

# **AIS Early Detection & Response Grant for City of Madison**

## **Eradication of Invasive Water Celery AIRR28123**

### **Progress Report 2024**

As a recipient of an Aquatic Invasive Species Early Detection and Response Grant, in 2024 the City of Madison continued monitoring and began treatments on a known infestation of the novel aquatic invasive plant, Java water dropwort, AKA Vietnamese water celery, AKA water celery (*Oenanthe javanica*). Monitoring is done to document the extent and range of an invasive plant and to help prepare an approach to control of the infestation.

#### **Monitoring**

Monitoring was performed by two citizen scientist volunteers, both members of the Friends of Starkweather Creek. Monitoring was done casually, with anecdotal accounts of observations being reported directly to the Stormwater Vegetation Coordinator. For 2025, City staff will work with these and other interested volunteers, primarily through Friends of Starkweather Creek, to use DNR reporting forms and photography guidelines for AIS monitoring.

#### **Monitoring Results**

The infestation of water celery along Starkweather Creek continues to appear, at this time, to be located along a section of the creek ranging from about 0.35 miles east and north of the Zeier Rd intersection at the northernmost end, to the intersection of Lien Rd and the creek at the southernmost end. Monitoring did not reveal infestations south of Highway 30 in areas more heavily used for recreation.

#### **Treatment**

In 2024 the City of Madison put out a request for bids for a contractor to a.) come up with a control plan for the water celery infestation along Starkweather Creek, and b.) implement the control plan. The City received one bidder and subsequently awarded the contract to Field & Stream Restorations. The City asked that the control plan conform to something similar to the below proposed control plan after it was determined in consultations with DNR that a non-pesticide approach to control would not be sufficient to control the infestation:

#### **City of Madison Suggested Treatment Plan**

**Treatment #1:** Foliar spray all vegetation present. Chemicals used will be aquatic approved herbicides such as Polaris AC (imazapyr), or aquatic approved formulations of glyphosate. If aquatic conditions require, applicators will be in possession of WI DATCP Aquatic Pesticide Applicator's License in category 5.0 Aquatic and Mosquito and will also obtain an Aquatic Plant Management Permit from Wisconsin DNR.

**Treatment #2:** Return to infestation no sooner than six (6) weeks after initial foliar applications. Foliar spray resprouts of all infestations. Chemicals used will be aquatic approved herbicides such as Polaris AC (imazapyr), or aquatic approved formulations of glyphosate. If aquatic conditions require, applicators will be in possession

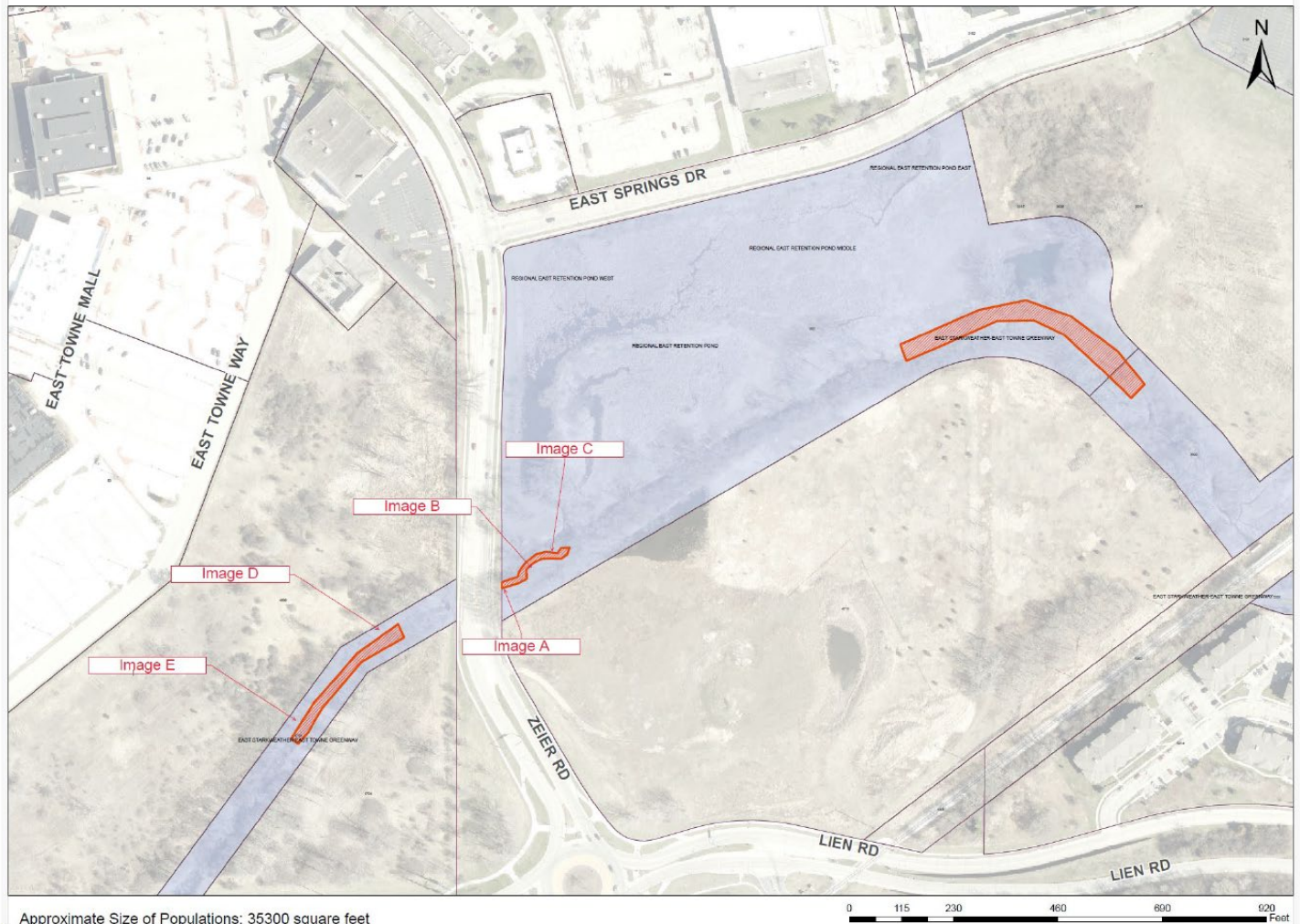
of WI DATCP Aquatic Pesticide Applicator's License in category 5.0 Aquatic and Mosquito and will also obtain an Aquatic Plant Management Permit from Wisconsin DNR.

Field & Stream prepared a control plan that was substantially similar to the proposed plan above. The Field & Stream control plan was submitted with this annual report as "Field & Stream Water Celery Control Plan 2024."

Field & Stream consulted with their pesticide supplier about the best chemical to use for this work. They submitted two labels for our approval: Imox (a.i. imazamox) and Aquasweep (a.i. 2, 4-D and Triclopyr). While the supplier speculated that Aquasweep would work well on water celery, they also noted there may be root uptake from surrounding trees/shrubs. The supplier speculated that Imox would work, but it was unknown. Because water celery is relatively rare and there are few documented control cases, City of Madison brought these pesticide options to DNR Marco Scarasso for review/approval. Marco noted that permitting issues were unlikely with either pesticide. The City opted to have Field & Stream use Imox to reduce the potential to cause damage to mature cottonwoods along the shoreline. Due to delays related to communications and the loss of the project manager at Field & Stream, only one treatment was pursued in 2024, instead of the originally proposed two treatments. In 2025, two treatments will be pursued as laid out in the "Control Plan."

Field & Stream proceeded with one application of Imox to the known extent of the infestation on September 26, 2024. The known extent was initially determined by Engineering staff scouting in 2023, and confirmed by Field & Stream scouting before they submitted their bid for the water celery treatment contract with the City. Locations of the treated infestations are shown on the map below:

## Water Celery Populations - Starkweather Creek



### Plans for 2025

The plan for 2025 is to continue treatment of the infestation. Field & Stream Restorations will continue the treatments in 2025 and will time the first treatment for slightly earlier than the 2024 treatment, closer to when the plant is flowering, expected to occur in August. City of Madison has again asked Friends of Starkweather Creek volunteers to continue monitoring along the entire length of Starkweather Creek for water celery. City staff will work with these and other interested volunteers to use DNR reporting forms and photography guidelines for AIS monitoring.

City staff will perform follow-up inspections and monitoring of all treatment areas. At the end of the growing season, staff will evaluate if the infestation is substantially controlled enough to consider reseeding or even plug planting of emergent shoreline vegetation, however it is expected that another year of treatment may be best before beginning revegetation efforts.

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