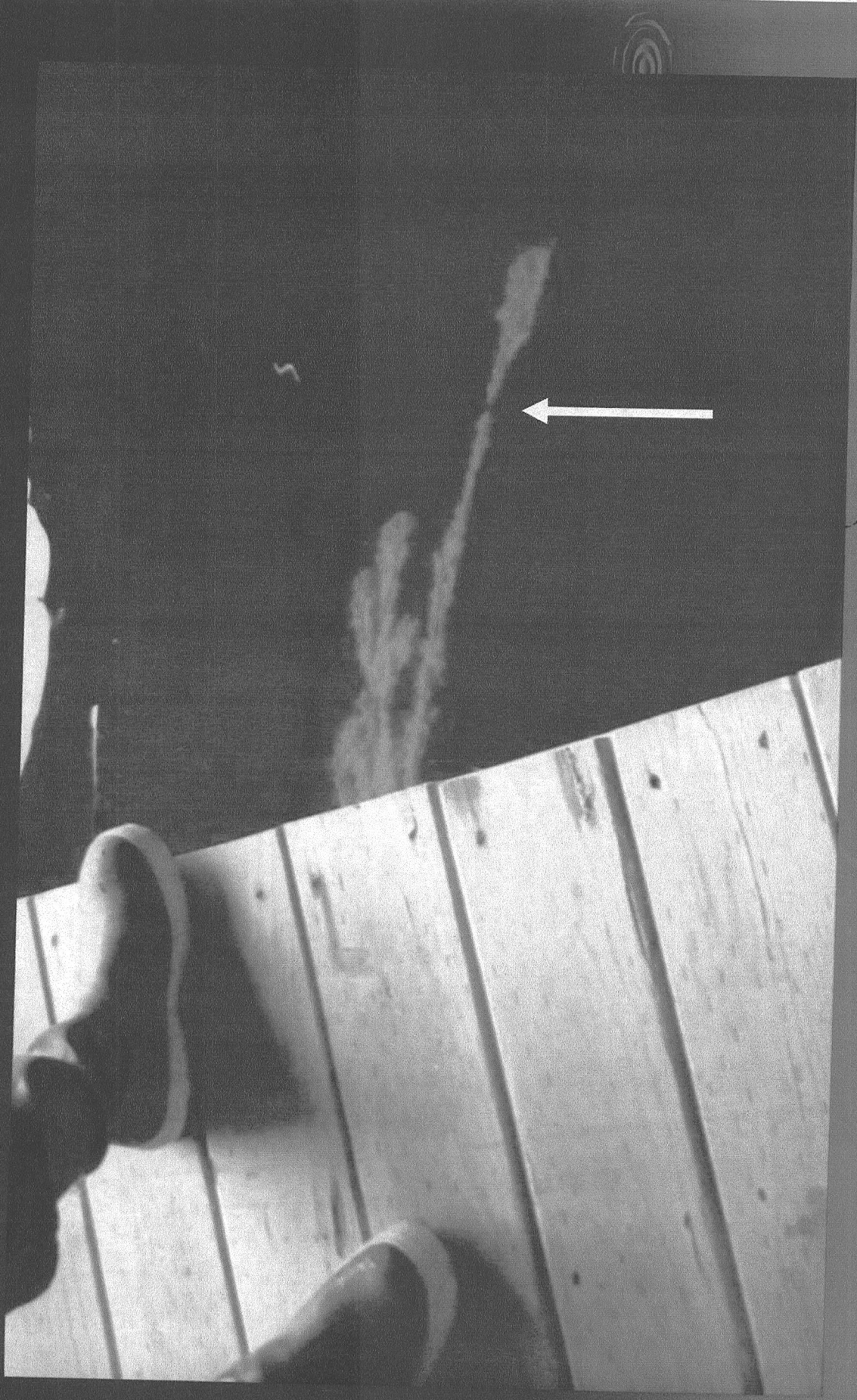


“Dangles”

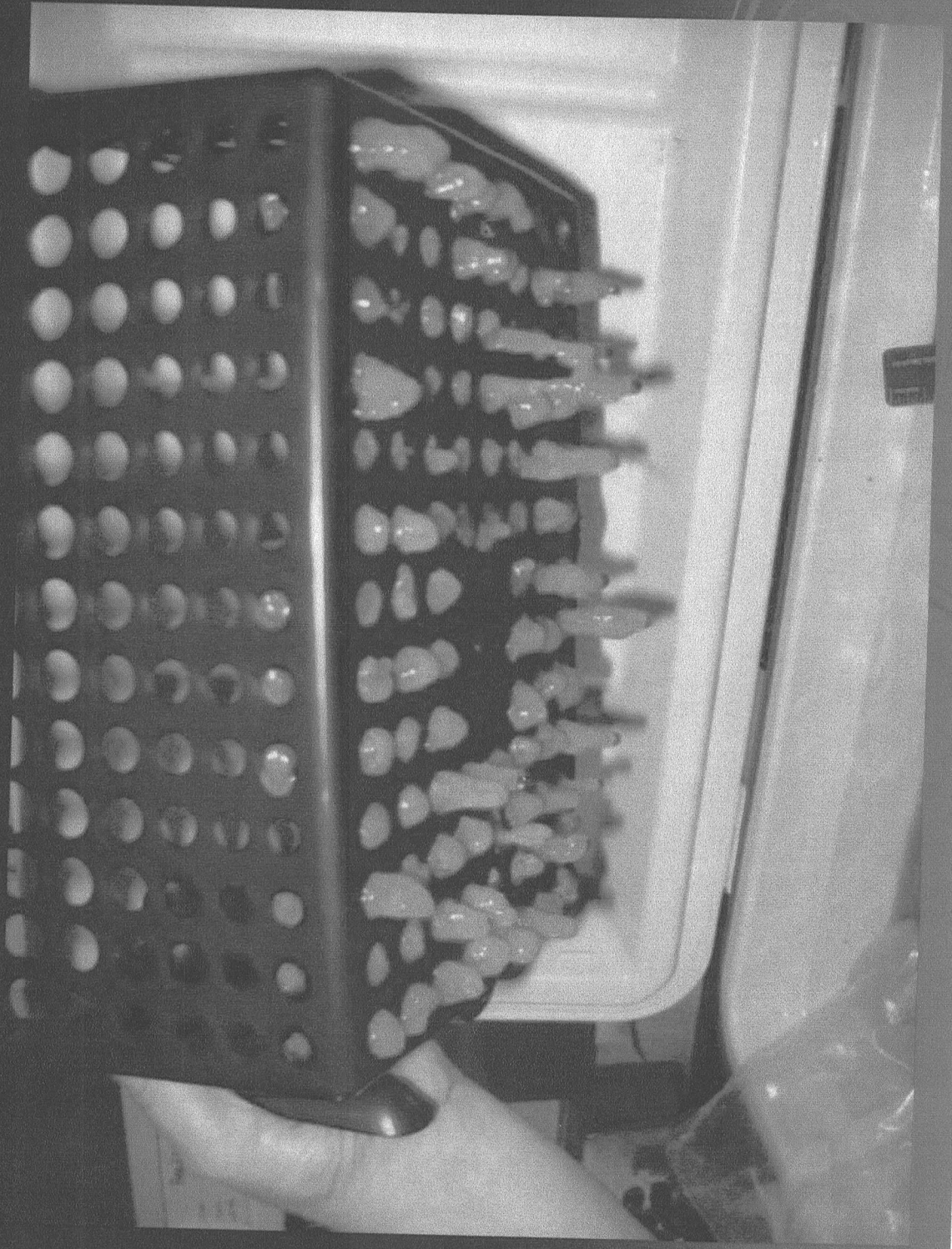
Typical 7-14
day growth of
dangles.



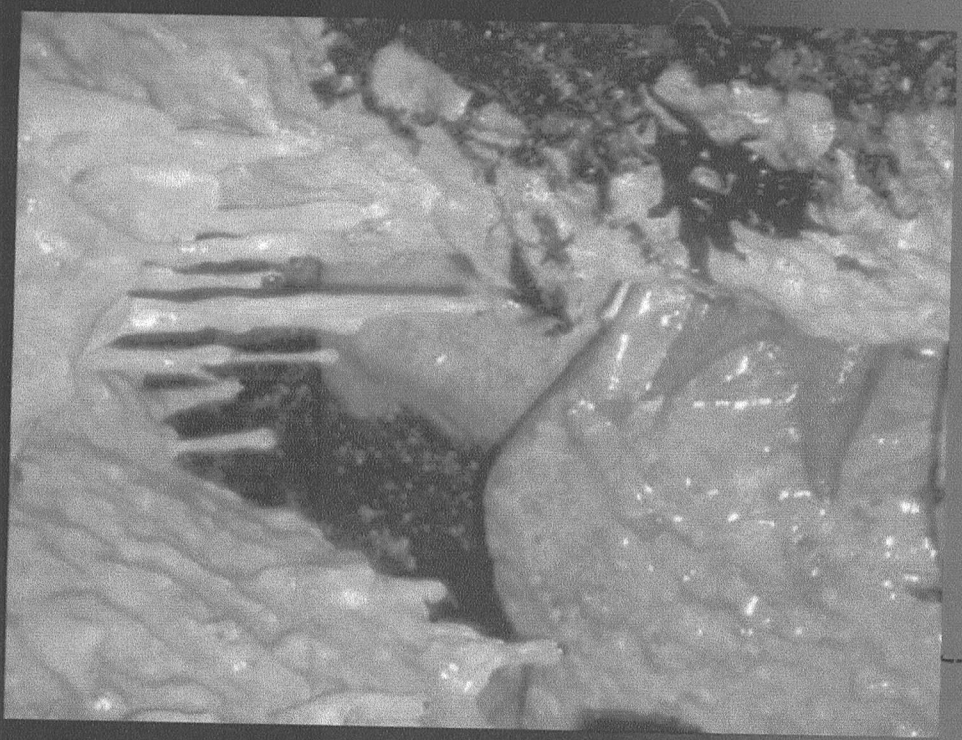
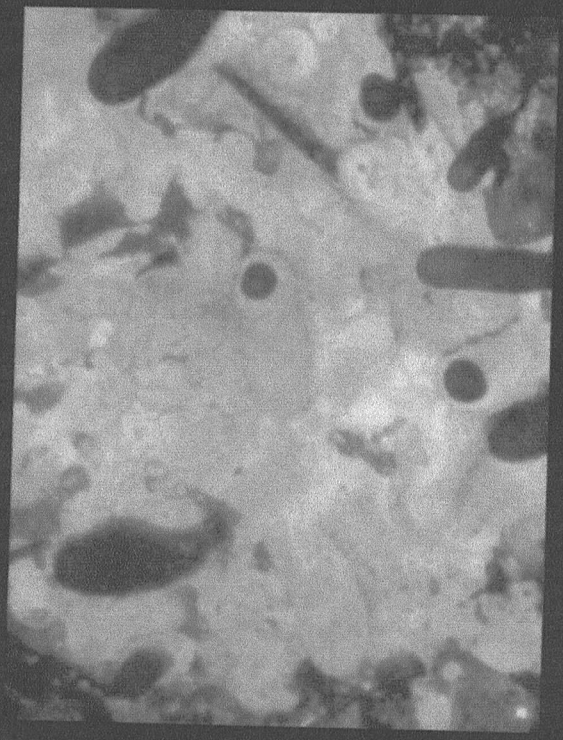
Dangles attenuate and break free



Within a few days



Intertidal Dvex Sitka, Alaska



Dvex in Sitka

- Explosive growth and potential for spread
- Whiting Harbor infestation
 - First contain, then eradicate.
- Reduce possibilities for reintroduction
- Learn more about the biology of Dvex and potential impacts in Alaska



Whiting Harbor infestation

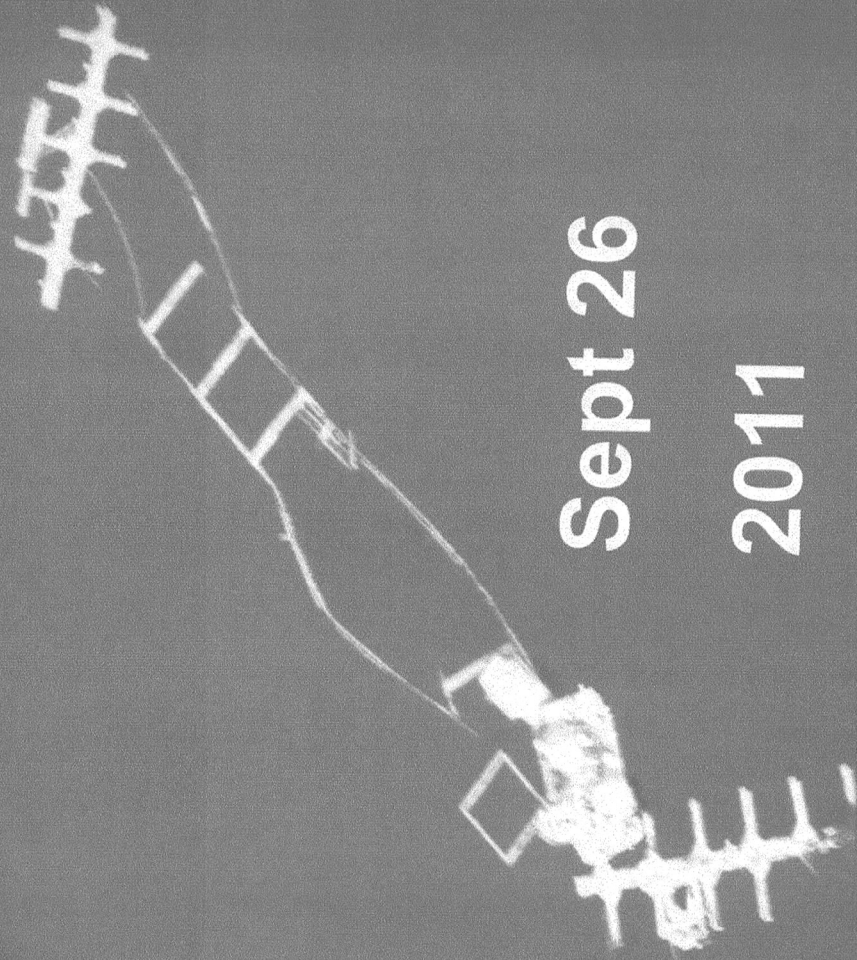
First contain, then eradicate.

- We all have been saying “Whiting docks are deteriorating and may carry Dvex out of Whiting”
- In fall of 2011, more than a year after Dvex discovery we lost dock structures out of Whiting
- Much has been cleaned up after storms
- There is still a rapidly deteriorating dock structure in Whiting that is heavily infested with Dvex and not well secured.
- Ability to quickly identify and carryout containment is crucial for communities. Still needs to be addressed in Sitka

Whiting Farm Deterioration



Summer
2010



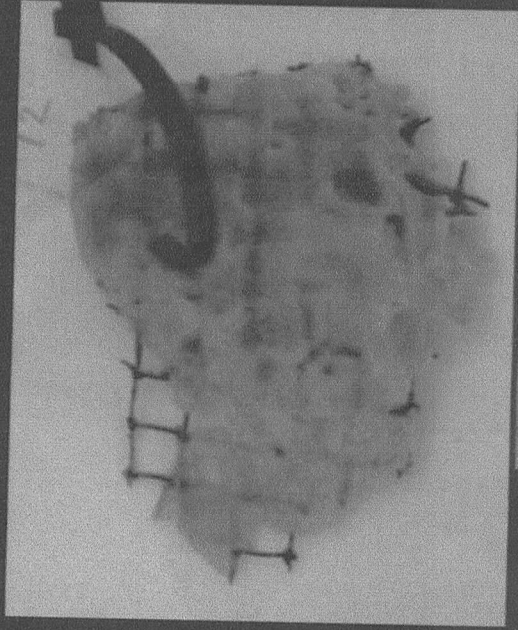
Sept 26
2011

Eradication

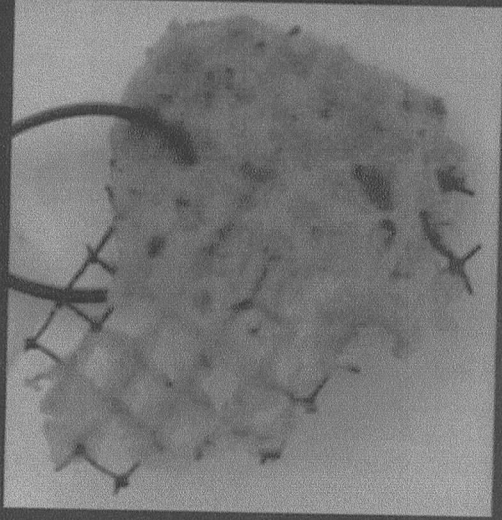
- We need to learn how to eradicate
- Smithsonian Environmental Research Center is testing eradication methods.
- This spring the plan is to scale up and try application of salt to limited area of sub-tidal habitat.



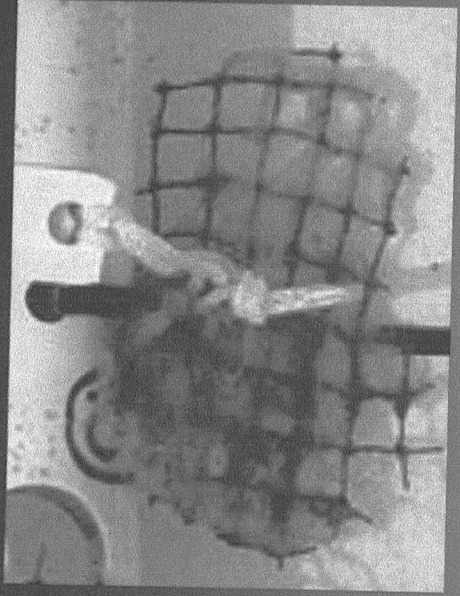
10% Acetic Acid (5 min)



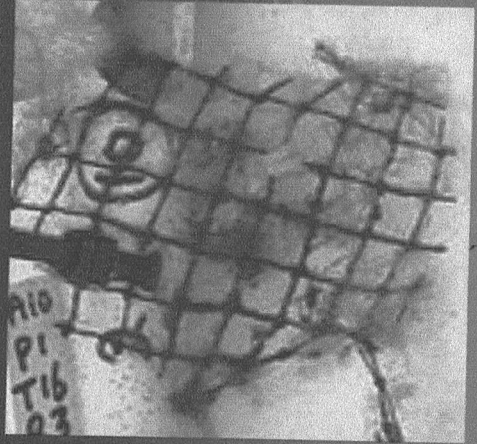
Before



After



1 Week



3 Weeks

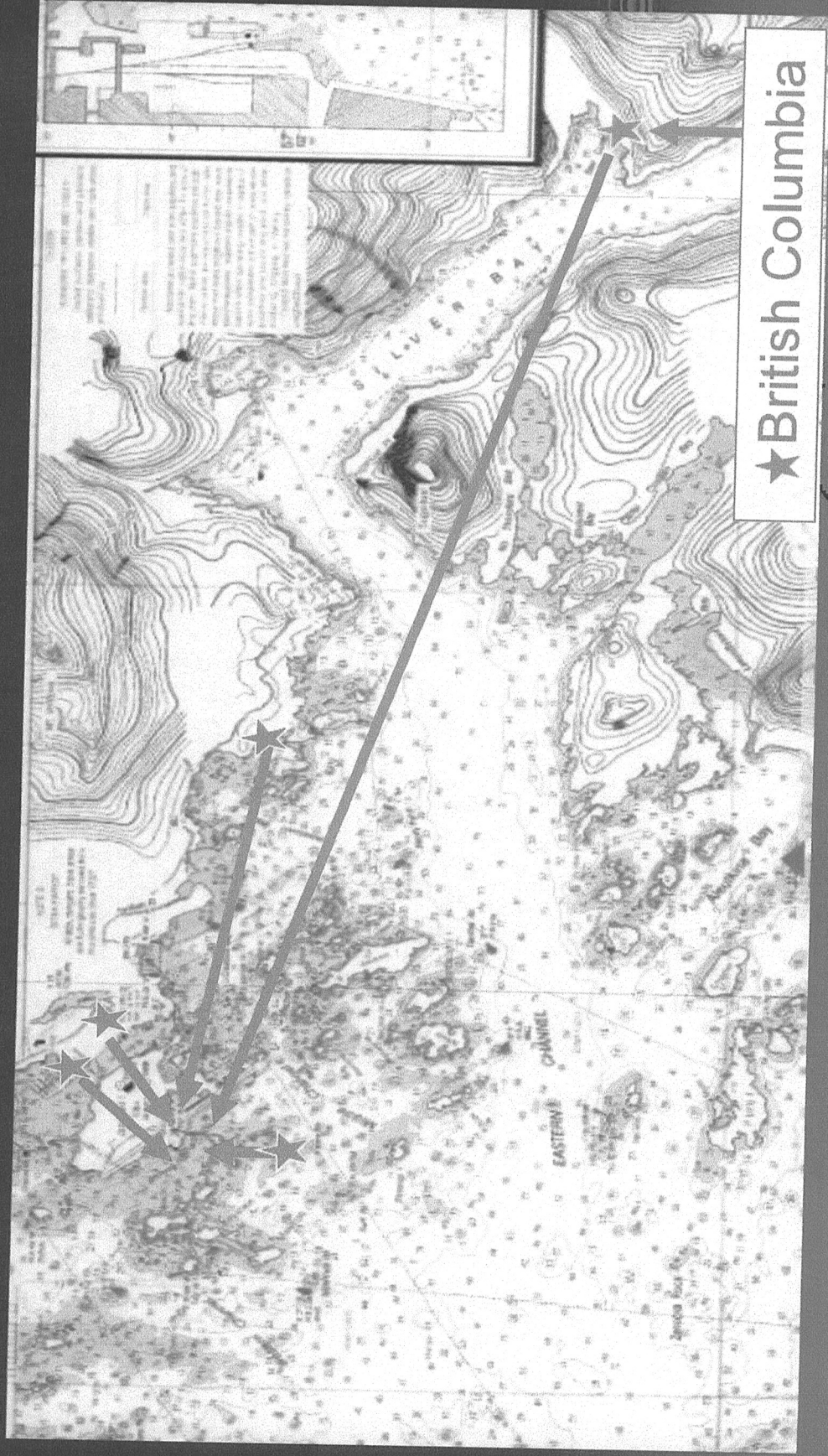
Dvex in Sitka

- Explosive growth and potential for spread
- Whiting Harbor infestation
 - First contain, then eradicate.
- Reduce possibilities for reintroduction
- Learn more about the biology of Dvex and potential impacts in Alaska

Reduce possibilities for reintroduction

- Ballast water, hull fouling, etc. all important
- Movement of docks other floating infrastructure has huge potential for spread of marine invasive species
- Moving a dock moves an entire habitat
- Very common in SE AK
- No legislation (?), little public awareness

Whiting docks pieced together from local and distant sources



Dvex in Sitka

- Explosive growth and potential for spread
- Whiting Harbor infestation
 - First contain, then eradicate.
- Reduce possibilities for reintroduction
- Learn more about the biology of Dvex and potential impacts in Alaska

Learn more about the biology of Dvex and potential impacts in Alaska

- Population genetics
- Distribution
- Ecological interaction and impacts
- Sexual reproduction & reproductive cycles
- Asexual reproduction & growth
- Considerations for containment & eradication

Impacts for Sitka and Alaska are Unknown

- Example: Herring Eggs (below)
- We know patches of Dvex can reach nearly 100% coverage Whiting.
- We do not know if herring will spawn on Dvex or if herring eggs can survive on Dvex.



Where do we go from here?
Where does Dvex go from here?



Whiting Harbor
Sitka, Alaska

STATE OF ALASKA

DEPARTMENT OF FISH AND GAME OFFICE OF THE COMMISSIONER

SEAN PARNELL, GOVERNOR

P.O. BOX 115526
JUNEAU, AK 99811-5526
PHONE: (907) 465-4100
FAX: (907) 465-2332

April 11, 2012

Representative Bill Stoltze
Co-Chair, House Finance Committee
Alaska State Legislature
State Capitol, Room 515
Juneau, AK 99801-1182

Co-Chairman Stoltze:

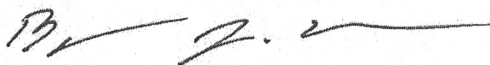
During the House Finance Committee hearing on House Bill 365, Representative Gara requested the Alaska Department of Fish and Game (ADF&G) provide written comment of our interpretation on how the directives contained within the bill would be implemented.

Under the rapid response and management plans described in the House Finance Committee Substitute for HB 365, AS 16.05.093(b) ADF&G authority "may use chemical, biological, mechanical, or physical methods, singly or in combination, to control the occurrence of or eradicate an aquatic invasive species..." AS 16.05.093(f) mandates that ADF&G "respond in a manner determined to cause the least harm to noninvasive resident fish populations..." The methods in which we would consider using to control or eradicate an aquatic invasive species are optional under HB 365, but the way in which we would carry out those methods is mandatory.

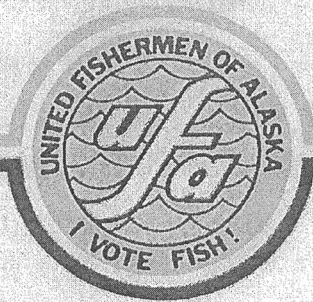
When considering the control or eradication of an invasive species within a freshwater ecosystem, ADF&G would take into account the presence of any non-invasive fish population present. Any potential harm to that non-invasive fish population as a result of the control or eradication of an invasive species would be mitigated. ADF&G would not be compelled to take action if the harm to the non-invasive fish population outweighs the benefits of eradication to the invasive fish population.

If you have any further questions on how ADF&G would carry out the directives contained in HB 365 please feel free to contact me at 465-6137.

Sincerely,



Ben Mulligan
Legislative Liaison



UNITED FISHERMEN OF ALASKA

211 Fourth Street, Suite 110
Juneau, Alaska 99801-1172
(907) 586-2820
(907) 463-2545 Fax
E-Mail: ufa@ufa-fish.org
www.ufa-fish.org

March 19, 2012

Representative Paul Seaton, Co-Chair
Representative Eric Feige, Co-Chair
House Resources Committee
Alaska State Legislature
120 4th St, State Capitol, Room 3
Juneau, AK 99801-1182

RE: Support for HB 365 Regarding Marine Invasive Species

Dear Co-Chairmen Seaton & Feige, and Committee Members,

United Fishermen of Alaska (UFA) is the largest statewide commercial fishing trade association, representing 37 commercial fishing organizations participating in fisheries throughout the state and its offshore federal waters. UFA member groups have long been concerned with the number of marine invasive species that have been identified in Alaska or have the potential to be introduced here. If rapid response capabilities are not established in advance, or if invasives and their transporting vectors are not identified at early stages, they pose potentially devastating effect on the state's fishery resources and the livelihoods of fishing fleets.

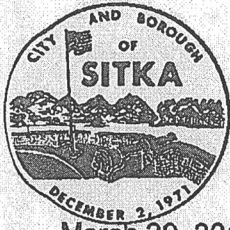
UFA commends the committee for drawing attention to this issue through sponsorship of HB 365, and we recommend support in the legislature. Thank you for your attention to this issue, and your support of HB 365.

Sincerely,

Mark Vinsel
Executive Director

MEMBER ORGANIZATIONS

Alaska Bering Sea Crabbers • Alaska Crab Coalition • Alaska Independent Fishermen's Marketing Association
Alaska Independent Tendemmen's Association • Alaska Longline Fishermen's Association • Alaska Scallop Association • Alaska Trollers Association
Alaska Whitefish Trawlers Association • Aleutian Pribilof Islands Community Development Association • Armstrong Keta • At-sea Processors Association
Bristol Bay Reserve • Bristol Bay Regional Seafood Development Association • Cape Barnabas Inc. • Concerned Area "M" Fishermen
Cook Inlet Aquaculture Association • Cordova District Fishermen United • Crab Group of Independent Harvesters • Douglas Island Pink and Chum
Groundfish Forum • Kenai Peninsula Fishermen's Association • Kodiak Regional Aquaculture Association • North Pacific Fisheries Association
Northern Southeast Regional Aquaculture Association • Petersburg Vessel Owners Association • Prince William Sound Aquaculture Corporation
Purse Seine Vessel Owner Association • Seafood Producers Cooperative • Southeast Alaska Herring Conservation Alliance
Southeast Alaska Fisherman's Alliance • Southeast Alaska Regional Dive Fisheries Association • Southeast Alaska Seiners
Southern Southeast Regional Aquaculture Association • United Catcher Boats • United Cook Inlet Drift Association
United Southeast Alaska Gillnetters • Valdez Fisheries Development Association



March 29, 2012

City and Borough of Sitka

100 Lincoln Street • Sitka, Alaska 99835

Rep. Bill Thomas, Co-Chair
Rep. Bill Stoltze, Co-Chair
House Finance Committee

Dear Co-Chairs Thomas and Stoltze and Finance Committee:

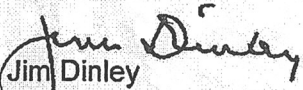
City and Borough of Sitka strongly supports House Bill 365, "An Act relating to the rapid response to, and control of, aquatic invasive species" and requests that HB 365 be heard and expedited for approval this Session by the Alaska State Legislature. This legislation is needed now to encourage a high priority response to eradicate dangerous invasive species before irreparable harm is done to Alaska's marine environment.

In the almost two years since the invasive tunicate *Didemnum Vexillum* was identified in Sitka's Whiting Harbor, the first known site in Alaska, the Alaska Department of Fish and Game has done dive surveys showing the spread of the tunicate and developed a draft response plan and hopefully this summer will hire an expert environmental firm to contain and eradicate this invasive with the \$500,000 in the Governor's Budget.

This tunicate has caused major habitat losses world wide, with hundreds of miles of fishing grounds on the East Coast closed to fishing. Sitka's rich fishing grounds and prime herring habitat, Sitka's harbors, and other Alaska waters, are at risk. HB 365 provides for a "Rapid response to, and control of, aquatic invasive species." This is exactly what CBS has asked the ADF&G to implement. The most important part of HB 365 is the direction to State agencies to not just develop response plans but implement actual containment and eradication, especially for those invasive species which could devastate Alaska's fisheries. This priority action requires a coordinated immediate response by all applicable State and Federal agencies.

Thank you for your support for affected communities including Sitka to prevent the spread of invasive species along Alaska's vast high-value coast.

Sincerely


Jim Dinley
Municipal Administrator

cc: Rep. Paul Seaton and Rep. Eric Feige, Co-Chairs, House Resources Committee
Rep. Peggy Wilson and Senator Bert Stedman

Providing for today...preparing for tomorrow

Linda Hay

From: Rep. Paul Seaton
Sent: Tuesday, March 20, 2012 4:05 PM
To: Linda Hay
Subject: FW: HB 365

-----Original Message-----

From: housemajority_email@housemajority.org [mailto:housemajority_email@housemajority.org]
Sent: Tuesday, March 20, 2012 3:50 PM
To: Rep. Paul Seaton
Subject: HB 365

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DO NOT REPLY DIRECTLY TO THIS EMAIL: your reply will go to enews@housemajority.org To correspond with the author Hit 'Reply' or 'Forward'.
Then change the TO: address to gagraziano@alaska.edu If suspected Spam please forward to: support@housemajority.org
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From: gagraziano@alaska.edu

I had the opportunity to listen in to the HB 365 hearing Monday, and was impressed with the comments and knowledge on invasive species issues in Alaska. Particularly as they pertained to needs for legislation and actions that encompass more than marine species, and mentioning the importance of rapid response funds like Montana's.

From what I have heard thus far it appears that HB 365 will direct Fish and Game to increase the priority of rapid response to identified marine invasive species, specifically with rapid response planning. The Department of Fish and Game has done a fair amount of planning already in cooperation with multiple agencies. Specifically for aquatic and marine species they have an established Aquatic Nuisance Species management plan, Spartina prevention and response plan, a green crab plan, and a plan for *Didemnum vexillum*. These are in addition to the broad Invasive Weeds and Pests management plan which the Division of Agriculture completed. An obvious next step to all these plans is implementation.

Several states have established invasive species councils that coordinate rapid response planning and implementation amongst agencies and stakeholders. Some of the core aspects of invasive species councils are represented in HB 365 through the provisions for response planning and implementation. The Fish and Game and Natural Resources Departments already have authority to plan for and implement actions related to invasive species. HB 365 essentially tells the Fish and Game Department that they must increase the priority of planning and response for new invasive species, however is limited to marine invasive species.

Established invasive species councils in other states efficiently coordinate planning and management actions amongst all involved agencies and stakeholders in a defined manner. States with effective programs, include implementation funds similar to Montana's rapid response fund. An invasive species council was proposed by Representative Craig Johnson in previous legislative sessions. Examining fiscal notes associated with invasive species council bills could help determine if more than marine response planning is possible with a similar amount of funding.

Gino Graziano
Invasive Plants Instructor

UAF Cooperative Extension Service
907-786-6315
gagraziano@alaska.edu

~ Gino Graziano
Zip Code: 99501

DO NOT REPLY DIRECTLY TO THIS EMAIL: your reply will go to enews@housemajority.org To correspond with the author Hit 'Reply' or 'Forward'.
Then change the TO: address to gagraziano@alaska.edu If suspected Spam please forward to: support@housemajority.org

Louie Flora

From: Rep. Paul Seaton
Subject: FW: HB 365 is needed to address Alaska's aquatic invasive species

From: Tim Stallard [<mailto:weeds.free.ak@gmail.com>]
Sent: Monday, March 19, 2012 11:08 AM
To: Rep. Paul Seaton; Rep. Eric Feige; Rep. Peggy Wilson; Rep. Alan Dick; Rep. Neal Foster; Rep. Bob Herron; Rep. Cathy Munoz; Rep. Berta Gardner; Rep. Scott Kawasaki
Subject: HB 365 is needed to address Alaska's aquatic invasive species

Hello members of the House Resources Committee,

Thank you for proposing and considering HB 365 - "An Act relating to the rapid response to, and control of, aquatic invasive species." I hope you will support this measure.

Alaska's environment and the natural resources upon which we depend for jobs, development, tourism, and quality of life are under threat by the rapid spread of damaging invasive species. Despite our isolation and extreme climate these aggressive alien species are skilled at hitch-hiking on cargo ships, fishing and pleasure boats, float planes, heavy equipment, vehicle tires, commodities (gravel, straw, mulch, soil), etc.

As you are likely aware, invasive species cause many billions of dollars of damage each year in the lower 48 and we are just beginning to see these impacts in Alaska. The best solution is to prevent the arrival of new species in the first place with invasive species-free commodities and good "hygiene" - For example wash the boat, plane, equipment, etc. free of any weed seeds or invasive species prior to arrival in a clean part of Alaska. While we need to do more to prevent the spread of invasive species, it is still inevitable that a few will sneak in. Thus it is essential that we have the ability to detect these alien invaders as early as possible and respond as quickly as possible. This is known as Early Detection/ Rapid Response (EDRR).

I know its politically easier to act after everyone recognizes a major problem, but the sooner we can detect and eradicate or control the most damaging species the better - this will save us a tremendous amount of money and heartache in the long run.

A specific example of a fresh water aquatic invasive species is Elodea (water weed) which is currently known in the Fairbanks, Anchorage, and Cordova areas. This plant is easily spread by small fragments. It has the ability to choke up lakes and slow moving water and degrade salmon spawning habitat. It was recently discovered in Anchorage's Sand Lake - which is used by float planes. We are very concerned that without action, it will soon spread to Lake Hood and from there throughout southcentral and southwest Alaska. USFWS biologists estimate it will cost about \$210,000 to plan for and apply aquatic herbicide to Sand Lake - but we believe we can eradicate the plant from this lake with a three year effort. Note that herbicides are a last resort, but in the case of this aggressive weed, herbicides represent a much lower ecological cost than allowing Elodea to take over and spread.

I read through the text of HB 365 and this proposed bill appears to me to perfectly address the need for ADF&G to develop an EDRR plan and act in coordination with other state, federal, local, and private entities. Of course such efforts require funding to be successful, but I understand that needs to be addressed separately in a concurrent process.

I don't see any changes that need to be made to this proposed legislation, except that there may be a comma out

of place or word order issue in Sec. 16.05.093 (c) that begins on line 5 of page two of the bill. I believe in the intent of this sentence, but it doesn't make sense to me the way it is written. Also, perhaps something could/should be added to this bill to address the issue of prevention?

the risk of asking for too much, we need a similar comprehensive statewide effort to deal with the rapid invasion of terrestrial invasive plants. DNR has an excellent Invasive Species Coordinator, but more resources are needed to address damaging invasive land plants. Perhaps most importantly, Alaska DOT needs to take an active role in preventing the spread of invasive weeds and controlling the many weeds along state Rights of Way, airports, snow dumps and gravel pits.

Please don't hesitate to contact me if I can provide any additional information.

Thank you,

Tim Stallard
Invasive Plant Program Coordinator
Anchorage Park Foundation

(907) 347-2214

Keeping Weeds OUT of the Picture

Louie Flora

Subject: FW: can you also add this to the committee packet?
Attachments: Hydrilla_response_upstate_NY.pdf; comparison_hydrilla_elodea_egeria.jpg; Aquatic_weed_control_TLW_presentation_2_1_11_compressed.pptx; Conceptual Amendment HB 365.docx

From: Wurtz, Tricia -FS [<mailto:twurtz@fs.fed.us>]
Sent: Monday, March 19, 2012 10:45 AM
To: Louie Flora
Subject: FW: True rapid response to Hydrilla in upstate NY

From: Wurtz, Tricia -FS
Sent: Wednesday, February 29, 2012 8:39 AM
To: cnipm-l@lists.uaf.edu
Cc: cecil_rich@fws.gov
Subject: True rapid response to Hydrilla in upstate NY

Hi CNIPM,

I was travelling in upstate NY last week when I read the attached article in a newspaper. A 65-acre infestation of *Hydrilla* was found in Cayuga Lake (one of the Finger Lakes) in August, and it was treated with Aquathol herbicide in October. Not only that, but a task force has formed that already has appealed to the NY State Legislature for \$1 million in funding to try to kill off the infestation completely. *Hydrilla* is a close relative of *Elodea* (see attached comparison).

This impresses me because these people seem to understand the need for a truly rapid response. I wish we Alaskans could act as quickly.

Trish

Trish Wurtz
Coordinator of FHP Invasive Plants / R10 Pesticides / and R10 Forest Health Monitoring Programs
USDA Forest Service, Forest Health Protection
3700 Airport Way, Fairbanks, Alaska 99709
907-451-2799
twurtz@fs.fed.us
<http://www.fs.usda.gov/goto/r10/fhp>

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House Resources Committee
State Capitol, Room 102
Juneau, AK 99801-1182

RE: Trout Unlimited supports HB 365

Dear Representatives Seaton and Fiege,

Trout Unlimited ("TU") is a national nonprofit conservation organization dedicated to the protection of coldwater fisheries and their habitats. Through our offices in Juneau, Anchorage and Dillingham and in conjunction with over 800 members and volunteers throughout the state, we have long participated in efforts to protect the valuable and still intact coldwater fishery resources in Alaska.

We have also long been concerned with the toll aquatic invasive species have taken on fish stocks in other parts of the country and around the world. As demonstrated time and again they can, in a short amount of time, threaten both sport and commercial fisheries and take a significant ecological and economic toll on our states resources.

We are writing to you in support of HB 365, authorizing the Department of Fish and Game to take measures to combat invasive aquatic species in a timely and appropriate fashion. Our commercial and sport fishing, as well as our mariculture industries, are too valuable to put at risk by delaying immediate action when it comes to marine aquatic invasive species.

Thank you very much for your time on this extremely important matter.

Sincerely,

Tim Bristol/Alaska Program Director

2/23/2012

THE ITHACAN 3

Ithaca requests up to \$1 million to kill Hydrilla

BY TINA CRAVEN
STAFF WRITER

To fund the eradication of hydrilla verticillata, an invasive aquatic species that first appeared in the Cayuga Inlet last fall, a local environmental task force has requested \$700,000 to \$1 million in funding from New York state.



JOHNSTON said the removal of hydrilla could take up to seven years.

First spotted in August, hydrilla creates toxic blue algae harmful to local wildlife. In October, the Cayuga Inlet Hydrilla Task Force and Allied Biological, a lake management consulting company based in the Northeast, administered Herbicide Aquathol X to prevent the plant from spreading.

The hydrilla is currently dormant, and Sharon Anderson, environmental program leader for the Cornell Cooperative Extension of Tompkins County, said the mild winter has done very little to impact the plant's growth. The invasion is expected to be worse, she said, because there was not a harsh winter to kill the hydrilla's exposed tubers.

Roxy Johnston, watershed coordinator for the City of Ithaca's Water Treatment Plant, said the task force asked the state for funds Jan. 31, but members are still awaiting a response. Johnston said she is hopeful the state will contribute some money to the project.

"The cost burden and the coordination burden really is overwhelming for any single municipality or even county," she said.

If left untreated, hydrilla could damage the local economy. The revenue made off the lake could disappear because the water could become solid hydrilla, she said. Locals would have to pay to keep the channels open while the tourism profits drop and the real estate value of the area declines.

If the state refuses to provide assistance, she said, the task force will look elsewhere for funding, like grants that would help cover the removal of the herbicide required to kill the tubers is costly.

"The cost is high per acre period, with whichever direction you choose to go," Johnston said. "We have quite a few number of acres we have to treat. We're looking at a maximum of 66 acres."

Johnston said there are before-and-after tests to ensure the herbicide will cause no unwanted side effects in the water. Also, money must be allocated to raise public awareness concerning the project.

While it is speculated that it will take five years to fully eliminate the hydrilla, Johnston said the process could take up to seven years.

Dave Adams, regulatory coordinator of the Department of Environmental Conservation, said the herbicide treatment in October was successful even though it did not entirely eradicate the plant's infestation.

"With treatment and monitoring, we can remove the overall vegetation's density and extent, but it will take a couple of years," Adams said.

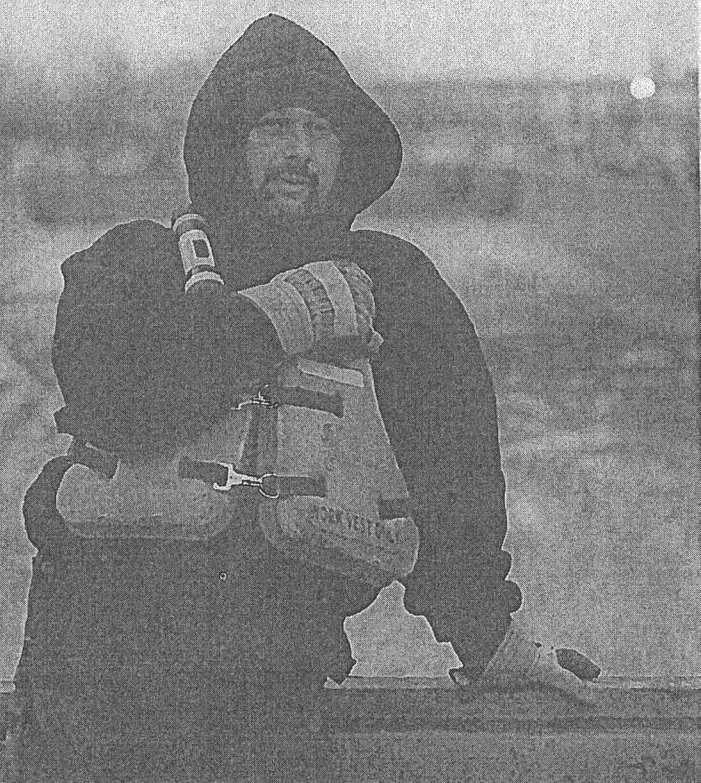
Balancing the Interests of the Economy & Great Lakes Ecosystem

by Tim Anderson

BATTLE OVER INVASIVE SPECIES

CHICAGO — Brett Kirbach of Illinois Marine Towing stands watch while working on the Windy City tow boat. State leaders are striving to balance the sometimes competing interests of the economy and the Great Lakes ecosystem.

© Getty Images/Scott Olson



Policymakers are striving to find a balance between protecting the delicate ecosystem of the Great Lakes and preserving much-needed jobs.

The problem comes in the form of invasive aquatic species entering the Great Lakes.

Take, for example, the case of sea lamprey, a fish native to the Atlantic Ocean that came to, and then spread throughout, the lakes via manmade shipping canals built in the 1800s.

By the middle of the 20th century, sea lampreys were wreaking havoc on the Great Lakes ecosystem and fishing industry. The population of lake trout was decimated. To this day, the U.S. and Canadian governments are spending millions of dollars a year to control this non-native fish.

More than 180 nonindigenous species have been detected in the Great Lakes. Some are harmless, but others—such as the sea lamprey—have had a profound ecological impact.

Wisconsin Rep. Cory Mason, whose district borders Lake Michigan and also includes some of the state's treasured 15,000 inland lakes, is all too familiar with the impact these invasions can have.

"We've certainly had to deal with the zebra mussel problems in Lake Michigan, and invasive species in our inland lakes change how people can use them," Mason said. "They affect our quality of life. And once they're here, there is no redoing it. They're here permanently."

Tough New Standards

Led in part by lawmakers like Mason, states have taken a lead role over the past decade in trying to keep invasive species out of the Great Lakes.

Today, the fight is centered in New York, which plans to begin enforcing the toughest standards on ballast water discharges in the country next year.

Late in 2011, Mason spearheaded a letter-writing campaign—signed by 21 Wisconsin lawmakers—urging New York to stand by its rules.

"Because of its geographic location, New York is a first-in port of entry, so a tougher standard in that state means protecting the entire basin," Mason said.

He points out that invasive species are not only an ecological threat, but also have an economic consequence. A study by University of Notre Dame researcher David Lodge estimated that these non-native species cost the Great Lakes region \$200 million a year.

But some state and federal leaders believe New York's rules go too far in trying to address the threat.

While the seaway has opened up a new pathway for invasive species to come to the Great Lakes, it has opened up new economic opportunities for the region to trade with the

rest of the world.

Governors in Indiana, Ohio and Wisconsin say New York's new rules will close these opportunities.

The state's discharge standard is incompatible with current ballast water treatment technologies, the governors wrote in a letter last year to New York Gov. Andrew Cuomo, and will "possibly force the closure of the St. Lawrence Seaway and imperil thousands of maritime-related jobs."

That letter prompted Mason's letter to New York.

Since the seaway began operating in 1959, more than 2.5 billion metric tons of goods valued at more than \$375 million have been moved through it. A 2011 study done on behalf of the Great Lakes shipping industry estimated that the economic activity related to the seaway supports 227,000 jobs in the region.

Over the past half-century, the ballast water of ocean-going ships has been the leading source of nonindigenous species introductions in the Great Lakes, and is the cause of notorious invaders such as the zebra mussel and round goby entering the freshwater system.

States have responded by adopting mandatory ballast water treatment programs and discharge standards. Michigan established the first state-level permitting program in 2005; other states have since followed.

"States like New York have basically said, 'We are not going to tolerate this source of pollution anymore, and we're going to try and figure out how to deal with it,'" said Joel Brammeier, president and CEO of the Alliance for the Great Lakes. "One way to deal with it is through the rapid development of (ballast water) technology, in order to achieve a standard to protect the Great Lakes."

The idea is to establish a standard of

treatment that reduces the number of viable organisms in ballast water discharges. But as Brammeier noted, "States are not of one mind on this issue."

The letters written by Mason and the three governors illustrate this divide.

Still, some lawmakers would like the eight Great Lakes states to find consensus on a uniform discharge standard for ballast water.

In late 2011, the Michigan Legislature passed a package of bills that in part call on the state's Department of Environmental Quality to lead such an effort.

The legislative package, sponsored by Sen. Howard Walker, also establishes a 19-member Aquatic Invasive Species Advisory Council, which will revise Michigan's laws, regulations and programs, as well as update the state's Aquatic Invasive Species Management Plan.

The Federal Response

Meanwhile, New York's proposed rules have prompted a strong response from some federal lawmakers. In late 2011, the U.S. House passed legislation stripping states of their authority to create ballast water regulations stronger than those at the federal level.

The same measure would establish a federal ballast water discharge standard that is the same as the one set by the United Nations' International Maritime Organiza-

tion, known as the IMO. As of early 2012, not enough member countries had ratified the IMO standard to be enforced.

New York's pending discharge standard is 100 times more stringent than the UN standard for existing vessels.

In contrast, states such as Minnesota and Wisconsin have established ballast water programs using the IMO standard. And both the U.S. Environmental Protection Agency and U.S. Coast Guard are moving ahead with plans to tie a federal standard to the IMO standard.

While a discharge standard remains a priority for many, some past actions have helped in the fight against invasive species. Starting in 2006, all overseas vessels entering the Great Lakes were required to conduct saltwater flushing and ballast water exchanges. Since then, there have been no reports of invasive species entering the lakes via ocean-going vessels.

But there are limits to the efficacy of these practices in preventing the introduction of invasive species.

The IMO standard adds another layer of protection to these existing practices. States such as New York and California have decided that even this standard is not enough, while others say anything above it simply is not feasible. ☐



"(Invasive species) affect our quality of life. And once they're here, there is no redoing it. They're here permanently."

—Wisconsin Rep. Cory Mason