#### June 2024

# Lawrence Lake Property Owner or Occupant Marquette County, WI

Re: Proposed Management of Nuisance Aquatic Plants for Navigational Access on Lawrence Lake

Dear Lawrence Lake Property Owner or Occupant:

The Lawrence Lake Protection and Rehabilitation District (the District) proposes to manage 3.7 acres on Lawrence Lake to control the excessive nuisance aquatic plants for navigational access.

The District proposes to conduct applications of flumioxazin to be performed sometime in June or July, 2024 by TIGRIS Aquatic Services, LLC (TIGRIS), proceeding only after the District obtains a permit from the Wisconsin Department of Natural Resources. Notification of the exact dates of application and water use restrictions associated with the use of flumioxazin will be provided by the posting of shoreline in and adjacent to treatment areas, and public access points.

There are no water use restrictions associated with use of flumioxazin EC with the exception of a 5-day irrigation restriction.

Additional details regarding the proposed management, including a copy of the permit application and the Wisconsin Department of Natural Resources aquatic herbicide fact sheet on flumioxazin can be found at: lawrencelakeprdistrict.com

For questions about the proposed management or a hard copy of the permit application, please contact:

Sharon Galonski Lawrence Lake Protection and Rehabilitation District Sharonlgalonski1957@gmail.com 608.296.5109

# **Aquatic Plant Management**

NOTE: Missing or incomplete fields are highlighted at the bottom of each page. You may save, close and return to your draft permit as often as necessary to complete your application. If there are no updates in 90 days, your draft is deleted

This Application has been Signed and Submitted by: i:0#.f|wamsmembership|amykay23 signed on 2024-06-13T16:44:26

Site or Project Name:

Lawrence Lake
The permit application will be saved automatically with this name
Chemical Control Application-Lake, River, Pond

Does the waterbody have:

• More than one property owner?

• More than one property owner?

• Uncontrolled surface water discharge?

• Public access?

• Yes • No

#### 3200-004 Chemical Aquatic Control Application - Lake, River, Pond

**NOTE:** To be considered a private pond, a waterbody must meet all of the following requirements:

- 1. Confined to one property owner.
- 2. The pond has no uncontrolled surface water discharge.
- 3. No public access.

Upon submittal of your permit application, a **non-refundable \$20 permit processing fee will be charged**. Additional acreage fees will be refunded if the permit request is denied or if no treatment occurs.

### 3200-004 Chemical Aquatic Plant Control Application

- Annually complete all pages on Form 3200-004 for chemical plant management applications. Complete form 3200-004a for large scale treatments(exceeds 10.0 acres in size or 10% of the area of the water body that is 10 feet or less in depth) as required by NR107.04(3).
  - Form 3200-004 is competed electronically through this system.
  - Form 3200-004a must be completed outside the system and uploaded to the attachments section. Please refer to this link for a copy of this form: <a href="http://dnr.wi.gov/files/pdf/forms/3200/3200-004A.pdf">http://dnr.wi.gov/files/pdf/forms/3200/3200-004A.pdf</a>
- Attach a map that shows the treatment location(s), treatment dimensions and riparian landowners. If requesting WPDES coverage, attach a water body map that shows surface outflow and receiving waters.
- For a large-scale treatment, attach evidence that a public notice has been published in a regional / local newspaper and if required that a public informational meeting has been conducted as defined in NR107.04(3).
- Pay fee online.
- Sign and Submit form.
- A signed permit application certifies to the Department that a copy of the application has been provided to any affected property owner's association/district and to landowners adjacent to treatment area.

Contact Information			
Applicant Information			
Organization	Lawrence Lake Protection and Rehabilitation District		
Last Name:			
First Name:			
Mailing Address:	P.O. Box 233		
City:	Westfield		
State:	<u>WI</u>		
Zip Code:	53964		
Email:			
Phone Number:			
(xxx-xxx-xxxx) Alternative Phone Number:			
(XXX-XXXX-XXXXX)			
Waterbody Address			
Last Name:			
First Name:			
Street Address:	N6904 2nd Court		
City:	Westfield		
State:	<u>WI</u>		
Zip Code:	53964		
Email:			
Phone Number:			
(xxx-xxx-xxxx) Alternative Phone Number:			
(xxx-xxx-xxxx)			
Applicator			
	TIGRIS Aquatic Services, LLC		
Applicator Certification #:	516694		
Business Location License #:	93-029481-025543		
Restricted Use Pesticide #:			
Address:	8046 Old Highway Road North		
City:	St. Cloud		
State:	<u>WI</u>		
Zip:	56301		
Email:	akay@tigrisusa.com		
Phone Number: (xxx-xxx-xxxx)	715-891-6798		
(^^^^^^^			

Adjacent Riparian Property Owne	rs				
NOTE: Phone and email address will not b	e publicly viewable.				
Uploaded riparian owners to attachme			n is not applicable fo		
Name	Address	5	Phone	[	Email Address
Site Information - Complete					
Waterbody Containing Contro	ol Area(s)				
Waterbody Property C	Owners Association				
or Waterbody Distri	ct Representative :	□ None			
Water Body	or Wetland Name:	Lawrence Lake	2		
	Primary County:	Marquette			
	Latitude:	43.8889418			
	Longitude:	-89.5627255			
	Section:	05			
	Township:	16			
	Range:	08			
	Direction:	● E ○ W	_		
Water	body Surface Area:	217	acros		
	•	175	acres		
Estimated Surface area	that is full or less	1/3	acres		
Proposed Control Area(s)					
Area(s) Proposed for Control:					
Site Name <u>Treati</u> (Optional) <u>Leng</u>			timated Acreage	Average Depth	<u>Calculated Volume</u>
0	<sub>ft. x</sub> 0	÷ 43,560 ft. <sup>2</sup> =	3.70 ac	4.60 ft =	17.02 ac-ft
	ft.				
	Estim	Grand Total	3.70 ac	Calculated Volume Grand Total	de it
Is the area with in or adjacent to a sensiti	ve area designated by th	e Department of N	latural Resources. <u>M</u>	ore Information	
○ Yes <b>●</b> No					

If the estimated acreage is greater than 10 acres, or is greater than 10 percent of the estimated area 10 feet or less in depth in Section II, complete and attach Form 3200-004A, Large-Scale Treatment Worksheet.

## Chemical Aquatic Plant Control Information - Lake, River, Pond Form 3200-004 (R 2/17)

**Notice**: Use of this form is required by the Department for any application filed pursuant to s. 281.17(2), Wis. Stats., and Chapters NR 107, 200 and 205, Wis. Adm. Code. This permit application is required to request coverage for pollutant discharge into waters of the state. Personally identifiable information on this form may be provided to requesters to the extent required by Wisconsin's Open Records Law [ss. 19.31-19.39, Wis. Stats.].

Treatment Type: <ul><li>● Lake ○ Pond ○ Wetland ○</li></ul>	) Marina ○ Other	
Has a management plan been provided to the DNR?  Yes  No  Don't Know	If Yes, date approved of most curr	Link to Approved Plan:  Uploaded Plan copy as an Attachment
Does the proposed plant removal agree with the app If NO, explain, Attach additional sheets if necessary.	roved plan? Yes No	орговиеч нап сору вз ан Attachment
Goal of Aquatic Plant Control:		
<ul> <li>✓ Maintain navigation channel</li> <li>☐ Maintain boat landing and car</li> <li>☐ Improve fish habitat</li> <li>☐ Maintain swimming area</li> <li>☐ Control of invasive exotics</li> <li>☐ Other</li> </ul>	ry in access	
Nuisance Caused By:		
☐ Floating water plants (majorit	y of leaves floating on water sur	oove water surface, e.g. cattail, bulrushes) face, e.g., water lilies, duckweed) ring parts may be exposed: milfoil, coontail)
List Target Plants		
<ul> <li>□ Algae</li> <li>□ Common/Glossy Buckthorn</li> <li>☑ Coontail</li> <li>☑ Curly-Leaf Pondweed</li> <li>□ Duckweed</li> <li>☑ Elodea</li> <li>☑ Eurasian Watermilfoil</li> </ul>	<ul> <li>☐ Flowering Rush</li> <li>☐ Hybrid Cattail</li> <li>☐ Hybrid Watermilfoil</li> <li>☐ Japanese Knotweed</li> <li>☐ Naiad</li> <li>☐ Narrow-Leaf Cattail</li> <li>☐ Phragmites</li> </ul>	<ul> <li>□ Purple Loosestrife</li> <li>□ Reed Canary Grass</li> <li>□ Reed Manna Grass</li> <li>□ Starry Stonewort</li> <li>□ Yellow Floating Heart</li> <li>□ Yellow Iris</li> <li>□ Pondweed</li> </ul>
Other Target Plants:		

Note: Different plants require different chemicals for effective treatment. Do not purchase chemical before identifying plants.

	Sla a ! a a 1/ a \			
Full Trade Name of Proposed C	nemicai(s)			
Agristar 2,4-D Amine	Clipper		☐ K-Tea	SCI-62
☐ Algimycin PWF	☐ Clipper SC		Littora	☐ Sculpin G
☐ Alligare 2,4-D	☐ Current		☐ Milestone	☐ SeClear
☐ Alligare Argos	Cutrine-Plus		☐ Nautique	☐ SeClear G
☐ Alligare Diquat	☐ Cutrine-Plus G	Granular	☐ Navigate	☐ Shoreklear-Plus
☐ Alligare Ecomazapyr	☐ Cutrine-Ultra		☐ Navitrol	Shredder Amine
☐ Alligare Glyphosate 5.4	☐ DMA 4 IVM		☐ Navitrol DPF	☐ Sonar AS
☐ Aqua Neat	☐ Earthtec		Phycomycin SCP	Sonar Genesis
☐ Aqua Star	☐ Element 3A		☐ Polaris	☐ Sonar H4C
☐ AquaPro	☐ Flumioxazin 53	1% WDG	☐ Polaris AC	Sonar PR
☐ Aquashade	☐ Formula F-30		☐ Pond-Klear	☐ Sonar Q
☐ Aquashadow	☐ Garlon 3A		☐ ProcellaCOR EC	☐ Sonar RTU
☐ Aquastrike	☐ Green Clean		Refuge	☐ Sonar SRP
☐ Aquathol K	☐ Habitat		Renovate 3	☐ SonarOne
☐ Aquathol Super K	☐ Harpoon		Renovate LZR	☐ Stingray
☐ Avast! SC	☐ Harvester		Renovate LZR Max	Symmetry NXG
☐ Captain	☐ Havoc Amine		Renovate Max G	☐ Touchdown Pro
☐ Captain XTR	☐ Hydrothol 192		☐ Renovate OTF	☐ Tribune
☐ Chinook	☐ Hydrothol Gra	anular	$\square$ Reward	☐ Trycera
☐ Clearcast	☐ Komeen		$\square$ Rodeo	☐ Weedar 64
☐ Clearcast ☐ Clearigate Other Proposed Chemical(s): Prop	☐ Komeen Cryst		☐ Roundup Custom	<ul><li>☐ Weedar 64</li><li>☐ Weedestroy AM-4</li></ul>
☐ Clearigate	☐ Komeen Cryst eller, Schooner (a	ll flumioxazi	☐ Roundup Custom n)	☐ Weedestroy AM-4
☐ Clearigate  Other Proposed Chemical(s): Prop  Have the proposed chemicals I  • All ○ Some ○ None  What were the results of the temporal contents of the temporal content	☐ Komeen Crysteller, Schooner (a been permitted reatment?	ll flumioxazi	☐ Roundup Custom n)	☐ Weedestroy AM-4
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☐ Clearigate  Other Proposed Chemical(s): Prop  Have the proposed chemicals I  • All ○ Some ○ None  What were the results of the temporal contents of the temporal content	☐ Komeen Crysteller, Schooner (abeen permitted reatment?	ll flumioxazi in a prior y	☐ Roundup Custom  n)  year on the proposed site	☐ Weedestroy AM-4
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Other Proposed Chemical(s): Prop  Have the proposed chemicals to All Osome None  What were the results of the tresponding access was a Method of Application: Injection  Note: Chemical fact sheets for aquatic pesticides used  Alternatives to Chemical  Control:  1. Mechanical harvesting  2. Manual removal	<ul> <li>Komeen Crysteller, Schooner (and peen permitted preatment?</li> <li>Achieved</li> <li>On</li> <li>d in Wisconsin are available</li> <li>Feasible?</li> <li>Yes ● No</li> <li>Yes ● No</li> <li>Yes ● No</li> </ul>	in a prior y  from the Departm  If No, Why  too shallow too large	☐ Roundup Custom  n)  rear on the proposed site  nent of Natural Resources upon request.  y Not?	☐ Weedestroy AM-4
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□ Clearigate Other Proposed Chemical(s): Prop Have the proposed chemicals It	<ul> <li>Komeen Crysteller, Schooner (and peen permitted peen peen peen peen peen peen peen pe</li></ul>	in a prior y  from the Department of No, Why  too shallow too large site doesn't y too expensiv not site spec	□ Roundup Custom  n)  rear on the proposed site  ent of Natural Resources upon request.  y Not?  warrant, prevents beneficial plant e  ific	☐ Weedestroy AM-4
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Will surface water outflow and/or overflow be controlled to prevent chemical loss?

○ Yes • No

WPDES Permit Request
Is WPDES coverage being requested? Refer to
http://dnr.wi.gov/topic/wastewater/aquaticpesticides.html for more information
○ Yes - complete section VII with signature.
• No
Already have WPDES
○ WPDES coverage not needed
Already have WPDES

Is the treatment area greater than 5% of surface area?

○ Yes • No

# **Required Attachments and Supplemental Information**

### **Upload Required Attachments** (15 MB per file limit) - Help reduce file size and trouble shoot file uploads

#### \* indicates completion of this item is required

Note: To add additional attachments using the down arrow icon. To replace an existing file, use the 'Click here to attach file ' link. To remove additional items, select the item and press CNTRL Delete.

Riparian Owners	File Attachment	2024 Aquatic Species Treatment Notice List.xisx
Public Notice	■ File Attachment	
Large Scale Worksheet	■ File Attachment	
Site Map	■ File Attachment	FINAL Map12 Lawrence NavLanes v2 (1).pdf

## **Fee Calculation**

## **Chemical Control Application**

- 1. s. NR 107.11(1), Wis. Adm. Code, lists the conditions under which the permit fee is limited to the \$20 minimum charge.
- 2. s. NR 107.11(4), Wis. Adm. Code, lists the uses that are exempt from permit requirements.
- 3. s. NR 107.04(2), Wis. Adm. Code, provides for a refund of acreage fees if the permit is denied or if no treatment occurs.

If Proposed treatment is over 0.25, calculate acreage fee:	3.7
(round up to nearest whole acre, to maximum of 50 acres)	3.7
acres X \$25 per acre = \$	\$100.00
If proposed treatment is less than 0.25 acre, acreage fee is \$0	7100.00
Basic Permit Fee (non-refundable)	\$20.00
Total Fee	\$120

### Payment Information

**Invoice Number:** WP-00047768

**Payment Confirmation Number: WS2WT1011493935** 

**Amount Paid: \$120** 

## **Sign and Submit**

#### **Applicant Responsibilities and Certification**

- 1. The applicant has prepared a detailed map which shows the length, width and average depth of each area proposed for the control of rooted vegetation and the surface area in acres or square feet for each proposed algae treatment.
- 2. The applicant understands that the Department of Natural Resources may require supervision of any aquatic plant management project involving chemicals. Under s.NR 107.07 Wis. Adm. Code, supervision may include inspection of the proposed treatment area, chemicals and application equipment before, during or after treatment. The applicant is required to notify the regional office 4 working days in advance of each anticipated treatment with the date, time, location and size of treatment unless the Department waives this requirement. Do you request the Department to waive the advance notification requirement?
  - O Yes 
    No
- 3. The applicant agrees to comply with all terms or conditions of this permit, if issued, as well as all provisions of Chapter NR 107, Wis. Adm. Code. The required application fee is attached.
- 4. The applicant will provide a copy of the current application to any affected property owners' association inland Lake District and, in the case of chemical applications for rooted aquatic plants, to all owners of property riparian or adjacent to the treatment area. The applicant has also provided a copy of the current chemical fact sheet for the chemicals proposed for use to any affected property owner's association or inland Lake District.
- 5. Conditions related to invasive species movement. The applicant and operator agree to the following methods required under s.NR 109.05(2), Wis. Adm. Code for controlling, transporting and disposing of aquatic plants and animals, and moving water:
  - Aquatic plants and animals shall be removed and water drained from all equipment as required by s.30.07, Wis. Stats., and ss. NR 19.055 and 40.07, Wis. Adm. Code.
  - Operator shall comply with the most recent Department-approved 'Boat, Gear, and Equipment Decontamination and Disinfection Protocol', Manual Code #9183.1, available at <a href="http://dnr.wi.gov/topic/invasives/disinfection.html">http://dnr.wi.gov/topic/invasives/disinfection.html</a>

All portions of this permit, map and accompanying cover letter must be in possession of the chemical applicator at the time of treatment. During treatment all provisions of Chapter NR 107 107.07 and NR 107.08, Wis. Adm. Code, must be complied with, as well as the specific conditions contained in the permit cover letter.

I hereby certify that that the above information is true and correct and that copies of the application shall be provided to all affected property owners promptly and that the conditions of the permit will be adhered to. All portions of this permit, map and accompanying cover letter must be in possession of the applicant or their agent at time of plant removal. During plant removal activities, all provisions of applicable Wisconsin Administrative Rules must be complied with, as well as the specific conditions contained in the permit cover letter.

#### Steps to Complete the signature process

IMPORTANT: All email correspondence will be sent to the address associated with your WAMS ID).

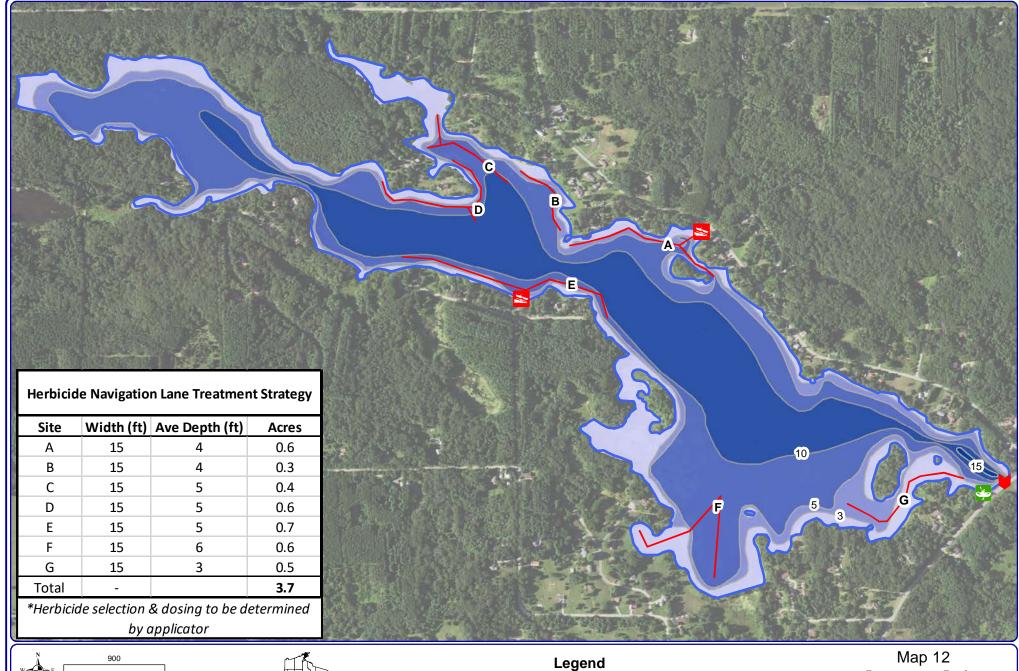
- Read and Accept the Responsibilities and Certification
- 2. Press the Initiate Signature Process button
- 3. Open the confirmation email for a one time confirmation code and instructions to complete the signature process.

You will receive a final acknowledgement email upon completing these steps.

☑ Check if you are signing as Agent for Applicant.

i:0#.f|wamsmembership|amykay23 signed on 2024-

✓ I hereby certify that the above information is true and correct and that copies of this submittal shall be provided to the appropriate parties named in the contact section and that the conditions of the permit and pesticide use will be adhered to.





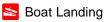
Hydro: WDNR Aquatic Plants: Onterra, 2022 Orthophotography: NAIP, 2022 Map date: 4-3-2024 - TWH



**Proposed Treatment Lanes** 15' width, 3.7 total acres

# Dam

Carry-In Access



Map 12 Lawrence Lake Marquette County, Wisconsin

**Potential Navigation Lane Treatment Strategy** 

# FLUMIOXAZIN CHEMICAL FACT SHEET

#### **Formulations**

Flumioxazin (2-[7-fluoro-3,4-dihydro-3-oxo-4-(2-propynyl)-2H-1,4-benzoxazin-6-yl]-4,5,6,7-tetrahydro-1H-isoindole-1,3(2H)-dione) has been used as an agricultural chemical since 2001 and was conditionally registered with the U.S. EPA for aquatic use in 2010. It is currently under registration review. An interim registration review decision was released in 2021. It is labeled for control of submerged, emergent and floating-leaf plants using direct foliar, surface or subsurface application. It is available in granular and liquid form for aquatic use. Commercial formulations approved for aquatic use in Wisconsin include SureGuard® SC, Propeller™ and Clipper®.\*

# **Aquatic Use and Considerations**

Flumioxazin is a broad-spectrum contact herbicide (i.e., it causes damage at the area of contact). It is a WSSA Group 14 herbicide, meaning the mechanism of action is by inhibiting protoporphyrinogen oxidase, which blocks production of heme and chlorophyll. Treated plants will respond quickly to treatment and rapidly decompose. For larger treatments or in dense vegetation, split treatments about two weeks apart are recommended to prevent fish suffocation from low oxygen due to decaying plants. The efficacy is dependent on both light intensity and water pH; herbicide efficacy decreases with increasing pH and decreasing light intensity.

It is important to note that repeated use of herbicides in the same WSSA group (i.e., with the same mechanism of action) can lead to herbicide-resistant plants, even in aquatic environments. In order to reduce the risk of developing resistant genotypes, avoid using the same type of herbicides year after year, and utilize effective integrated pest management strategies as part of any longterm control program.

Flumioxazin needs to be applied to young plants early in the spring as they begin to grow. It should not be used in very hard-water lakes (pH over 8.5), which are periodically found in southeastern and central Wisconsin. Application in the early morning will increase efficacy, particularly in hard-water lakes. A waterbody should not be treated with flumioxazin if there is an outlet, or in flowing waters such as rivers or streams.

Flumioxazin is labeled to control invasive Eurasian watermilfoil (Myriophyllum spicatum) and curly-leaf pondweed (Potamogeton crispus)†. Native species that are labeled as susceptible to flumioxazin include coontail (Ceratophyllum demersum), native watermilfoil (Myriophyllum spp.), naiads (Najas spp.), pondweeds (Potamogeton spp.), waterlilies (Nuphar spp. & Nymphaea spp.), duckweeds (Lemna spp.), watermeal (Wolffia spp.), and sago pondweed (Stuckenia pectinata). Some types of filamentous algae may also be controlled.†

The Wisconsin Department of Natural Resources (DNR) is committed to promoting diversity, fairness, equity and the principles of environmental justice. We ensure that we do not discriminate in employment, programs, decisions, actions or delivery of services. If you have questions or to request information in an alternative format (large print, Braille, audio tape, etc.), please contact us at 888-936-7463 or <a href="https://dnr.wisconsin.gov/About/Nondiscrimination">https://dnr.wisconsin.gov/About/Nondiscrimination</a>

<sup>&</sup>lt;sup>†</sup> May vary by formulation, application rate, and/or product. Every product label must be carefully reviewed and followed by the user.

<sup>\*</sup> Product names are provided solely for your reference and should not be considered exhaustive nor endorsements.

### **Post-Treatment Water Use Restrictions**

There are no post-treatment restrictions on water use for swimming, fishing, or pet/livestock drinking water. There is a five-day restriction on irrigation.

# Herbicide Degradation, Persistence and Trace Contaminants

Flumioxazin is broken down rapidly by water (hydrolysis), light (photolysis), and microbes. The half-life (the time it takes for half of the active ingredient to degrade) is dependent on the pH of the water, and ranges from approximately four days at pH 5 to 18 minutes at pH 9. In most Wisconsin lakes, half-life should be less than a day.

Flumioxazin degrades into APF (6-amino-7-fluoro-4-(2-propynyl)-1,4,-benzoxazin-3(2H)-one) and THPA (3,4,5,6-tetrahydrophthalic acid). Flumioxazin has a low potential to leach into groundwater due to the very quick hydrolysis and photolysis. APF and THPA have a high potential to leach through soil and could be persistent.

# Impacts on Fish and Other Aquatic Organisms

Flumioxazin is slightly to moderately toxic to freshwater fish on a short-term basis, with possible effects on larval growth below the maximum label rate of 400 parts per billion. Flumioxazin is moderately toxic to freshwater invertebrates, with possible impacts below the maximum label rate. Flumioxazin is practically non-toxic to birds and small mammals on a short-term exposure basis.

The potential for bioaccumulation (the process by which chemicals in the environment or in a food source are taken up by plants or animals) is low since degradation in water is rapid. The metabolites APF and THPA have not been assessed for toxicity or bioaccumulation.

#### **Human Health**

Short-term exposure risk is primarily limited to chemical applicators; concentrated flumioxazin can cause some skin and eye irritation and may pose an inhalation risk. Wear proper personal protective equipment and follow label instructions while handling.

Long-term health effect studies indicate that flumioxazin is not carcinogenic. However, flumioxazin may be an endocrine disrupting compound in mammals, as some studies on small mammals observed effects on reproduction and larval development, including reduced offspring viability, malformation in cardiac and skeletal development, and anemia. Flumioxazin does not bioaccumulate long-term in mammals; most of the herbicide is excreted within a week.

#### **For Additional Information**

U.S. Environmental Protection Agency (EPA) Office of Pesticide Programs <u>epa.gov/pesticides</u>

Wisconsin Department of Agriculture, Trade, and Consumer Protection datcp.wi.gov/Pages/Programs Services/ACMOv erview.aspx

Wisconsin Department of Natural Resources 608-266-2621 dnr.wi.gov/lakes/plants

Wisconsin Department of Health Services dhs.wisconsin.gov

National Pesticide Information Center 1-800-858-7378 npic.orst.edu