JUNE 2024

Balsam Lake Protection and Rehabilitation District Balsam Lake, Polk County, Wisconsin



AQUATIC PESTICIDE APPLICATION REPORT



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Background Information

TIGRIS Aquatic Services, LLC (TIGRIS) was contracted by the Balsam Lake Protection and Rehabilitation District (the District) to perform aquatic pesticide (herbicide) applications to infestations of Curlyleaf pondweed (CLP) in the project area(s) outlined within Aquatic Pesticide Application Report, in compliance with the published Wisconsin Department of Natural Resources (WDNR) Aquatic Invasive Species (AIS) Treatment Protocols, the April 10, 2024 statewide coverage under the Aquatic Plant Control Wisconsin Pollutant Discharge Elimination System (WPDES) Permit (WI-0064556) authorizing coverage for TIGRIS and the District, and the May 23, 2024 WDNR Permit Approval.

The appropriate logs of the work performed, environmental conditions, and maps of the CLP colonies treated can be found in this report in addition to the required electronic submittal of the WDNR Aquatic Plant Management Chemical Treatment Record.



PROJECT TEAM

CLP Management with Aquathol K (endothall)

Balsam Lake, Polk County, Wisconsin

Project Manager

Amy Kay Director of Business Development + Marketing, TIGRIS 715.891.6798 akay@tigrisusa.com

Wisconsin Licenses Pesticide Applicator

Matt Swanson Operations Manager, TIGRIS WI Pesticide Applicator 320.733.3914 mswanson@tigrisusa.com

Field Support

Bryce McGowan Field Supervisor, TIGRIS WI Pesticide Applicator 320.250.2838 bmcgowan@tigrisusa.com

Balsam Lake Contact

Jack Weix Balsam Lake Protection and Rehabilitation District 612.325.8530 weixjack@gmail.com

TIGRIS AQUATIC SERVICES, LLC **Licensing Information**

Wisconsin Department of Agriculture. **Trade and Consumer Protection** PO BOX 8911, MADISON, WI 53708-8911

NUMBER: 93-029481-025543

COMMERCIAL PESTICIDE APPLICATION BUSINESS LIC

LICENSED BUSINESS LOCATION TIGRIS AQUATIC SERVICES LLC

EXPIRES: 12/31/2024

SUBJECT TO REVOCATION AS PROVIDED BY LAW

DOING BUSINESS AS:

TIGRIS AQUATIC SERVICES LLC PO BOX 9031 HAMILTON NJ 08650

THIS LICENSE IS NOT TRANSFERABLE

POST OR CARRY AS REQUIRED BY LAW



AQUATIC PESTICIDE APPLICATIONS

CLP Management with Aquathol K (endothall)

Balsam Lake, Polk County, Wisconsin

Aquatic Pesticide Used

Aquathol K, EPA Registration Number: 70506-176 Active Ingredient: dipotassium salt of endothall

Aquathol K is a liquid formulation that came in 2.5 gallon containers.

Aquatic Pesticide Application Schedule

The aquatic herbicide applications were performed of Tuesday, May 28, 2024.

Equipment Used

TIGRIS deployed one high quality, technologically equipped aquatic pesticide application vessels to perform the CLP control project on Balsam Lake. Liquid applications were made below the surface of the water to enable immediate contact time with the AIS at appropriate depth in the water column. The application system was calibrated, and the metered flow tracking system was used to insure proper dosing strategy was achieved as precisely and consistently as possible.

The application vessel used was equipped with mapping technology to guide licensed applicator Matt Swanson, who performed aquatic pesticide applications to and within targeted management areas to further enhance precision application. Mapping data captured in real time during aquatic pesticide applications produced GPS tracks, submerged aquatic vegetation (SAV) location and coverage, bathymetry, and water temperature at the time of application. This data was uploaded to web based software for the production of treatment maps which can be found within this Aquatic Pesticide Application Report.









AQUATIC PESTICIDE APPLICATIONS

CLP Management with Aquathol K (endothall)

Balsam Lake, Polk County, Wisconsin

Permit Compliance

The District provided the required Permits and approvals for the herbicide applications from the Wisconsin Department of Natural Resources and TIGRIS obtained coverage for aquatic plant control activities under the Statewide Wisconsin Pollutant Discharge Elimination System (WPDES) General Permit.

Additional Compliance for WPDES General Permit

TIGRIS obtained coverage for aquatic plant control activities under the Statewide WPDES General Permit that provided authorization for the herbicide applications. This permit requires a Visual Check Record and Pesticide Application Control Documentation.

- Visual Check Record: A visual check was carried out by TIGRIS licensed and certified Wisconsin Commercial Pesticide Applicator Matt Swanson at the time of application at multiple representative locations within the treatment areas. During and immediately following the herbicide applications no adverse conditions were observed. Adverse Incidents are defined as death or distress of non-target organisms, disruption of wildlife habitat, risk to recreational activities, risk to human health, etc.
- **Pesticide Application Control:** To ensure that TIGRIS did not exceed the pesticide label maximum rate, licensed and certified Wisconsin Commercial Pesticide applicator, Matt Swanson, performed aquatic herbicide applications. Application equipment was maintained and calibrated prior to the application to ensure effective pesticide application. Maintenance of herbicide application equipment ensured that no unintended discharges occurred.

WDNR Warning Signs for Pesticide Treatment Area

WDNR Warning Signs were posted along the shoreline on properties within and adjacent to the pesticide treatment areas and at public access sites in accordance with approved WDNR permit for the chemical control of aquatic plants.

There are no water use restrictions (swimming, fishing, etc.) associated with the use of Aquathol K, all activities including irrigation may go uninterrupted.

Decontamination Compliance - NR40

Equipment decontamination measures were performed prior to entering Balsam Lake and prior to exiting the boat launching site and moving TIGRIS's vessel(s) to another waterbody per the current decontamination procedures (Reference NR40).





WDNR AQUATIC PLANT MANAGEMENT HERBICIDE TREATMENT RECORD

Submitted to WDNR online.

State of Wisconsin **Department of Natural Resources** dnr.wi.gov

Aquatic Plant Management Herbicide Treatment Record

Form 3200-111 (R4/20)

Notice: Completion of this form is a condition of the permit and provides records required by WDNR (NR 107) and DATCP (ATCP 29.21 and 29.22). The Department may not issue you future permits unless you complete and submit this form. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records Law [ss. 19.31-19.39, Wis. Stats.].

| | mediately if any unusual circumst | | ent | | | | |
|---------------------------------|--|---------------------------------------|----------------------|--------------|--------------------------|------------|--|
| | soon after treatment as possible, | | | | | | |
| | October 1 if no treatment occurre | | 107) and DATCD | ATCD 20 | 21 and 20 22) | | |
| Permit Number | along with the permit satisfies the Water body Name (including po | | 107) and DATCP | ATCP 29. | 21 and 29.22j. | | |
| NO-2024-49-20540 | Balsam Lake | onus, e.g., Siliui Fonu) | | | | | |
| County | Permit Holder Name (Custome | r Name) | | | | | |
| Polk | Jack Weix | | | | | | |
| Permit Holder Address | | City | Sta | te | Zip Code | | |
| PO Box 202 | | Balsam Lake | WI | | 54810 | | |
| Treatment Informa | ation | | | | | | |
| Treatment Date(mm/dd/yyyy) | Starting Time (24:00 hour) | Ending Time (24:00 hour) | Water Temp | - □ c | Ambient Air Temp | _ □ c | |
| 5/28/2024 | 08:30 | 14:00 | 65 | ✓ F | 56 | ✓ F | |
| Wind Speed (mph) | Wind Direction | Expected Duration of Chemica | I Residuals | | 1 | | |
| 7 | North West | <30 days | | | | | |
| Adverse Conditions Noted (i.e | ., dead fish, spawning fish, algae bloom, | , etc.) | | | | | |
| none | | | | | | | |
| If adverse conditions noted, in | dicate corrective actions taken | | | | | | |
| | | | | | | | |
| Comments | | | | | | | |
| | | | | | | | |
| Onsite Supervision by DATCF | If Yes, Supe | ervisor Name : | | | | | |
| and/or DNR Staff | O Yes ● No | | | | | | |
| Mixing and Loading Site Loca | tion (if other than business site or from p | repackaged retail container or applie | ed with equipment wi | th a total c | apacity of not more than | 5 gallons | |
| liquid or 50 pounds dry) | | | | | | | |
| | | | | | | | |
| Water User Restriction | | | (0.) | | | | |
| ✓ No Restrictions L | | | n (Crop) | | | | |
| Swimming Dr | inking Water 🗌 Irrigation C | Other: | | | | | |
| ✓ Herbicide Treatment and | Water Use Restrictions Signs Posted In | Accordance With NR 107 and ATCF | 29.22? | | | | |
| Applicato | or shall provide each custom | er with a free copy of eac | h pesticide lab | el used | (if requested) | | |
| | | | | | | | |
| Applicator Inform | ation | | | | | | |
| Individual or Business Name | | | | | | | |
| TIGRIS Aquatic Servi | ces, LLC | | | 71 | 5-891-6798 | X | |
| Street Address | | | | | | | |
| 8046 Old Highway Ro | ad North | | | | | | |
| City | | | State | | Code | | |
| St. Cloud | | | WI | 56 | 301 | | |
| Individuals Making or | | | | | | | |
| | | | | | | | |
| Supervising | Last Name | First | Certific | ation# | License | # | |
| Pesticide Application | 1att | Curanaan | Design | 1 | E16604 | | |

Swanson

516694

Reciprocal

Name of Person Completing Form

Matt

| Date | 5/28/2024 | | Aquatic Plant Management Herbicide Treatment Record Form 3200-111 (R4/20) Page 2 of 2 | | | | | | | | | | | |
|------------------------------|------------------------|-------------------|---|----------|----------------------------------|---------|------|--------------------|------|-------------|----------|-----------------------------------|------|---|
| Site | Property Name | Address / Fire No | 0 | | | Treated | 114/ | Permitted | Se | nsitiv | <u>e</u> | Latitude | Lone | gitude |
| No | | | | | | acreage | | Acreage | Ar | ea? | | | | |
| A-24 | | | | | | 16.70 | | 0.00 | | | | | | |
| Herbio | cide Name | | | Other | Herbicide | | EP | 'A Reg. No. | | Amo Appl | | Units | Cond | plication centration (mg/l = ppm) |
| Aqua | thol K Aquatic Herb | icide | | | | | 70 | 506-176 | 90. | 6 | | gallons | 1.00 | |
| Site | Property Name | Address / Fire No | 0 | | 1 | Freated | | Permitted | Se | nsitiv | 9 | Latitude | Long | gitude |
| No | . , | · | | | 4 | acreage | | Acreage | Ar | ea? | | | ` | |
| B-24 | | | | | | 5.90 | | 0.00 | | | | | | |
| Herbio | cide Name | | | Other | Herbicide | | EP | 'A Reg. No. | | Amo Appl | | Units | Cond | plication centration (mg/l = ppm) |
| Aqua | thol K Aquatic Herb | icide | | | | | 70 | 506-176 | 42. | 3 | | gallons | 1.5 | |
| Site No C-24 Herbio | Property Name | Address / Fire No | | Other | | 8.70 | EP | 0.00 A Reg. No. | | ea? | unt | Latitude Units | Ар | gitude |
| | | | | | | | | | , | Appl | ied | | | centration (mg/l = ppm) |
| Aqua | thol K Aquatic Herb | icide | | | | | 70 | 506-176 | 66. | 6 | | gallons | 1.5 | |
| | | | | _ | | | | | | | | | | • • • • • |
| TS S | | Site(s) | TS | SP | Flat Stem Den | ducad | | Site(s) | | TS | 5P | Dieberdeen Dend | wood | Site(s) |
| | Cattail Chara | | | | Flat-Stem Pon Floating-Leaf I | | 1 | | | | | Richardson Pond Robbins Pondwe | | |
| | Coontail | A-24, B-24, C | | | Illinois Pondwe | | od. | | | | | Sago Pondweed | - | |
| ▽ [| Curly-Leaf Pondweed | | | ✓ | Large-Leaf Po | | | A-24, B-24, | C-24 | | | Watershield | | |
| | Duckweed | | | | Northern Milfo | | | | | | | White Water Lily | | |
| | Elodea | | | | Phragmites | | | | | | | Wild Celery | | |
| | Eurasion /hybrid Milfo | pil | | | Planktonic Alg | ae | | | | | | White-Stem Pondy | veed | |
| | Filamentous Algae | | | | Purple Looses | | | | | | | | | |
| Othe | er Plants (not list | ed above) | | | | | | | | | | | | |
| | SP Name | | | | 9 | Site(s) | | | | | | | | |
| | | | | | | | | | | | | | | |

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.

| Site Map | File Attachment | 2024 Balsam Approved.jpg |
|--------------------|-----------------|--------------------------------|
| Site Map | File Attachment | 2024 Balsam Application Map.pd |
| Lake Management | File Attachment | |
| Plan | | |

Fee Calculation

Chemical Treatment Record

No additional payment required for submitting treatment records.

Sign and Submit

Applicant Responsibilities and Certification

I certify that I have completed the Chemical Treatment Record as required by WDNR (NR107) and DATCP (ATCP 29.21 and 29.22).

Steps to Complete the signature process

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

- 1. Read and Accept the Responsibilities and Certification
- 2. Press the Initiate Signature Process button
- 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.

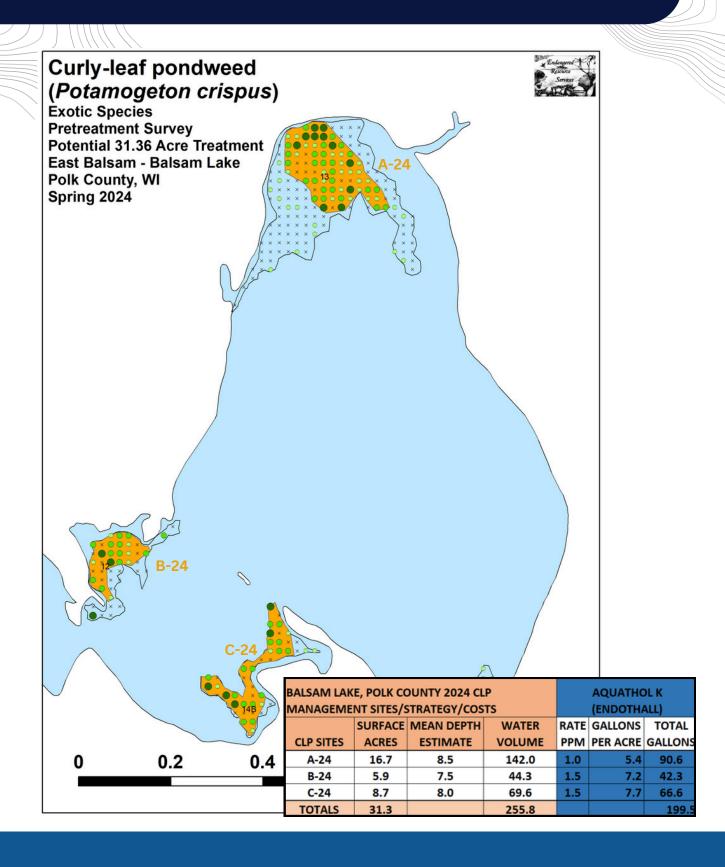
Check if you are signing as Agent for Applicant.

i:0#.f|wamsmembership|mswanson03 signed on 20

✓ 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.

2024 FINAL CLP CONTROL PLAN

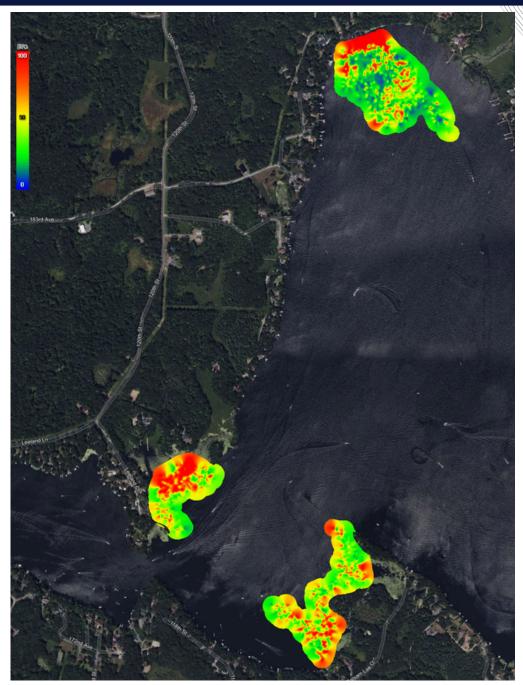
Balsam Lake, Polk County, Wisconsin



2024 AQUATIC HERBICIDE APPLICATION MAP Balsam Lake, Polk County, Wisconsin



2024 SUBMERGED AQUATIC VEGETATION (SAV) MAP Balsam Lake, Polk County, Wisconsin



Submerged Aquatic Vegetation Mapping

A Lowrance HDS Digital Echosounder System with a Structure Scan Module was used to record data of the SAV profile in the control plots during the aquatic herbicide applications. Data was collected and then uploaded to a data processing website for time of treatment processing of SAV data in the management areas. The data collected (coverage, height in the water column, and bio-volume) was performed in order to support best management practices and the use of best available technologies implemented by TIGRIS.

END OF AQUATIC PESTICIDE APPLICATION REPORT