

HF81 - 0 - Reporting Fish Kills in Public Waters

Chief Author: **Sydney Jordan**  
 Committee: **Environment and Natural Resources Finance And Policy**  
 Date Completed: **1/25/2023 2:26:44 PM**  
 Lead Agency: **Health Dept**  
 Other Agencies:  
     Administrative Hearings      Agriculture Dept  
     Natural Resources Dept      Pollution Control Agency  
     Public Safety Dept          University Of Minnesota

State Fiscal Impact	Yes	No
Expenditures	X	
Fee/Departmental Earnings	X	
Tax Revenue		X
Information Technology		X
Local Fiscal Impact	X	

This table shows direct impact to state government only. Local government impact, if any, is discussed in the narrative. Reductions shown in the parentheses.

State Cost (Savings)	Biennium			Biennium		
	Dollars in Thousands	FY2023	FY2024	FY2025	FY2026	FY2027
<b>Administrative Hearings</b>	-	-	-	-	-	-
Administrative Hearings	-	-	-	-	-	-
<b>Agriculture Dept</b>						
General Fund	-	45	-	-	-	-
<b>Health Dept</b>						
General Fund	-	219	83	-	-	-
<b>Natural Resources Dept</b>						
Game And Fish (Operations)	-	29	-	-	-	-
<b>Pollution Control Agency</b>						
General Fund	-	56	-	-	-	-
<b>Public Safety Dept</b>						
General Fund	-	7	7	7	7	7
<b>University Of Minnesota</b>						
General Fund	-	31	-	-	-	-
<b>State Total</b>						
Administrative Hearings	-	-	-	-	-	-
General Fund	-	358	90	7	7	7
Game And Fish (Operations)	-	29	-	-	-	-
<b>Total</b>	-	<b>387</b>	<b>90</b>	<b>7</b>	<b>7</b>	<b>7</b>
<b>Biennial Total</b>			<b>477</b>			<b>14</b>

Full Time Equivalent Positions (FTE)	Biennium			Biennium	
	FY2023	FY2024	FY2025	FY2026	FY2027
Administrative Hearings	-	-	-	-	-
Administrative Hearings	-	-	-	-	-
Agriculture Dept					

Full Time Equivalent Positions (FTE)	Biennium			Biennium	
	FY2023	FY2024	FY2025	FY2026	FY2027
General Fund	-	.3	-	-	-
Health Dept					
General Fund	-	1.25	.5	-	-
Natural Resources Dept					
Game And Fish (Operations)	-	.22	-	-	-
Pollution Control Agency					
General Fund	-	.4	-	-	-
Public Safety Dept					
General Fund	-	-	-	-	-
University Of Minnesota					
General Fund	-	.54	-	-	-
<b>Total</b>	-	<b>2.71</b>	<b>.5</b>	-	-

**Lead LBO Analyst's Comment**

I have reviewed this fiscal note for reasonableness of content and consistency with the LBO's Uniform Standards and Procedures.

The fiscal note addresses the cost of developing and approving new protocols. Agencies indicated the number of fish kill investigations will likely increase resulting from the new protocols required in the bill. An increase in investigations may have further fiscal impacts to the state. Those costs are not carried within the fiscal note as such costs cannot be determined until the protocols are approved. This bill directs the reporting of fish kills to be directed to the Office of Emergency Response within the Department of Public Safety (DPS) however that office does not exist within the agency. See DPS's fiscal note for additional information.

**LBO Signature:** Kate Schiller      **Date:** 1/25/2023 2:26:44 PM  
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**State Cost (Savings) Calculation Details**

This table shows direct impact to state government only. Local government impact, if any, is discussed in the narrative. Reductions are shown in parentheses.

\*Transfers In/Out and Absorbed Costs are only displayed when reported.

<b>State Cost (Savings) = 1-2</b>	<b>Biennium</b>			<b>Biennium</b>	
Dollars in Thousands	<b>FY2023</b>	<b>FY2024</b>	<b>FY2025</b>	<b>FY2026</b>	<b>FY2027</b>
Administrative Hearings	-	-	-	-	-
Administrative Hearings	-	-	-	-	-
Agriculture Dept					
General Fund	-	45	-	-	-
Health Dept					
General Fund	-	219	83	-	-
Natural Resources Dept					
Game And Fish (Operations)	-	29	-	-	-
Pollution Control Agency					
General Fund	-	56	-	-	-
Public Safety Dept					
General Fund	-	7	7	7	7
University Of Minnesota					
General Fund	-	31	-	-	-
<b>Total</b>	<b>-</b>	<b>387</b>	<b>90</b>	<b>7</b>	<b>7</b>
<b>Biennial Total</b>			<b>477</b>		<b>14</b>
<b>1 - Expenditures, Absorbed Costs*, Transfers Out*</b>					
Administrative Hearings	-	-	-	-	-
Administrative Hearings	-	12	-	-	-
Agriculture Dept					
General Fund	-	45	-	-	-
Health Dept					
General Fund	-	219	83	-	-
Natural Resources Dept					
Game And Fish (Operations)	-	29	-	-	-
Pollution Control Agency					
General Fund	-	56	-	-	-
Public Safety Dept					
General Fund	-	7	7	7	7
University Of Minnesota					
General Fund	-	31	-	-	-
<b>Total</b>	<b>-</b>	<b>399</b>	<b>90</b>	<b>7</b>	<b>7</b>
<b>Biennial Total</b>			<b>489</b>		<b>14</b>
<b>2 - Revenues, Transfers In*</b>					
Administrative Hearings	-	-	-	-	-
Administrative Hearings	-	12	-	-	-
Agriculture Dept					
General Fund	-	-	-	-	-
Health Dept					
General Fund	-	-	-	-	-
Natural Resources Dept					
Game And Fish (Operations)	-	-	-	-	-

<b>State Cost (Savings) = 1-2</b>		<b>Biennium</b>			<b>Biennium</b>	
<b>Dollars in Thousands</b>		<b>FY2023</b>	<b>FY2024</b>	<b>FY2025</b>	<b>FY2026</b>	<b>FY2027</b>
Pollution Control Agency						
General Fund		-	-	-	-	-
Public Safety Dept						
General Fund		-	-	-	-	-
University Of Minnesota						
General Fund		-	-	-	-	-
	<b>Total</b>	-	<b>12</b>	-	-	-
	<b>Biennial Total</b>			<b>12</b>		-

HF81 - 0 - Reporting Fish Kills in Public Waters

Chief Author: **Sydney Jordan**  
 Committee: **Environment and Natural Resources Finance And Policy**  
 Date Completed: **1/25/2023 2:26:44 PM**  
 Agency: **Health Dept**

State Fiscal Impact	Yes	No
Expenditures	X	
Fee/Departmental Earnings		X
Tax Revenue		X
Information Technology		X
Local Fiscal Impact		X

This table shows direct impact to state government only. Local government impact, if any, is discussed in the narrative. Reductions shown in the parentheses.

State Cost (Savings)	Biennium			Biennium		
	Dollars in Thousands	FY2023	FY2024	FY2025	FY2026	FY2027
General Fund	-	219	83	-	-	-
<b>Total</b>	-	<b>219</b>	<b>83</b>	-	-	-
<b>Biennial Total</b>			<b>302</b>			-

Full Time Equivalent Positions (FTE)	Biennium			Biennium	
	FY2023	FY2024	FY2025	FY2026	FY2027
General Fund	-	1.25	.5	-	-
<b>Total</b>	-	<b>1.25</b>	<b>.5</b>	-	-

**LBO Analyst's Comment**

I have reviewed this fiscal note for reasonableness of content and consistency with the LBO's Uniform Standards and Procedures.

**LBO Signature:** Kate Schiller      **Date:** 1/25/2023 8:23:37 AM  
**Phone:** 651-296-6052      **Email:** kate.schiller@lbo.mn.gov

**State Cost (Savings) Calculation Details**

This table shows direct impact to state government only. Local government impact, if any, is discussed in the narrative. Reductions are shown in parentheses.

\*Transfers In/Out and Absorbed Costs are only displayed when reported.

<b>State Cost (Savings) = 1-2</b>		Biennium			Biennium	
Dollars in Thousands	FY2023	FY2024	FY2025	FY2026	FY2027	
General Fund	-	219	83	-	-	-
<b>Total</b>	<b>-</b>	<b>219</b>	<b>83</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Biennial Total</b>			<b>302</b>			<b>-</b>
<b>1 - Expenditures, Absorbed Costs*, Transfers Out*</b>						
General Fund	-	219	83	-	-	-
<b>Total</b>	<b>-</b>	<b>219</b>	<b>83</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Biennial Total</b>			<b>302</b>			<b>-</b>
<b>2 - Revenues, Transfers In*</b>						
General Fund	-	-	-	-	-	-
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Biennial Total</b>			<b>-</b>			<b>-</b>

**Bill Description**

The bill adds new Minnesota Statute, sections 103G.216 and 103G.2165, to require reporting of fish kills to multiple state agencies and tasks the Minnesota Department of Health with development of a fish kill response protocol for state response to fish kill events in Minnesota.

**Technical comments:**

The Development of Fish Kill Response Protocol section of the bill establishes the Minnesota Department of Health as the lead agency for developing the protocol, but Section 3 of the bill appropriates money to the Board of Regents of the University of Minnesota to develop the response protocol.

The bill requires that this protocol be developed with input from the relevant parties by October 1, 2023, which allows for approximately three months to develop the protocol (assuming a start date of July 1, 2023). This timeline would be extremely challenging to meet for finalizing the protocol given the length of time it takes to create processes, procedures, and rules that require input from different technical experts and prepare them for review by an administrative law judge.

The Minnesota Department of Natural Resources historically has been the lead agency to respond to fish kill events and has an established response process.

**Assumptions**

The department assumes it would be responsible for developing the protocol and convening experts in other state agencies that have responsibility for fish kill response and the University of Minnesota (UMN), Dept of Fisheries, Wildlife, and Conservation Biology to assist with development of the fish kill response protocol. Regulatory and emergency response authority for fish in Minnesota is generally shared between the Department of Natural Resources, Pollution Control Agency, and when pesticides are involved, Department of Agriculture. The department also assumes it would take a year to develop the fish kill response protocol based on similar experience in developing expedited rules and small rules that also require submittal and review by an administrative law judge (ALJ). For fiscal year 2024, 1.25 full-time equivalent (FTE) staff would be needed to facilitate interagency meetings; review scientific and grey literature on existing protocols and best practices related to fish kills; review methods of assessing physical, biological, and chemical contaminants, including determining sampling protocol; develop a listing of contaminants to test for; and develop appropriate procedures for handling, submitting, analyzing, and reporting findings. The cost to pay the Office of Administrative Hearings for an administrative law judge to review and approve the protocol is \$12,250.

The department further assumes that it will take six months to incorporate comments and address issues raised by the

ALJ for resubmittal and final approval. The department will need 0.5 FTE staff in fiscal year 2025 to complete this process.

**Expenditure and/or Revenue Formula**

<b>Expenditure (Actual Dollars)</b>	<b>Amount</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>
<b>Salary &amp; Fringe:</b>		FTE	FTE	FTE	FTE
Environmental Research Scientist	137,474	1.00	0.50		
Planner Principal State	129,602	0.25			
	<b>FTE</b>	<b>1.25</b>	<b>0.50</b>	<b>0.00</b>	<b>0.00</b>
	<b>Subtotal</b>	<b>169,875</b>	<b>68,737</b>	<b>0</b>	<b>0</b>
<b>Information Technology:</b>					
	<b>Subtotal</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Other Operating Costs:</b>					
OAH review costs		12,250			
	<b>Subtotal</b>	<b>12,250</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Grants, Aids &amp; Subsidies:</b>					
	<b>Subtotal</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Indirect (20.3% Eligible Costs)</b>	<b>Subtotal</b>	<b>36,971</b>	<b>13,954</b>	<b>0</b>	<b>0</b>
<b>Expenditure</b>	<b>Total</b>	<b>219,096</b>	<b>82,691</b>	<b>0</b>	<b>0</b>
<b>Fiscal Tracking (Dollars in Thousands)</b>		<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>
<b>Health Protection BACT 03</b>		<b>219</b>	<b>83</b>	<b>0</b>	<b>0</b>
Administration		219	83	0	0
Grants		0	0	0	0

**Long-Term Fiscal Considerations**

The protocol, once approved by the ALJ, requires all state agencies to follow the protocol when responding to fish kill events, potentially requiring staff time, travel, sampling equipment, lab testing costs, fees, etc. The department is unsure what role, if any, it would play in response to fish kill events under this new protocol.

Additionally, the protocol must be reviewed and updated by all parties originally involved every five years, which will take additional staff resources and program expenditures to complete.

**Local Fiscal Impact**

**References/Sources**

**Agency Contact:**

**Agency Fiscal Note Coordinator Signature:** Char Kimber

**Date:** 1/24/2023 2:15:00 PM

**Phone:** 651-201-4685

**Email:** health.fiscalnotes@state.mn.us

HF81 - 0 - Reporting Fish Kills in Public Waters

Chief Author: **Sydney Jordan**  
 Committee: **Environment and Natural Resources Finance And Policy**  
 Date Completed: **1/25/2023 2:26:44 PM**  
 Agency: **Administrative Hearings**

State Fiscal Impact	Yes	No
Expenditures	X	
Fee/Departmental Earnings	X	
Tax Revenue		X
Information Technology		X
Local Fiscal Impact		X

This table shows direct impact to state government only. Local government impact, if any, is discussed in the narrative. Reductions shown in the parentheses.

State Cost (Savings)	Biennium			Biennium		
	Dollars in Thousands	FY2023	FY2024	FY2025	FY2026	FY2027
Administrative Hearings	-	-	-	-	-	-
<b>Total</b>	-	-	-	-	-	-
<b>Biennial Total</b>			-			-

Full Time Equivalent Positions (FTE)	Biennium			Biennium	
	FY2023	FY2024	FY2025	FY2026	FY2027
Administrative Hearings	-	-	-	-	-
<b>Total</b>	-	-	-	-	-

**LBO Analyst's Comment**

I have reviewed this fiscal note for reasonableness of content and consistency with the LBO's Uniform Standards and Procedures.

**LBO Signature:** Chloe Burns      **Date:** 1/13/2023 12:15:22 PM  
**Phone:** 651-297-1423      **Email:** chloe.burns@lbo.mn.gov



**State Cost (Savings) Calculation Details**

This table shows direct impact to state government only. Local government impact, if any, is discussed in the narrative. Reductions are shown in parentheses.

\*Transfers In/Out and Absorbed Costs are only displayed when reported.

<b>State Cost (Savings) = 1-2</b>	<b>Biennium</b>			<b>Biennium</b>	
Dollars in Thousands	FY2023	FY2024	FY2025	FY2026	FY2027
Administrative Hearings	-	-	-	-	-
<b>Total</b>	-	-	-	-	-
<b>Biennial Total</b>			-		-
<b>1 - Expenditures, Absorbed Costs*, Transfers Out*</b>					
Administrative Hearings	-	12	-	-	-
<b>Total</b>	-	12	-	-	-
<b>Biennial Total</b>			12		-
<b>2 - Revenues, Transfers In*</b>					
Administrative Hearings	-	12	-	-	-
<b>Total</b>	-	12	-	-	-
<b>Biennial Total</b>			12		-

**Bill Description**

HF81 provides for the development of a fish kill protocol. The Department of Health (MDH) together with the Pollution Control Agency, the Department of Natural Resources, and the University of Minnesota must establish a protocol for agencies to follow when responding to a report of a fish kill.

MDH must submit the protocol developed by these entities to the Office of Administrative Hearings (OAH) for review and approval by an administrative law judge (ALJ).

**Assumptions**

Based on past practices, OAH assumes that review and approval of a fish kill protocol would be akin to procedures used to review and approve a medium size agency rulemaking under chapter 14. OAH assumes that review and approval of a fish kill protocol will require an estimated 50 hours of ALJ time for activity related to such a protocol review. Subd. 4 requires that the protocol be updated and submitted for review and approval by an ALJ every five years.

OAH currently bills ALJ time at the MMB-approved billable rate of \$245 per hour (see Minn. Stat. § 16A.126, subd. 1 (2022)).

**Expenditure and/or Revenue Formula**

Estimated 50 hours of ALJ time for activities related to reviewing and approving the requirements of Sec. 2, Subd. 1(b) Development of Fish Kill Response Protocol = 50 hours x \$245/hr = \$12,250 charged to MDH in FY2024.

**Long-Term Fiscal Considerations**

Subd. 4 requires that every five years the protocol be reviewed and updated and submitted to an ALJ for review and approval.

**Local Fiscal Impact**

**References/Sources**

**Agency Contact:** Denise Collins

**Agency Fiscal Note Coordinator Signature:** Denise Collins

**Phone:** 651-3617875

**Date:** 1/12/2023 3:25:46 PM

**Email:** denise.collins@state.mn.us

HF81 - 0 - Reporting Fish Kills in Public Waters

Chief Author: **Sydney Jordan**  
 Committee: **Environment and Natural Resources Finance And Policy**  
 Date Completed: **1/25/2023 2:26:44 PM**  
 Agency: **Agriculture Dept**

State Fiscal Impact	Yes	No
Expenditures	X	
Fee/Departmental Earnings		X
Tax Revenue		X
Information Technology		X
Local Fiscal Impact	X	

This table shows direct impact to state government only. Local government impact, if any, is discussed in the narrative. Reductions shown in the parentheses.

State Cost (Savings)	Biennium			Biennium		
	Dollars in Thousands	FY2023	FY2024	FY2025	FY2026	FY2027
General Fund	-	45	-	-	-	-
<b>Total</b>	-	<b>45</b>	-	-	-	-
<b>Biennial Total</b>			<b>45</b>			-

Full Time Equivalent Positions (FTE)	Biennium			Biennium	
	FY2023	FY2024	FY2025	FY2026	FY2027
General Fund	-	.3	-	-	-
<b>Total</b>	-	<b>.3</b>	-	-	-

**LBO Analyst's Comment**

I have reviewed this fiscal note for reasonableness of content and consistency with the LBO's Uniform Standards and Procedures.

The fiscal note addresses the cost of developing and approving new protocols. The Department of Agriculture (MDA) indicated the number of fish kill investigations will likely increase resulting from the new protocols required in the bill. An increase in investigations may have further fiscal impacts to the state. Those costs are not carried within the fiscal note as such costs cannot be determined until the protocols are approved.

**LBO Signature:** Chloe Burns    **Date:** 1/25/2023 11:08:38 AM  
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**State Cost (Savings) Calculation Details**

This table shows direct impact to state government only. Local government impact, if any, is discussed in the narrative. Reductions are shown in parentheses.

\*Transfers In/Out and Absorbed Costs are only displayed when reported.

<b>State Cost (Savings) = 1-2</b>		Biennium			Biennium	
Dollars in Thousands		FY2023	FY2024	FY2025	FY2026	FY2027
General Fund	-	45	-	-	-	-
<b>Total</b>	-	<b>45</b>	-	-	-	-
<b>Biennial Total</b>			<b>45</b>			-
<b>1 - Expenditures, Absorbed Costs*, Transfers Out*</b>						
General Fund	-	45	-	-	-	-
<b>Total</b>	-	<b>45</b>	-	-	-	-
<b>Biennial Total</b>			<b>45</b>			-
<b>2 - Revenues, Transfers In*</b>						
General Fund	-	-	-	-	-	-
<b>Total</b>	-	-	-	-	-	-
<b>Biennial Total</b>			-			-

**Bill Description**

House File 81 (HF81) requires a person observing a fish kill in public waters to report the kill to the Office of Emergency Response within four hours. The Office of Emergency Response must alert the Minnesota Department of Natural Resources (DNR), Minnesota Department of Health (MDH) and the Minnesota Pollution Control Agency (MPCA) within one hour. The Bill also requires development and implementation of a fish kill response protocol (Protocol) by MDH in consultation with the DNR, MPCA, Minnesota Department of Agriculture (MDA) and the University of Minnesota (U of M). HF81 also requires review of the completed protocol by an administrative law judge (ALJ) for completeness, and a reoccurring review on a five-year basis. HF81 includes an appropriation to the University of Minnesota Department of Fisheries, Wildlife and Conservation Biology to develop the Protocol.

**Assumptions**

**Protocol Development**

Currently the DNR is the lead agency on the initial determination as to the cause of fish kills that are reported in the state. If a non-natural cause is suspected the DNR coordinates with the MDA (for agricultural chemicals) and the MPCA (for other pollutants including manure) on the fish kill response. An Interagency Fish Kill Response Guidance Document has been developed by the agencies and is used to guide response coordination and communication. Fish kills occurring in flowing systems (rivers and streams) represent a particular challenge with respect to the determination of cause as the stressor or pollutant has often moved downstream by the time the kill is reported and the agencies are able to respond. As a result, the resources and associated fiscal impact dedicated towards specific fish kill investigations can be highly variable.

- The Protocol will utilize existing Fish Kill Response Guidance for general communication and coordination strategy.
- The MDA will also receive an alert from the Office of Emergency Response as specified in Reporting Requirements. HF81 currently omits the MDA from notification.
- It is assumed that the reporting process identified in this bill will double the number of fish kills MDA investigates annually, from an average of about one per year to two per year.
- The Protocol development and approval will require 0.3 full time equivalents (FTEs) at the MDA in FY2024.
- Administrative Law Judge (ALJ) costs are not included in this fiscal note and are the responsibility of the lead agency (MDH).
- The fiscal impacts associated with implementation of the Protocol cannot be assessed until the development of the Protocol is complete and approved by the ALJ.

**Expenditure and/or Revenue Formula**

Protocol development: 0.3 FTE x \$149,000 = \$44,700 (one time).

For this projection the annual cost of 1.0 FTE is \$149,000. Annual costs for this FTE include salary, fringe, and employee support costs (workspace, travel, computer, equipment, etc.).

**Long-Term Fiscal Considerations**

Any long term fiscal impacts are unknown at this time due to the highly variable nature of fish kill investigations and the details of the plan unknown at this time.

**Local Fiscal Impact**

Local support in fish kill investigations can occur (SWCDs, local law enforcement, etc.). Depending on the requirements for local involvement as specified in the Protocol, some fiscal impact to local government should be expected.

**References/Sources**

**Agency Contact:** Joshua Stamper (651-201-6639)

**Agency Fiscal Note Coordinator Signature:** Julie Sis

**Phone:** 651-201-6412

**Date:** 1/20/2023 1:04:05 PM

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HF81 - 0 - Reporting Fish Kills in Public Waters

Chief Author: **Sydney Jordan**  
 Committee: **Environment and Natural Resources Finance And Policy**  
 Date Completed: **1/25/2023 2:26:44 PM**  
 Agency: **Natural Resources Dept**

State Fiscal Impact	Yes	No
Expenditures	X	
Fee/Departmental Earnings		X
Tax Revenue		X
Information Technology		X
Local Fiscal Impact	X	

This table shows direct impact to state government only. Local government impact, if any, is discussed in the narrative. Reductions shown in the parentheses.

State Cost (Savings)	Biennium			Biennium		
	Dollars in Thousands	FY2023	FY2024	FY2025	FY2026	FY2027
Game And Fish (Operations)	-	29	-	-	-	-
<b>Total</b>	-	<b>29</b>	-	-	-	-
<b>Biennial Total</b>			<b>29</b>			-

Full Time Equivalent Positions (FTE)	Biennium			Biennium	
	FY2023	FY2024	FY2025	FY2026	FY2027
Game And Fish (Operations)	-	.22	-	-	-
<b>Total</b>	-	<b>.22</b>	-	-	-

**LBO Analyst's Comment**

I have reviewed this fiscal note for reasonableness of content and consistency with the LBO's Uniform Standards and Procedures.

**LBO Signature:** Chloe Burns      **Date:** 1/17/2023 12:45:32 PM  
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**State Cost (Savings) Calculation Details**

This table shows direct impact to state government only. Local government impact, if any, is discussed in the narrative. Reductions are shown in parentheses.

\*Transfers In/Out and Absorbed Costs are only displayed when reported.

<b>State Cost (Savings) = 1-2</b>		<b>Biennium</b>			<b>Biennium</b>	
Dollars in Thousands	FY2023	FY2024	FY2025	FY2026	FY2027	
Game And Fish (Operations)	-	29	-	-	-	-
<b>Total</b>	-	29	-	-	-	-
<b>Biennial Total</b>			29			-
<b>1 - Expenditures, Absorbed Costs*, Transfers Out*</b>						
Game And Fish (Operations)	-	29	-	-	-	-
<b>Total</b>	-	29	-	-	-	-
<b>Biennial Total</b>			29			-
<b>2 - Revenues, Transfers In*</b>						
Game And Fish (Operations)	-	-	-	-	-	-
<b>Total</b>	-	-	-	-	-	-
<b>Biennial Total</b>			-			-

**Bill Description**

This bill creates a requirement to report fish kills in public waters to the Department of Public Safety, describes requirements for a new fish kill response protocol to be completed by October 1 2023, requires Administrative Law Judge approval of new protocols, and requires that the protocol be reviewed and updated every five years.

**Assumptions**

This proposal enhances current protocol and guidelines established between the Minnesota Pollution Control Agency (MPCA), Department of Natural Resources (DNR), and Minnesota Department of Agriculture (MDA) for coordination on fish kill responses, by adding the University of Minnesota and the Minnesota Department of Health (MDH).

Costs of developing a new fish kill response protocol would include staff time for preparation of protocol materials, inter-agency meetings, and other collaborative work by DNR staff in the divisions of Ecological and Water Resources and Fish and Wildlife. This would require an estimated 450 combined hours of work by three expert employees.

Currently, the DNR serves as the lead agency on fish kill investigations until a discharge/release has been identified as the cause. The MDA takes the lead for pesticide and fertilizer incidents while the MPCA investigates the environmental impacts from the release of hazardous materials, oil, or other pollutants such as manure. Local governments also help with fish kill investigations.

State and county specialists in water quality, watershed management, feedlots, fisheries, and laboratory analyses all work together to explore possible causes of fish kills. An inter-agency fish kill protocol has already been established and serves as the primary foundation detailing agency responses.

Costs of implementing a new fish kill protocol are unknown at this time, and could vary greatly depending on terms agreed to by the agencies involved. It is possible that DNR responsibilities would be increased to a point where costs would exceed current funding. We assume that if new work required by new fish kill protocols exceeds current capacity related to fish kill response, the legislature would revisit any related appropriation amounts to the DNR.

The DNR assumes that MDH would incur the cost of obtaining approval by an Administrative Law Judge.

**Expenditure and/or Revenue Formula**

3 employees x 150 hours each x \$64 hourly rate = \$28,800

### **Long-Term Fiscal Considerations**

The new fish kill protocol must be reviewed and approved every five years, which is outside the scope of this fiscal note.

### **Local Fiscal Impact**

Depending on the outcome of the protocols the bill aims to develop, impacts to local government units (LGUs) could range from none to moderate. LGUs already contribute at times to fish kill investigations. If protocols call for comparable LGU involvement, the local fiscal impact will be minimal to none. If the protocols call for increased LGU involvement, then some fiscal impacts could come to fruition in the minimal to moderate categories.

### **References/Sources**

MN DNR fish kills and die offs informational website:

<https://www.dnr.state.mn.us/fisheries/fishkills.html#:~:text=To%20report%20a%20fish%20kill,day%20seven%20days%20a%20week>

**Agency Contact:** Linda Kelly (651) 259-5238

**Agency Fiscal Note Coordinator Signature:** Tyler Teggatz

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HF81 - 0 - Reporting Fish Kills in Public Waters

Chief Author: **Sydney Jordan**  
 Committee: **Environment and Natural Resources Finance And Policy**  
 Date Completed: **1/25/2023 2:26:44 PM**  
 Agency: **Pollution Control Agency**

State Fiscal Impact	Yes	No
Expenditures	X	
Fee/Departmental Earnings		X
Tax Revenue		X
Information Technology		X
Local Fiscal Impact	X	

This table shows direct impact to state government only. Local government impact, if any, is discussed in the narrative. Reductions shown in the parentheses.

State Cost (Savings)	Biennium			Biennium		
	Dollars in Thousands	FY2023	FY2024	FY2025	FY2026	FY2027
General Fund	-	56	-	-	-	-
<b>Total</b>	-	<b>56</b>	-	-	-	-
<b>Biennial Total</b>			<b>56</b>			-

Full Time Equivalent Positions (FTE)	Biennium			Biennium	
	FY2023	FY2024	FY2025	FY2026	FY2027
General Fund	-	.4	-	-	-
<b>Total</b>	-	<b>.4</b>	-	-	-

**LBO Analyst's Comment**

I have reviewed this fiscal note for reasonableness of content and consistency with the LBO's Uniform Standards and Procedures.

**LBO Signature:** Chloe Burns      **Date:** 1/13/2023 2:56:29 PM  
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**State Cost (Savings) Calculation Details**

This table shows direct impact to state government only. Local government impact, if any, is discussed in the narrative. Reductions are shown in parentheses.

\*Transfers In/Out and Absorbed Costs are only displayed when reported.

<b>State Cost (Savings) = 1-2</b>		<b>Biennium</b>			<b>Biennium</b>	
Dollars in Thousands		FY2023	FY2024	FY2025	FY2026	FY2027
General Fund	-	56	-	-	-	-
<b>Total</b>		-	<b>56</b>	-	-	-
<b>Biennial Total</b>				<b>56</b>		-
<b>1 - Expenditures, Absorbed Costs*, Transfers Out*</b>						
General Fund	-	56	-	-	-	-
<b>Total</b>		-	<b>56</b>	-	-	-
<b>Biennial Total</b>				<b>56</b>		-
<b>2 - Revenues, Transfers In*</b>						
General Fund	-	-	-	-	-	-
<b>Total</b>		-	-	-	-	-
<b>Biennial Total</b>				-		-

**Bill Description**

The bill code new law in Minnesota Statutes, chapter 103G that defines a fish kill and establishes reporting requirements and requires the development of a fish kill response protocol by the commissioner of health, in consultation with the commissioners of the Pollution Control Agency (PCA), natural resources, and agriculture and the head of the University of Minnesota's Department of Fisheries, Wildlife, and Conservation Biology. The protocol must be reviewed by an administrative law judge and once approved must be implemented by the agencies and reviewed and updated every five years. The bill includes an appropriation to the University of Minnesota's Department of Fisheries, Wildlife, and Conservation Biology to develop the protocol.

**Assumptions**

The PCA, Department of Natural Resources (DNR), and Minnesota Department of Agriculture (MDA) coordinate on fish kill responses. The DNR serves as the lead agency on fish kill investigations until a discharge/release has been identified as the cause. The MDA takes the lead for pesticide and fertilizer incidents while the MPCA investigates the environmental impacts from the release of hazardous materials, oil, or other pollutants such as manure. Local governments also help with fish kill investigations. State and county specialists in water quality, watershed management, feedlots, fisheries, and laboratory analyses all work together to explore possible causes of fish kills. An interagency Fish Kill Protocol has already been established and serves as the primary foundation detailing agency responses. If responding agencies believe a fish kill resulted largely from natural causes, then investigation and follow-up action will be limited. However, with the exception of certain viral outbreaks (e.g., Viral hemorrhagic septicemia), it is very difficult to definitively determine that a fish kill occurred from natural causes.

1. The costs in this analysis address only PCA costs and are over and above current program appropriations to the PCA.
2. The bill will be enacted late in the current fiscal year, the appropriation to the University of Minnesota would be available July 1, 2023, and the development of the protocol is to be completed by October 1, 2023.
3. It is assumed the reporting process identified in this bill will increase the number of fish kills the PCA is notified of; however, the increase in fish kill notifications is not assumed to require changes to existing emergency response protocol or increase costs of processing emergency response notifications within the PCA.
4. Based on the timeframe to develop the protocol, it is assumed 0.4 full time equivalent (FTEs) across multiple staff above and beyond normal fish kill related work will be required in FY2024 to consult on development of the protocol, submit comments to the administrative law judge, and contribute to any revisions to bring the

development of the protocol to completion. *Assumed 3 staff from 2 divisions would be engaged in the work, 1 from Environmental Analysis and Outcomes Division and 2 from Watershed Division. Estimated 275 hours per person to develop and comment on the protocol over about 6 months to develop and comment on the protocol or 825 hours total for approximately 0.4 FTEs*

5. Fiscal impacts of implementation are unknown due to the potential for variability in the protocol and our current capacity for work on fish kills.

### **Expenditure and/or Revenue Formula**

Development of protocol: 0.4 FTE x \$140,000/FTE = \$56,000 in FY2024 (one-time cost)

\*The annual cost of 1.0 FTE is \$140,000 in FY2023-2027. Annual costs for 1.0 FTE include salary, fringe, and non-specialized employee support costs (work space, computer and office supplies, office equipment, local travel, etc.)

### **Long-Term Fiscal Considerations**

N/A

### **Local Fiscal Impact**

Depending on the outcome of the protocols the bill aims to develop, impacts to local government units (LGUs) could range from none to moderate. LGUs already contribute at times to fish kill investigations. If protocols call for comparable LGU involvement, the local fiscal impact will be minimal to none. If the protocols call for increased LGU involvement, then some fiscal impacts could come to fruition in the minimal to moderate categories.

### **References/Sources**

PCA Staff

**Agency Contact:** Melissa Lewis 651-757-2817

**Agency Fiscal Note Coordinator Signature:** John Allen

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HF81 - 0 - Reporting Fish Kills in Public Waters

Chief Author: **Sydney Jordan**  
 Committee: **Environment and Natural Resources Finance And Policy**  
 Date Completed: **1/25/2023 2:26:44 PM**  
 Agency: **Public Safety Dept**

State Fiscal Impact	Yes	No
Expenditures	X	
Fee/Departmental Earnings		X
Tax Revenue		X
Information Technology		X
Local Fiscal Impact		X

This table shows direct impact to state government only. Local government impact, if any, is discussed in the narrative. Reductions shown in the parentheses.

State Cost (Savings)	Biennium			Biennium		
	Dollars in Thousands	FY2023	FY2024	FY2025	FY2026	FY2027
General Fund	-	7	7	7	7	7
<b>Total</b>	-	7	7	7	7	7
<b>Biennial Total</b>			14			14

Full Time Equivalent Positions (FTE)	Biennium			Biennium	
	FY2023	FY2024	FY2025	FY2026	FY2027
General Fund	-	-	-	-	-
<b>Total</b>	-	-	-	-	-

**LBO Analyst's Comment**

I have reviewed this fiscal note for reasonableness of content and consistency with the LBO's Uniform Standards and Procedures.

This bill directs the reporting of fish kills to be directed to the Office of Emergency Response within the Department of Public Safety (DPS) however that office doesnt exist within the agency. See DPSs fiscal note for additional information.

**LBO Signature:** Laura Cecko    **Date:** 1/11/2023 1:54:03 PM  
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**State Cost (Savings) Calculation Details**

This table shows direct impact to state government only. Local government impact, if any, is discussed in the narrative. Reductions are shown in parentheses.

\*Transfers In/Out and Absorbed Costs are only displayed when reported.

<b>State Cost (Savings) = 1-2</b>		Biennium			Biennium	
Dollars in Thousands	FY2023	FY2024	FY2025	FY2026	FY2027	
General Fund	-	7	7	7	7	7
<b>Total</b>	-	7	7	7	7	7
<b>Biennial Total</b>			<b>14</b>			<b>14</b>
<b>1 - Expenditures, Absorbed Costs*, Transfers Out*</b>						
General Fund	-	7	7	7	7	7
<b>Total</b>	-	7	7	7	7	7
<b>Biennial Total</b>			<b>14</b>			<b>14</b>
<b>2 - Revenues, Transfers In*</b>						
General Fund	-	-	-	-	-	-
<b>Total</b>	-	-	-	-	-	-
<b>Biennial Total</b>			-			-

**Bill Description**

This bill requires the reporting of an incident resulting in the death of 100 or more fish within an area one-half square mile or less, in public waters, to the Office of Emergency Response in the Department of Public Safety.

**Assumptions**

While the bill specifically denotes that the notification of an incident would need to be processed by the Office of Emergency Response within the Department of Public Safety, this office does not currently exist. The Minnesota Bureau of Criminal Apprehension (BCA) assumes that this office would not be created and that, therefore, the notification would primarily be processed by the Minnesota Duty Officer Program located at the BCA.

The Duty Officer Program provides a single answering point for local and state agencies to request state-level assistance for emergencies, serious accidents or incidents, or for reporting hazardous materials and petroleum spills. The Duty Officer is available 24 hours per day, seven days per week.

The “fish kill” incidents would, therefore, fall to the Duty Officer to process communication to begin state assistance and the protocols to be developed.

The BCA assumes that it will not participate in the implementation or development of the protocols and would instead be the first point of contact for the general public. The Duty Officer would go on to notify those agencies responsible for the protocols to begin their work.

In 2021, the Duty Officer received and processed 172 fish kill notifications to a number of agencies and entities, informing them of the need to begin the applicable protocols. Each of these notifications took, at maximum, 30 min to implement. This resulted in approximately 86 hours spent on fish kills.

In total, however, there are approximately 500 fish kills or die offs each year in the State of Minnesota, per the Minnesota Department of Natural Resources. Given that the bill would require triage and notifications be made by the Duty Officer, which are not currently required in statute, the BCA assumes that it will need to triage all 500 fish kills or die offs each year, resulting in 164 additional hours of work for the Duty Officer.

A Duty Officer at the Minnesota Bureau of Criminal Apprehension costs, at maximum, approximately \$43.46 per hour.

The work of the duty officers must continue in spite of any additional or modified duties, so the time to be spent on these

additional fish kill reports must be replaced.

**Expenditure and/or Revenue Formula**

Therefore, at 30 min (per fish kill report) x 328 additional reports per year = 164 additional hours of work per year

164 hours x \$43.46 = \$7,127.44 per year

**Long-Term Fiscal Considerations**

**Local Fiscal Impact**

**References/Sources**

**Agency Contact:** Olivia Anderson 651-793-2713

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HF81 - 0 - Reporting Fish Kills in Public Waters

Chief Author: **Sydney Jordan**  
 Committee: **Environment and Natural Resources Finance And Policy**  
 Date Completed: **1/25/2023 2:26:44 PM**  
 Agency: **University Of Minnesota**

State Fiscal Impact	Yes	No
Expenditures	X	
Fee/Departmental Earnings		X
Tax Revenue		X
Information Technology		X
Local Fiscal Impact		X

This table shows direct impact to state government only. Local government impact, if any, is discussed in the narrative. Reductions shown in the parentheses.

State Cost (Savings)	Biennium			Biennium		
	Dollars in Thousands	FY2023	FY2024	FY2025	FY2026	FY2027
General Fund	-	31	-	-	-	-
<b>Total</b>	-	<b>31</b>	-	-	-	-
<b>Biennial Total</b>			<b>31</b>			-

Full Time Equivalent Positions (FTE)	Biennium			Biennium	
	FY2023	FY2024	FY2025	FY2026	FY2027
General Fund	-	.54	-	-	-
<b>Total</b>	-	<b>.54</b>	-	-	-

**LBO Analyst's Comment**

I have reviewed this fiscal note for reasonableness of content and consistency with the LBO's Uniform Standards and Procedures.

**LBO Signature:** Xunxuan Weerts    **Date:** 1/23/2023 2:52:00 PM  
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**State Cost (Savings) Calculation Details**

This table shows direct impact to state government only. Local government impact, if any, is discussed in the narrative. Reductions are shown in parentheses.

\*Transfers In/Out and Absorbed Costs are only displayed when reported.

<b>State Cost (Savings) = 1-2</b>		Biennium			Biennium	
Dollars in Thousands		FY2023	FY2024	FY2025	FY2026	FY2027
General Fund	-	31	-	-	-	-
<b>Total</b>		-	31	-	-	-
<b>Biennial Total</b>				31		
<b>1 - Expenditures, Absorbed Costs*, Transfers Out*</b>						
General Fund	-	31	-	-	-	-
<b>Total</b>		-	31	-	-	-
<b>Biennial Total</b>				31		
<b>2 - Revenues, Transfers In*</b>						
General Fund	-	-	-	-	-	-
<b>Total</b>		-	-	-	-	-
<b>Biennial Total</b>				-		

**Bill Description**

This bill would create a new law in Minnesota Statutes, chapter 103G that defines a fish kill and establishes reporting requirements and requires the development of a fish kill response protocol by the commissioner of health, in consultation with the commissioners of the Pollution Control Agency (PCA), natural resources, and agriculture and the head of the University of Minnesota's Department of Fisheries, Wildlife, and Conservation Biology. The protocol must be reviewed by an administrative law judge and once approved must be implemented by the agencies and reviewed and updated every five years. The bill includes an appropriation to the University of Minnesota's Department of Fisheries, Wildlife, and Conservation Biology to develop the protocol.

**Assumptions**

The PCA, Department of Natural Resources (DNR), and Minnesota Department of Agriculture (MDA) coordinate on fish kill responses. The DNR serves as the lead agency on fish kill investigations until a discharge/release has been identified as the cause. The MDA takes the lead for pesticide and fertilizer incidents while the MPCA investigates the environmental impacts from the release of hazardous materials, oil, or other pollutants such as manure. Local governments also help with fish kill investigations. State and county specialists in water quality, watershed management, feedlots, fisheries, and laboratory analyses all work together to explore possible causes of fish kills. An interagency Fish Kill Protocol has already been established and serves as the primary foundation detailing agency responses. If responding agencies believe a fish kill resulted largely from natural causes, then investigation and follow-up action will be limited. However, with the exception of certain viral outbreaks (e.g., Viral hemorrhagic septicemia), it is very difficult to definitively determine that a fish kill occurred from natural causes.

1. The costs in this analysis addresses only the costs of the Department of Fisheries, Wildlife, and Conservation Biology at the University of Minnesota.
2. The bill will be enacted late in the current fiscal year, the appropriation to the University of Minnesota would be available July 1, 2023, and the development of the protocol is to be completed by October 1, 2023.
3. It is assumed the reporting process identified in this bill will increase the number of fish kills reported; however, the increase in fish kill notifications is not assumed to require changes to existing emergency response protocol or increase costs of processing emergency response notifications.
4. Based on the timeframe to develop the protocol, it is assumed 0.048 full time equivalents (FTEs) for a faculty person who is a fish disease expert and six months (0.25 FTEs) support for a graduate student will be required in FY2024 to consult on development of the protocol, submit comments to the administrative law judge, and contribute to any revisions



to bring the development of the protocol to completion.

Assumed 1 faculty member and 1 graduate student from FWCB. Estimated 64 hours for the faculty person and 480 hours for the graduate student to develop and comment on the protocol over about 6 months to develop and comment on the protocol for approximately 0.298 FTEs.

5. Fiscal impacts of implementation are unknown due to the potential for variability in the protocol and our current capacity for work on fish kills.

### **Expenditure and/or Revenue Formula**

Development of protocol:  $0.298 \text{ FTE} \times \$104,207/\text{FTE} = \$31,000$  in FY2024 (one-time cost)

### **Long-Term Fiscal Considerations**

Implementation of the protocol after its development is not part of this bill. Long-term implementation costs are not known.

### **Local Fiscal Impact**

Creation of the protocol will not impact local government units. Implementation after creation may increase LGU costs depending on what is expected of them. However, implementation is not part of this bill.

### **References/Sources**

Robert B. Blair, Department Head and Professor, Department of Fisheries, Wildlife, and Conservation Biology, University of Minnesota

### **Agency Contact:**

**Agency Fiscal Note Coordinator Signature:** Keeya Steel

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