

# USING GIS FOR BETTER PROJECT SCREENING AND EVALUATION



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Wetlands Specialist



# APPLICATION SCREENING -- MiWATERS

The screenshot displays the MiWaters website interface. At the top, the browser address bar shows the URL <https://miwaters.deq.state.mi.us/miwaters/#/external/home>. The navigation bar includes links for Home, About, Contact, Sign In, and Mi.gov Home. The main header reads "MiWaters – Water Resources Information and Forms" with the subtext "Create and manage Permit Applications and Service Requests".

A central section titled "Why Create a MiWaters Account?" lists activities that require an account: building on sensitive areas, discharging wastewater, and applying pesticides. It includes a "CREATE AN ACCOUNT" button and a "SIGN IN WITH AN EXISTING ACCOUNT" button.

Below this is a section for "Public Information and Services" with the tagline "Keep informed with our online tools — no account necessary". This section features three tool cards:

- SITE MAP EXPLORER:** A card showing a map interface with a text box stating: "Use our Explorer mapping tools and advanced-search capabilities to navigate all available Water Resources Division public site information."
- PUBLIC NOTICE SEARCH:** A card showing a search interface with a text box stating: "Keep informed about public notices, hearings, and other events, and access documents related to Water Resources permit applications."
- REPORT SPILLS, POLLUTION, UNAUTHORIZED ACTIVITIES:** A card showing a form interface with a text box stating: "If you've witnessed or become aware of spills, pollution, or any other unauthorized activities in wetlands, lakes, or streams, you can use our online tools to easily file a report, with complete anonymity if you choose."

The footer contains links for Mi.gov Home, MiWaters Home, Contact, Policies, and Copyright 2017 State of Michigan.



- **MOA between EPA and DEQ**

EXAMPLES

Interstate Waters  
Drinking Water Intakes

- **State Law (NREPA)**

EXAMPLES

State Natural Rivers  
State Historic/Archaeological Sites

- **MI Coastal Zone Management Program**

EXAMPLES

CZM Certification

- **Some Criteria addressed in both MOA and State Law**

EXAMPLES

Contamination  
T&E Species

- **STATE OR FEDERALLY LISTED OR THREATENED OR ENDANGERED SPECIES**  
(including USFWS designated critical habitat areas)  
Data Source: MI Natural Features Inventory
- **INTERSTATE WATERS (including tribal lands)**  
Data Source: Wetlands, Lakes, and Streams unit, DEQ
- **AREAS OF KNOWN OR SUSPECTED CONTAMINATION (Superfund, etc)**  
Data Source: Remediation and Redevelopment Division, DEQ

- **AREAS OF KNOWN OR SUSPECTED CONTAMINATION  
(Dredge sediment testing requirements)**

Data Source: Remediation and Redevelopment Division, DEQ

- **PROXIMITY TO A PUBLIC WATER INTAKE (within one mile)**

Data Source: Office of Drinking Water, DEQ

- **NATIONAL AND STATE PARKS**

Data Source: Conservation and Recreation Lands (CARL), Ducks Unlimited



- **FISH AND WILDLIFE SANCTUARIES AND REFUGES**

Data Source: Conservation and Recreation Lands (CARL), Ducks Unlimited

- **NATIONAL AND HISTORICAL MONUMENTS**

Data Source: Conservation and Recreation Lands (CARL), Ducks Unlimited

- **FEDERAL WILDERNESS AREAS AND PRESERVES**

Data Source: Conservation and Recreation Lands (CARL), Ducks Unlimited



- **NATIONAL HISTORIC PRESERVATION ACT SITES**  
Data Source: State Historic Preservation Office
- **NATIONAL WILD AND SCENIC RIVERS**  
Data Source: US National Park Service
- **STATE DESIGNATED WILDERNESS/NATURAL AREAS,  
OR ENVIRONMENTAL AREAS**  
Data Source: MI Department of Natural Resources

- **STATE HISTORIC OR ARCHAEOLOGICAL SITES**  
Data Source: State Historic Preservation Office
- **IDENTIFIED RECHARGE AREAS FOR DRINKING WATER AQUIFERS**  
Data Source: Office of Drinking Water, DEQ
- **IDENTIFIED RARE OR UNIQUE ECOLOGICAL TYPES  
(Rare and Imperiled Community Types)**  
Data Source: MI Natural Features Inventory



- **MICHIGAN NATURAL RIVERS**

Data Source: MI Department of Natural Resources

- **USACE SECTION 10 AREAS**

Data Source: Wetlands, Lakes, and Streams Unit, DEQ

- **MICHIGAN'S COASTAL ZONE**

Data Source: MI Coastal Zone Management Program, DEQ



# MIWATERS -- SITE EDITOR

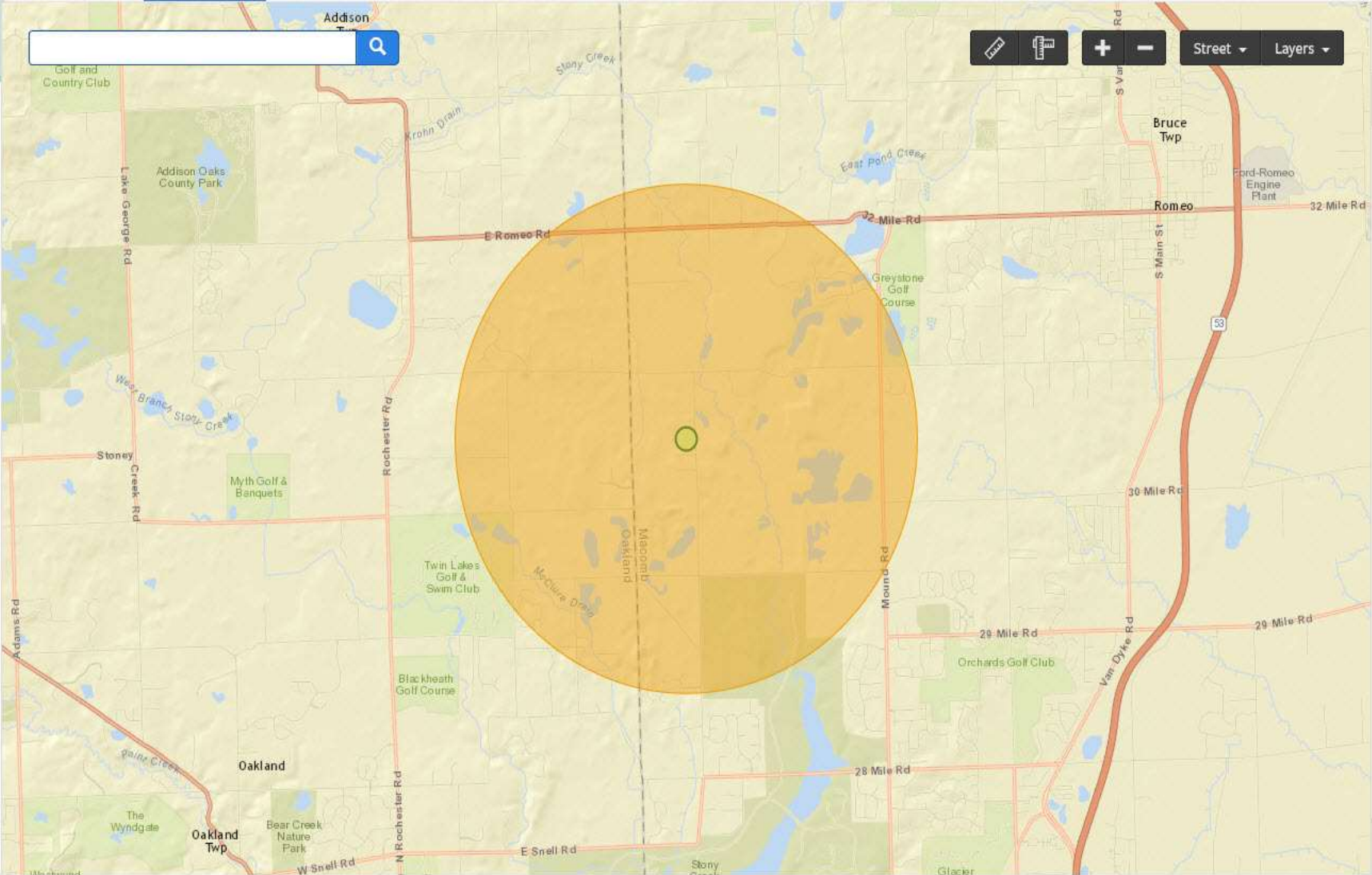
Site Number 08-50-0001-V  
Complaint:08-50-0001-V

Site Details

- Details
- Site Plan**
- Documents
- Events
- Program Components
- Contacts
- Related Sites

SITE  
Complaint:08-50-0001-V

- Site Information
- Contacts List
- Apps, Requests and Reports
- Permits
- Compliance and Enforcement Actions
- Evaluations
- Violations
- Financials
- Documents
- Authorized Users



### Edit Feature

- Detail
- Intersections**

**Buffer**

10000 Feet

[Download Intersections CSV](#)

- Warning: this feature intersects with a threatened and endangered species area
- Warning: this feature intersects with a HAL area

### Intersections

- ▶ HAL Sections: Known Archaeological Site
- ▶ MNFI T&E Species: Buteo lineatus
- ▶ MNFI T&E Species: Asio otus

- ESTABLISHES THE USE OF LATITUDE/LONGITUDE COORDINATES FOR PROJECT TRACKING
- SPATIAL APPROACH ALLOWS GIS LAYER INTERSECTION TO SCREEN PROJECTS BASED ON PROJECT LOCATION
- SCREENING LAYERS CAN BE KEPT CURRENT BY LINKING DIRECT TO AGENCY SERVERS AND AGENCY MAINTAINED DATA
- KML/KMZ SITE DATA IMPORT AVAILABLE SOON

Wetlands Map Viewer x MDEQ MiWaters Portal x

Secure | https://miwaters.deq.state.mi.us/info/app/#/submissionwizard/Od28363b-6511-4a8a-b18d-f35e9cbb66dc/4?returnContext=to%20Home&returnURL=https%3F~2F~2Fmiwaters.deq.state.mi.us~2Fmiwaters~2F%23~2Fsite~2FformPortal~2Fnewforms%3Fsi...

Apps Imported MSU Federal Credit Facebook Lansing all for sale Amazon.com Record MUVE The Huffington Post Rolling Stone FleetCommander DEQ - Wetlands DEQ/MiWaters (Map) Wetlands Map Viewer MiWaters - Home SOM Jobs GMAIL

Home About Contact Michigan Home

DEQ MiWaters Water Resources Information and Forms

BACK to Home

MDEQ/USACE Joint Permit Application (JPA) for Inland Lakes and Streams, Great Lakes, Wetlands, Floodplains, Dams, Environmental Areas, High Risk Erosi...  
Revision 1 v1.26 1988-0228-3E289 9/21/2017

Calculated Fee Computed at Payment

Last saved a few seconds ago

SAVE PROGRESS

Processing Info

INSTRUCTIONS: Please read first!

1 Applicant Information

1B Contact Information

**2 Project Location Information**

3 Project Description

4 Type of Permit Being Applied For

5 Application Form and Other Documents

6 Fees

Review

Confirm & Submit

## 2 Project Location Information

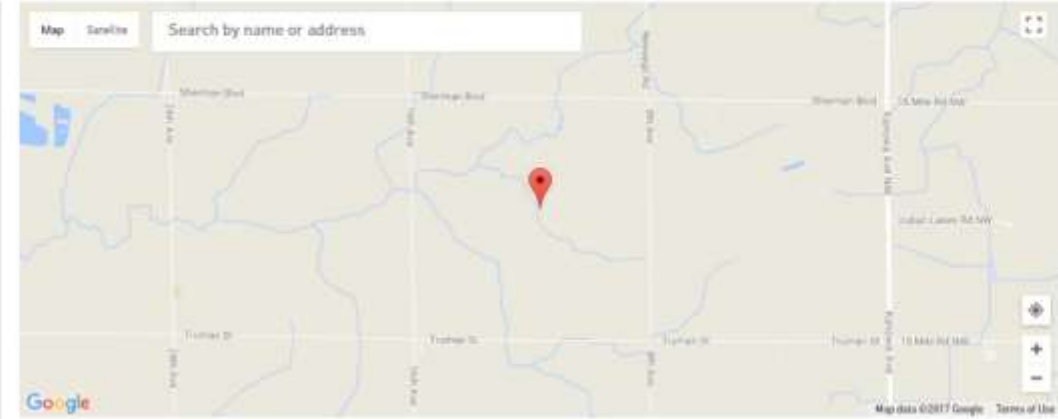
If you have selected an existing site, the project name and location information may pre-fill.

DEQ Site Reference Number (Pre-Populated, if applicable)  
7545058391497311014

Site or Facility Name

Wilson-Casnovia: 00-70-0069-P

Project Location



Map Satellite Search by name or address

LOCATION COORDINATES

LATITUDE: 43.1987

LONGITUDE: -85.8193

Project Location Address

Map data ©2017 Google Terms of Use

The screenshot displays the MIWaters Site Editor interface. At the top, the browser address bar shows the URL: <https://miwatersqa.deq.state.mi.us/miwaters/#/site/edit/plan?siteId=789286374216031030>. The page header includes navigation links for Home, About, Contact, and Sign Out, along with the user name Anne Garwood. The main content area is titled "Site Details" and features a tabbed interface with options for Details, Site Plan, Documents, Events, Program Components, Contacts, and Relations. The "Site Plan" tab is active, displaying a satellite map of a site. A search bar is located above the map. To the right of the map, the "Site Features" section includes an "Add New" button and a search input field. Below this, the "On Map" section shows a single feature: "SITE\_LOC-1 - Site Location" with a "Site Location" label. The left sidebar contains a "Site Search" field and a list of navigation options: Details, Contacts List, Apps, Requests and Reports, Permits, Evaluations, Violations, Compliance and Enforcement Actions, Financials, Documents, and Authorized Users. The footer of the page includes links for MI.gov Home, MIWaters Home, Contact, Policies, and Copyright 2017 State of Michigan.

The screenshot displays the MIWaters web application interface. At the top, the browser address bar shows the URL: <https://miwatersqa.deq.state.mi.us/miwaters/#/site/edit/plan?siteid=789286374216031030>. The page title is "Site Details" for "Fizzell Test".

The main content area features a map of the site with a yellow polygon highlighting a specific area. Below the map are controls for "Point", "Line", "Polygon", "Clear", "OK", and "Cancel".

The right sidebar contains a "New Feature - Detail" form with the following fields:

- Identifier:**
- Description:**
- Type:**
- Collection Method:**
- Coordinate Data (Lat Long):**

Buttons for "Save" and "Cancel" are located at the bottom of the form.

The footer of the page includes: [MI.gov Home](#), [MIWaters Home](#), [Contact](#), [Policies](#), and Copyright 2017 State of Michigan.

The screenshot displays the 'Edit Permit Feature' interface in the DEO MIWaters system. The page is divided into a left-hand navigation menu and a main content area. The navigation menu includes sections like 'My Tools', 'Applications', 'Permits', 'Evaluation', 'Compliance and Enforcement', 'Financial Instruments', 'Conservation Easements', 'Inspection Planning', 'Reports', 'Explorer', and 'Work'. The main content area is titled 'Permit Details' and contains the following form fields:

- Permit Identifier:** A text input field with a search icon.
- Requested Waterbody Name:** A dropdown menu with 'All Lake' selected.
- Activities:** A large text area for listing activities.
- Legal Parts:** A list of checkboxes for 'Part 801 - Water Lakes and Streams' and 'Section 404 of Clean Water Act'.
- Request Type:** A dropdown menu with 'Permit' selected.
- Maximum Stage:** A dropdown menu with 'Stream Bed' selected.
- Activity Description:** A text area with the placeholder 'Input writing tool here'.
- Feature Ecology:** A table with columns for 'Feature Ecology' and 'Requested Area'. The table contains one row with 'Stream Lake' in the first column and '0.00' in the second column.

At the bottom of the form, there are 'Save' and 'Cancel' buttons. The footer of the page includes 'My Home', 'MIWaters Home', 'Contact', 'Help', and 'Copyright 2017 State of Michigan'.

▼ BASE

- Counties
- Ecoregions
- Watershed Basins
- Sections
- Transportation

▼ COASTAL

- Critical Dune Area - Internal
- Critical Dune Area - PUBLIC
- High Risk Erosion Zones
- Environmental Areas
- Coastal Zone Management Boundary

▼ MANAGEMENT

- GL Bottomland Conveyances
- GL Bottomland Preserves
- National Forest Land
- National Parks
- State Parks
- Submerged Log Recovery Area
- USACE Section 10 Area
- USFWS Refuges
- DEQ Conservation Easements
- Conservation and Recreation Lands

▼ HYDROGRAPHY

- Approved TMDL Watersheds
- Cold/Cold Transitional Stream
- Designated Trout Streams
- Federal Wild Scenic Rivers
- Inland Lake Bathymetry
- Outstanding State Resource Waters
- State Natural Rivers
- Trout Lakes
- USGS Streamflow Stations
- Streams and Rivers
- Inland Lakes
- FEMA FIRM Panels
- FEMA Flood Hazard Zones
- Cisco Lakes 2011

▼ ENVIRONMENTAL

- Contaminated Sites
- DEQ Dam Inventory
- Kermit PT
- Kermit PY
- Landfill (Active)
- Landfill (Old)
- Part 201 Sites

▼ WETLANDS

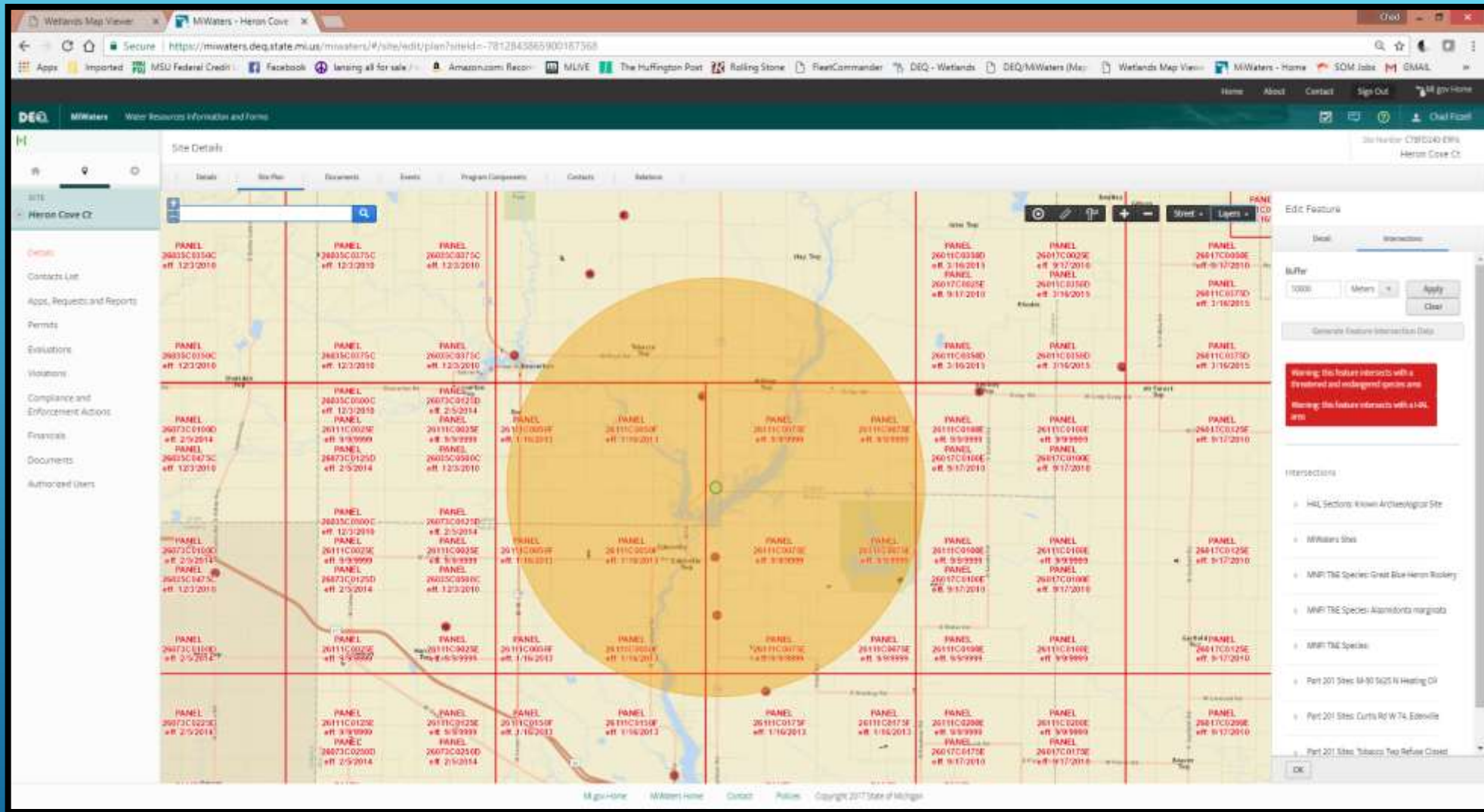
- Local Wetland Ordinances
- Part 303 Wetlands
- Wetland Inventory 2005
- Hydric Soils



The screenshot displays the MIWaters web application interface for editing a site plan. The main map area shows a site with a yellow circular buffer overlaid on a satellite view. The buffer is centered on a site location marked with a green dot. The map is overlaid with various colored zones: red for USACE Section 10 Areas, pink for Critical Dune Areas - PUBLIC, and yellow for Coastal Zone Management Boundaries. A layer control panel on the right side of the map allows users to toggle different layers, including BASE, COASTAL (with sub-layers for Critical Dune Area - Internal, Critical Dune Area - PUBLIC, High Risk Eroded Zones, Environmental Area, and Coastal Zone Management Boundary), ENVIRONMENTAL, HYDROGRAPHY, HYDROLOGIC STUDIES, MANAGEMENT, and WETLANDS. The 'Edit Feature' sidebar on the right shows a 'Buffer' of 5000 feet and a 'Warning' message: 'Warning: this feature intersects with a USACE Section 10 Area', 'Warning: this feature intersects with a threatened and endangered species area', and 'Warning: this feature intersects with a HAL area'. The 'Interactions' section lists several overlapping features, including Critical Dune Area - PUBLIC, DEQ Conservation Easements, and HAL Sections. A 'Site Features' sidebar on the left provides a search bar and a legend for the map's symbology.

# LAYER INTERSECTIONS

# INTERSECTION RESULTS



## Edit Feature

Warning: this feature intersects with a threatened and endangered species area

Warning: this feature intersects with a HAL area

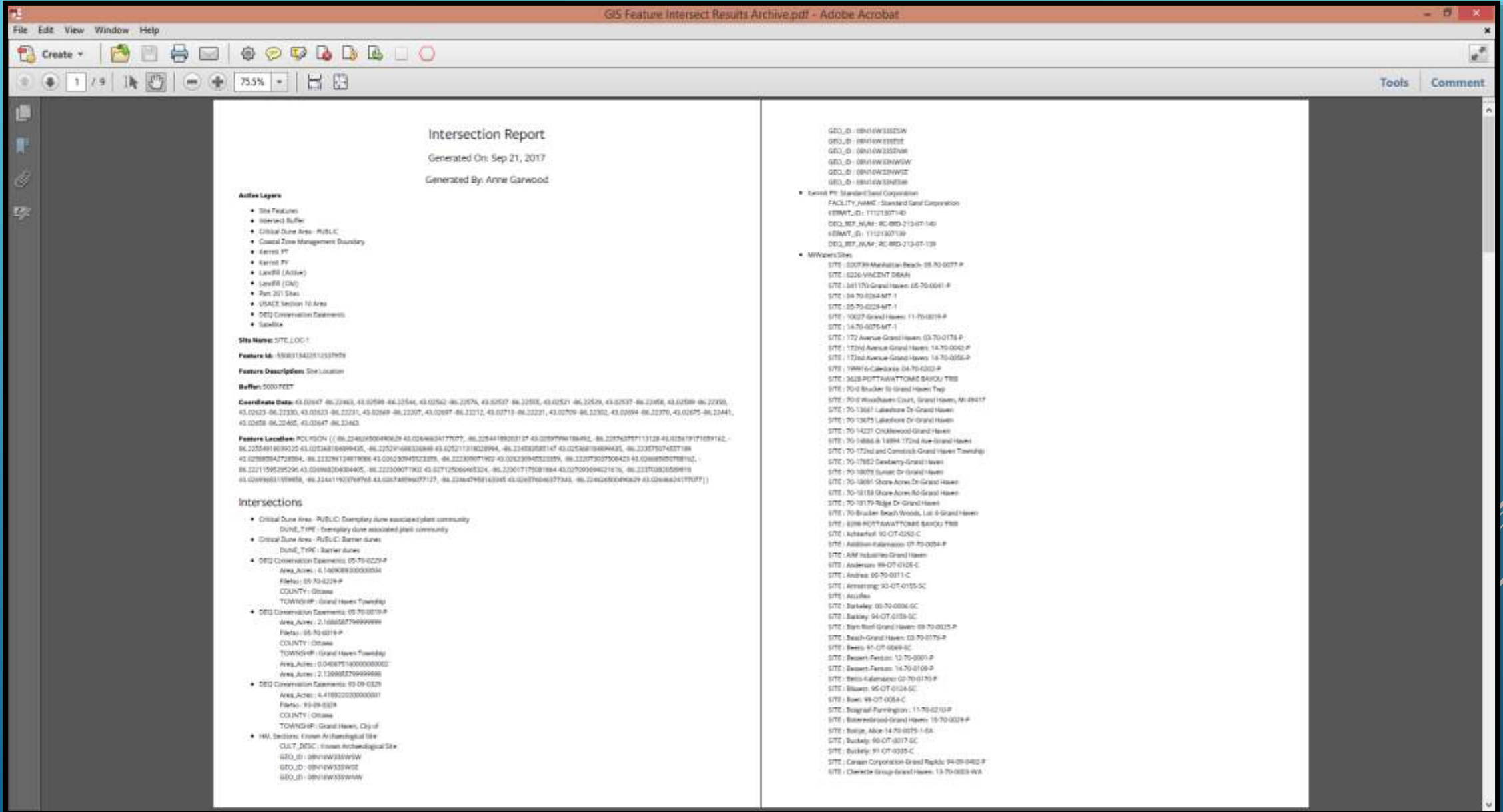
- HAL Sections: Known Archaeological Site
- M/Waters Sites
- MNFI T&E Species: Great Blue Heron Rookery

MNFI T&E Species: *Alasmidonta marginata*  
ELCODE: IMBIV02040  
SNAME: *Alasmidonta marginata*  
SCOMNAME: Elktoe  
NAME\_CAT\_1: Invertebrate Animal  
Lastobs: 1979  
EORANK: H  
USESA:  
SPROT: SC  
ELCAT: Animal

- MNFI T&E Species:
- Part 201 Sites: M-30 5625 N Heating Oil  
SITE\_ID: 56000171  
SITENAME: M-30 5625 N Heating Oil  
POLLUTANTS: Benzene, Heating oil

OK

The screenshot shows a web application interface for generating feature intersection data reports. The main area is a map with various colored overlays representing different environmental features. A yellow circle highlights a specific area on the map. A legend in the bottom-left corner identifies the features: USACE Section 10 Area (red square), DEQ Conservation Easements (green square), Critical Dune Area - PUBLIC (pink square), and Coastal Zone Management Boundary (yellow square). A 'Site Features' panel on the left shows a search bar and a list of features, including 'SITE\_LOC-1 - Site Location'. A 'Layers' panel on the right lists various map layers, with 'Critical Dune Area - PUBLIC' and 'Coastal Zone Management Boundary' checked. A 'Generate Feature Intersection Data' button is highlighted in yellow in the 'Edit Feature' panel on the right. Below this button, a red warning box states: 'Warning: this feature intersects with a USACE Section 10 Area', 'Warning: this feature intersects with a threatened and endangered species area', and 'Warning: this feature intersects with a HAL area'. The 'Intersections' list on the right shows several entries, including 'Critical Dune Area - PUBLIC: Exemplary dune assoc...', 'Critical Dune Area - PUBLIC: Barrier dunes', and 'DEQ Conservation Easements: 05-70-0219-P'.



The screenshot displays the MIWaters Identify Tool interface. At the top, the browser address bar shows the URL: <https://miwaters.deq.state.mi.us/miwaters/#/site/edit/plan?siteId=7545058391497311014>. The page header includes navigation links for Home, About, Contact, Sign Out, and MI.gov Home. The main content area is titled "Site Details" and features a navigation menu with tabs for Details, Site Plan, Documents, Events, Program Components, Contacts, and Relations. The "Details" tab is active, showing a search bar and a list of site details for "Wilson-Casnovia: 00-70-0069-P". A map of the site is displayed, with a pop-up window showing facility information: **FACILITY\_NAME** Mich Con - Lakey Foundry, **KERMIT\_ID** 11120104025, and **DEQ\_REF\_NUM** RC-RRD-201-04-025. The map includes a legend for "Kermit PY" and "Site Location". The footer contains links for Mi.gov Home, MIWaters Home, Contact, Policies, and Copyright 2017 State of Michigan.

Wetlands Map Viewer x MiWaters - Wilson-Casnovia x Chad

Secure | <https://miwaters.deq.state.mi.us/miwaters/#/site/edit/plan?siteId=7545058391497311014>

Apps Imported MSU Federal Credit Facebook Lansing all for sale Amazon.com: Recon MLIVE The Huffington Post Rolling Stone FleetCommander DEQ - Wetlands DEQ/MIWaters (Map) Wetlands Map Viewer MIWaters - Home SOM Jobs GMAIL

Home About Contact Sign Out MI.gov Home

DEQ MIWaters Water Resources Information and Forms Chad Fizzell

Site Number: 00-70-0069-P  
Wilson-Casnovia: 00-70-0069-P

Site Details

Details Site Plan Documents Events Program Components Contacts Relations

SITE

Wilson-Casnovia: 00-70-0069-P

Details

Contacts List

Apps, Requests and Reports

Permits

Evaluations

Violations

Compliance and Enforcement Actions

Financials

Documents

Authorized Users

**FACILITY\_NAME**  
FACILITY\_NAME: Mich Con - Lakey Foundry  
KERMIT\_ID: 11120104025  
DEQ\_REF\_NUM: RC-RRD-201-04-025

Site Features

On Map:

CPS Site Location 00-70-0069-P - Location for Resources Site 00700069  
Site Location

Legend

Kermit PY

Muskegon

Mi.gov Home MIWaters Home Contact Policies Copyright 2017 State of Michigan

# SCREENING TOOLS AVAILABLE TO EXTERNAL CUSTOMERS

# SITE EXPLORER

Enter keywords...

Advanced Search (Help?)

Site Name  
35-1545 Media Dr.-East Tawas

Address

City

Town Range Sec (e.g., 02S10E35)

Zip Code

Tax Parcel Number

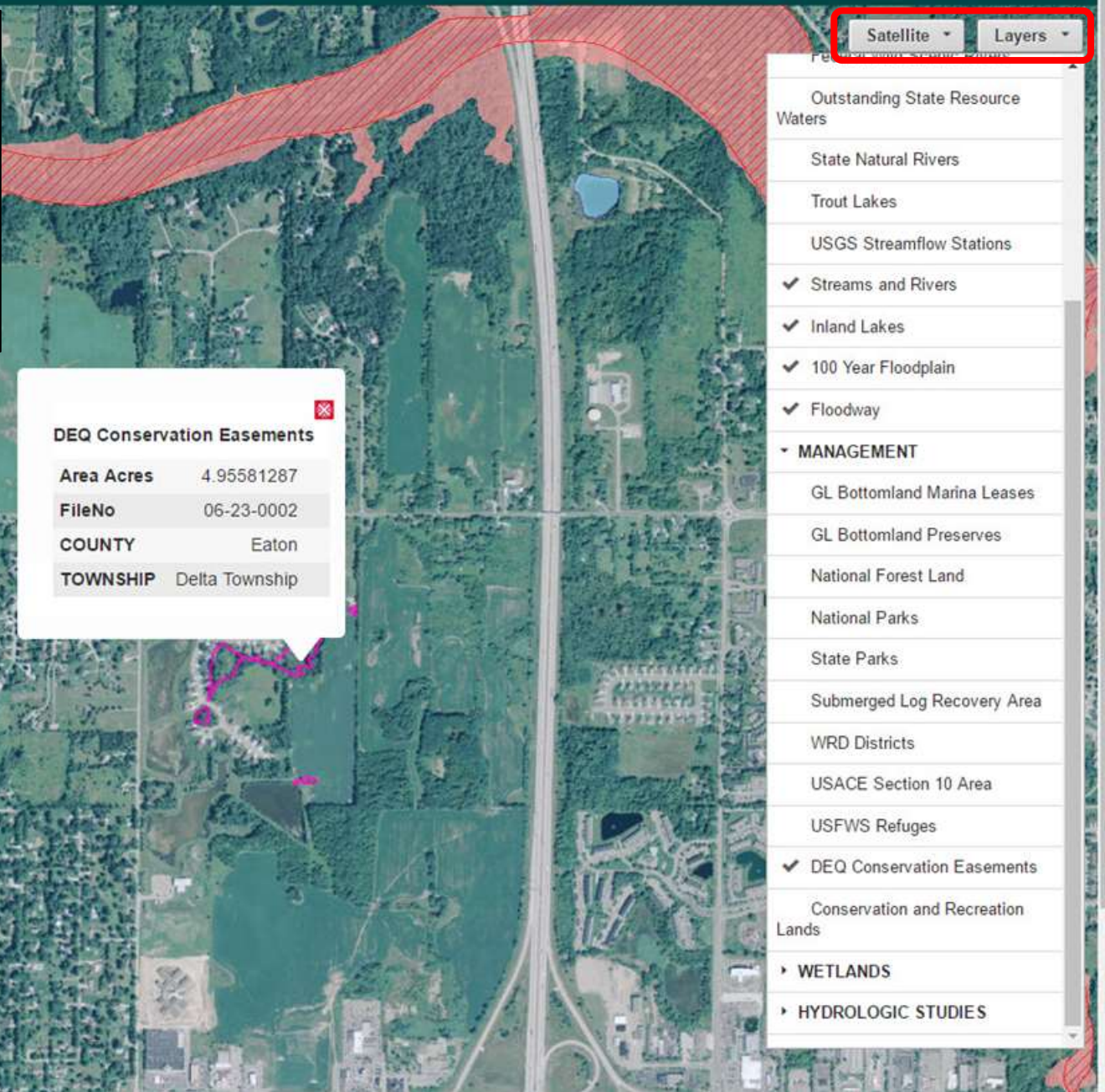
NAICS Code

- Josh's Auto Parts
- Driveway-Marion: 12-67-0017-P
- 20100399-Tannery Creek (Village of Douglas)
- garage-North Muskegon: 07-61-0087-P
- CARLSON-MARQUETT: 80-03-0041-P
- Complaint:97-25-0020-V
- Surles-Kinston: 95-07-0193-P
- Ontonagon County-Ontonagon: 97-01-0029-P



# EXPLORING A SITE -- GIS LAYERS

- Multiple GIS layers and backdrops can be added from the two drop down menus in the upper right
- Features within the layers can be clicked for more details
- A legend is available under the 'Legend' tab under the search entry
- Other layers of interest include USACE Section 10 Areas, Coastal Program Regulatory boundaries, as well as information from other DEQ programs such as Landfills and Contaminated Sites



DEQ MiWaters Water Resources Information and Forms

9999 0 sites found

Results Filter Export Legend

- 100 Year Floodplain
- Floodway
- Inland Lakes
- Streams and Rivers



Critical Habitat for Threatened & Endangered Species [USFWS]

Overview

A specific geographic area(s) that contains features essential for the conservation of a threatened or endangered species and that may require special management and protection.

by FWS\_HQ\_ES\_ECOS  
Last Modified: February 9, 2017

Web Map

Open in Map Viewer

Open in ArcGIS Desktop

Metadata

Details

## Description

Welcome to the US Fish & Wildlife Service's map of Threatened and Endangered Species with Critical Habitat in the United States. You are about to use an online mapper that displays designated critical habitat spatial information to understand that the designated critical habitat displayed in this mapper DOES NOT represent all of the critical habitat designated by the U.S Fish & Wildlife Service. Only digitized critical habitat submitted into this system is available here. If there is additional designated critical habitat that is not displayed in this mapper, if you require critical habitat information available here, please contact the lead FWS Region for that species.

## Layers

Final Linear Features

Home - Critical Habitat for Threatened & Endangered Species [USFWS]

Modify Map | Sign In

Details | Basemap

Legend

Final Linear Features

Final Polygon Features

Proposed Linear Features

Proposed Polygon Features

Critical Habitat - Polygon Features - Final: Hine's emerald dragonfly

singleunit	SINGLE
comname	Hine's emerald dragonfly
sciname	<i>Semiothisa hirsuta</i>
spcode	105P
vpcode	101
unit	Please check current species specific shapefile
subunit	Please check current species specific shapefile
unitname	Please check current species specific shapefile
subunitname	
status	Final
zoom to	

esri

**Michigan Natural Features Inventory**  
MICHIGAN STATE UNIVERSITY EXTENSION

[About MNFI](#) [Contact Us](#) [Services](#) [Data Resources](#) [Publications and Reports](#) [Education](#) [Invasive Species](#) [Links](#)

### Information Services

MNFI's mission is to provide the highest quality information in order to contribute to the conservation of biodiversity. If the options listed below do not fit your needs, please contact us and we can prepare customized data products for you.

#### Information Request

An Information Request provides a listing of all species and natural communities within four miles of a location. The scientific name, common name, element category, federal status, state status, global rank, state rank, last observed date, USGS 1:24,000 topoquad mapsheet code and name, county name, watershed name, PLSS township, range, and section will be listed for all occurrences within the area.

See our [Information Request](#) page for more information and pricing.

#### Rare Species Review

A Rare Species Review involves a refined review of the rare species in the immediate vicinity of your project. Project information is provided to MNFI who then use the heritage database to evaluate for potential impacts to rare species that are known to be near the project. This desktop review results in a letter that will list out all species within the area and MNFI's evaluation on the potential impacts the project may have on those species.

The Rare Species Review corresponds to the Endangered Species Assessment previously provided by the Wildlife Division of the MDNR. The letter provided by this review can be submitted for consideration when working with the State of Michigan.

See our [Rare Species Review](#) page for more information and pricing.

**Michigan Natural Features Inventory**  
MICHIGAN STATE UNIVERSITY EXTENSION

[About MNFI](#) [Contact Us](#) [Services](#) [Data Resources](#) [Publications and Reports](#) [Education](#) [Invasive Species](#) [Links](#)

### Rare Species Explorer

[New Search](#)

#### Species Search

**Criteria**

Scientific or Common Name

Taxonomic Group  
All  
All Animals  
All Plants  
Amphibians  
Birds  
Fish

Habitat / Community Type  
All  
Palustrine  
Marsh  
Interdunal wetland  
Intermittent wetland  
Submergent marsh

Survey Period Beginning  
Any time

**Results**

Column Name	Display	Sort By
Scientific Name	<input checked="" type="checkbox"/>	<input type="radio"/>
Common Name	<input checked="" type="checkbox"/>	<input type="radio"/>
Taxonomic Group	<input checked="" type="checkbox"/>	<input type="radio"/>
State Status	<input type="checkbox"/>	<input type="radio"/>
US Status	<input type="checkbox"/>	<input type="radio"/>
State Rank	<input type="checkbox"/>	<input type="radio"/>
Global Rank	<input type="checkbox"/>	<input type="radio"/>
Habitat / Community Type	<input type="checkbox"/>	<input type="radio"/>
Survey	<input type="checkbox"/>	<input type="radio"/>

<https://mnfi.anr.msu.edu/>

The screenshot displays the DEQ Environmental Mapper web application. The browser address bar shows the URL [www.mcgi.state.mi.us/environmentalmapper/](http://www.mcgi.state.mi.us/environmentalmapper/). The page header includes the DEQ logo and the text "Environmental Mapper Department of Environmental Quality". Navigation links for "DEQ Home" and "Contact" are visible. The main interface features a map of a residential area with numerous colored markers (purple, orange, red, green, blue) overlaid on an aerial view. A left-hand sidebar contains a "Layers" panel with the following options and their visibility status:

- Street
- Aerial
- Hybrid
- PLAT
- Land Use
- TOPO

Below the map style selection, there is a note: "Toggle layer visibility by clicking the corresponding checkbox". The layer checkboxes are:

- Land Use Restriction
- Environmental Management
- Brownfield Redevelopment
- Wellhead Protection Areas
- Legislative Districts
- Public Land Survey

Map navigation controls include "Clear Map", "Map Zooms", "Map Quick Keys", "Site Details", and "Print". A coordinate box at the bottom left of the map displays "43.21336, -86.25845".

<http://www.mcgi.state.mi.us/environmentalmapper/>



Wetlands Map Viewer

web2.mcgi.state.mi.us/wetlands/mcgiMap.html#

DEQ | Contacts | Permits | Online Services | Programs | Locations | MI.gov

### Part 303 Wetland Data

- Wetland (Hydric) Soils
- National Wetlands Inventory 2005
- MIRIS 1978 Wetlands

### Hydric Soils

Type	Show on Map
Sb	<a href="#">Highlight</a>

### MIRIS 1978 Wetlands

Type	Acres	Show on Map
Lowland Hardwood	218.934 Acres	<a href="#">Highlight</a>

### NWI Data

Type	Acres	Show on Map
Forested	109.239695	<a href="#">Highlight</a>

[NWI+ Data \(Advanced Users\)](#)

[Clear](#)

CLINTON COUNTY

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, A...

# PROJECT SCREENING & GIS

For SITE  
EXPLORER/EDITOR  
Questions:

Chad Fizzell  
[fizzellc@michigan.gov](mailto:fizzellc@michigan.gov)  
517-284-5533

Anne Garwood  
[garwooda@Michigan.gov](mailto:garwooda@Michigan.gov)  
517-284-5535