



FIELD & STREAM ECOLOGICAL, INC

December 2, 2025

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City of Madison – Stormwater Engineering

Field Notes: Starkweather Creek Water Celery Control (Zier Rd)

Summer of 2024:

- No actual herbicide application completed, FSE was waiting on the approval for the correct herbicide application
- We made many visits out to the site to check on the progress of the water celery. To ensure it was not seeding out.
- There were no plants along the creek bed that were seeding or even attempting to produce a seed head.



September 26th, 2024:

- Picture shows an application of IMOX herbicide at the Eastern Most end of the creek.
- This location above is where we found the highest density of Water Celery.
- On this spray visit there was water celery all along the banks from Zier Rd Eastward until the end location marked that was on the map provided by the City of Madison Engineering.
- Across Zier Rd we found little to no water celery, the creek expands 10-fold on the other side and we walked both banks only finding a few individual species.
- All populations we found on this visit were sprayed with a 2% IMOX solution.

Map provided by the City of Madison
is located at the end of the document

August 6th, 2025:

- This is the first FSE visit of the year. It seems with the shade and larger rain events from June and July of this year the plants don't seem to follow an August seed head time as there was no indication again of seed heads forming.
- The population to the east of Zier Rd. is somehow worse than last year. We are attributing this to a weak application or uptake of herbicide.
- We increased the percentage to 3.3% IMOX and added 2% Glyphosate to the mixture hoping that will complete a fast top kill and a slow kill to the roots, like phragmites,
- The entire banks along the east section of Zier Rd were covered with water celery till the end of the project boundary.
- There were more species spreading into the water than before. FSE made attempts to pull out as many as we could get.
- Across Zier Rd there was still little Water Celery found maybe 4-6 individual plants, and those were sprayed.

October 9th, 2025:

- FSE believes the previous application was a success and there was a reduction of about 85% of the population previously seen on August 6th.
- We used the same 3.3% IMOX and 2% glyphosate backpack spray mixture to treat this time.
- The populations that did remain seemed damaged or stunted as there was still not flowers or seed heads seen.
- More efforts were made to pull out the water submerged species.
- The area where the picture was taken in September of 2024 is now mostly bare dirt as IMOX and glyphosate kill all species.
 - o This area, which was originally the worst, has now seen a 90%-95% reduction in species.
- FSE found no species across Zier Rd.
- We are not sure if there is a seed bank, therefore, we will anticipate next year's treatment in hopes that we reduced much of the population.

