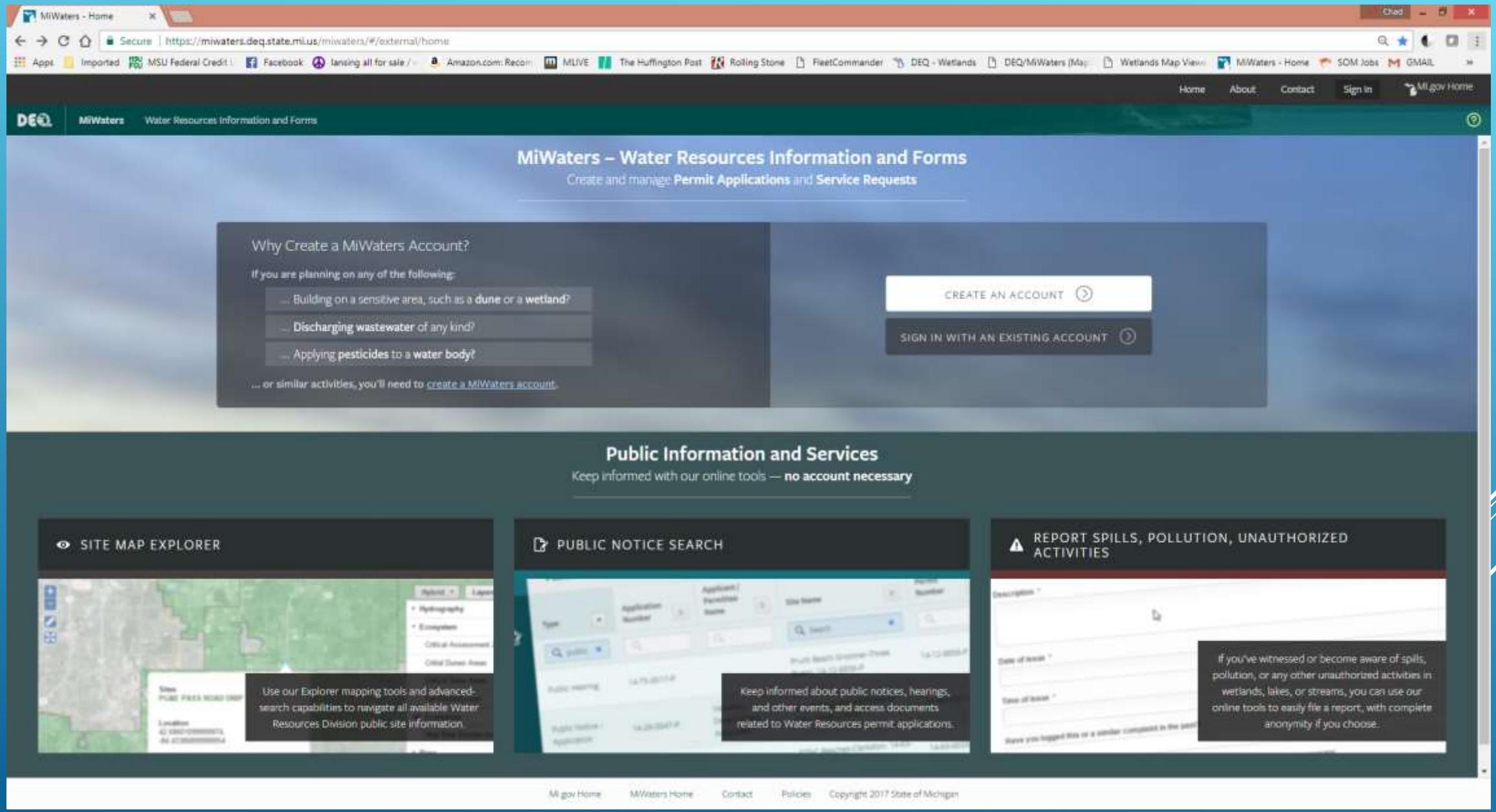
USING GIS FOR BETTER PROJECT SCREENING AND EVALUATION

Chad Fizzell
Wetlands Specialist

APPLICATION SCREENING -- MiWATERS



APPLICATION SCREENING -- BASIS OF PROJECT SCREENING

- **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

APPLICATION SCREENING -- WRD RESOURCE PROGRAMS

- **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

APPLICATION SCREENING -- WRD RESOURCE PROGRAMS

- **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

APPLICATION SCREENING -- WRD RESOURCE PROGRAMS

- **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

APPLICATION SCREENING -- WRD RESOURCE PROGRAMS

- **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

APPLICATION SCREENING -- WRD RESOURCE PROGRAMS

- **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

APPLICATION SCREENING -- WRD RESOURCE PROGRAMS

- **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

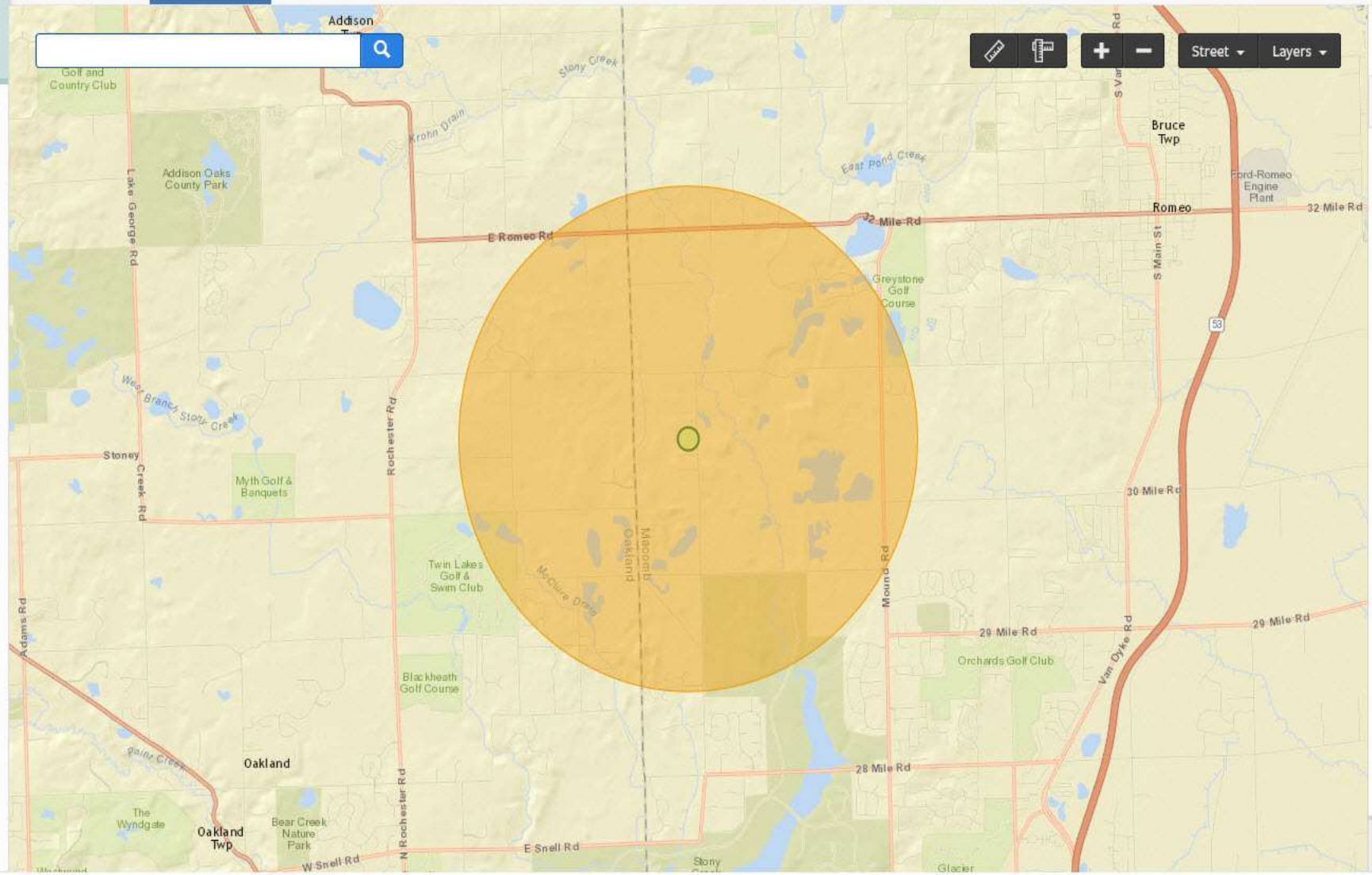
Site Details

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

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 Apply Clear

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

OK

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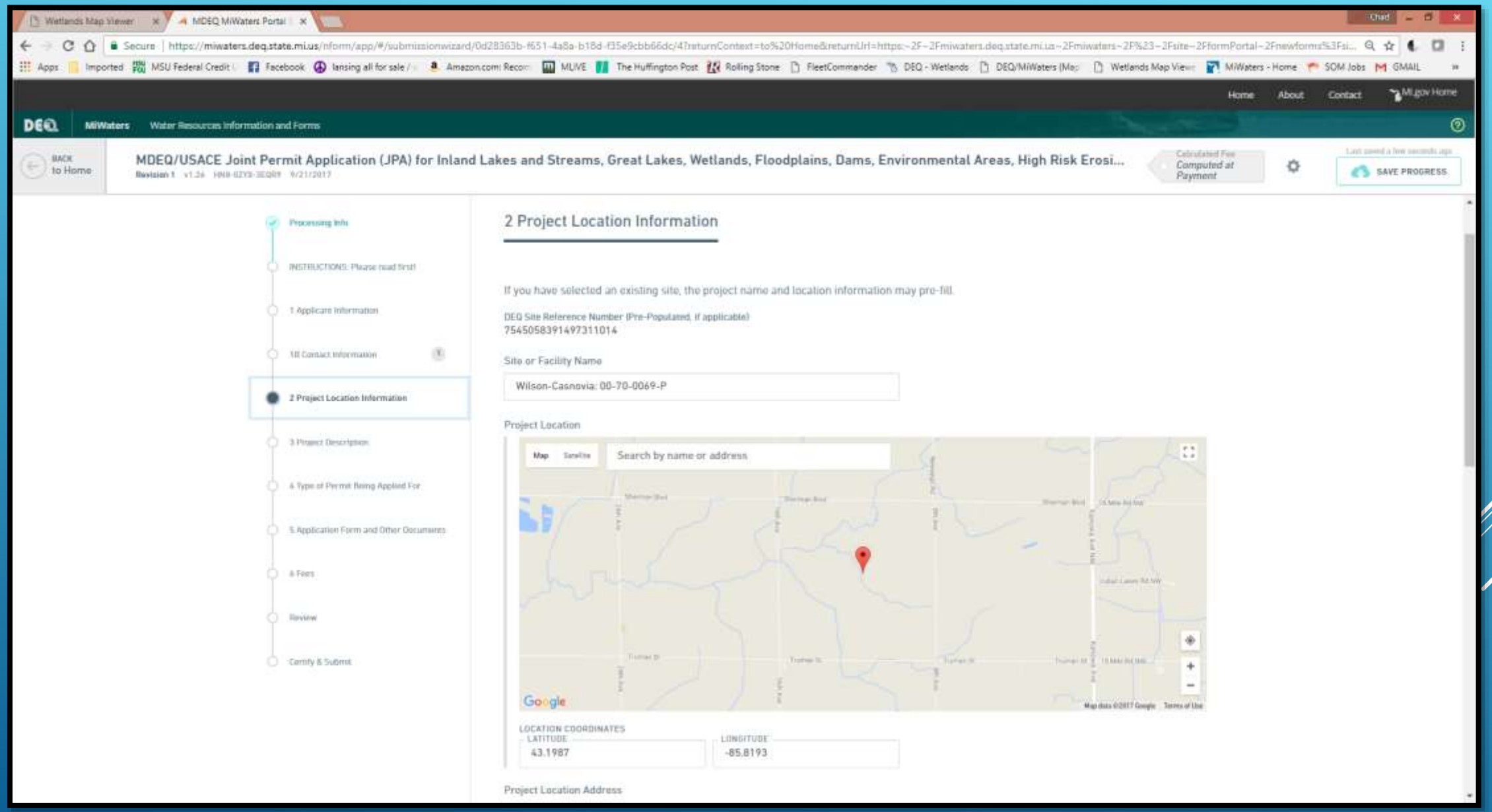
MIWATERS SITES

A SPATIAL APPROACH TO PROJECT TRACKING

- 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

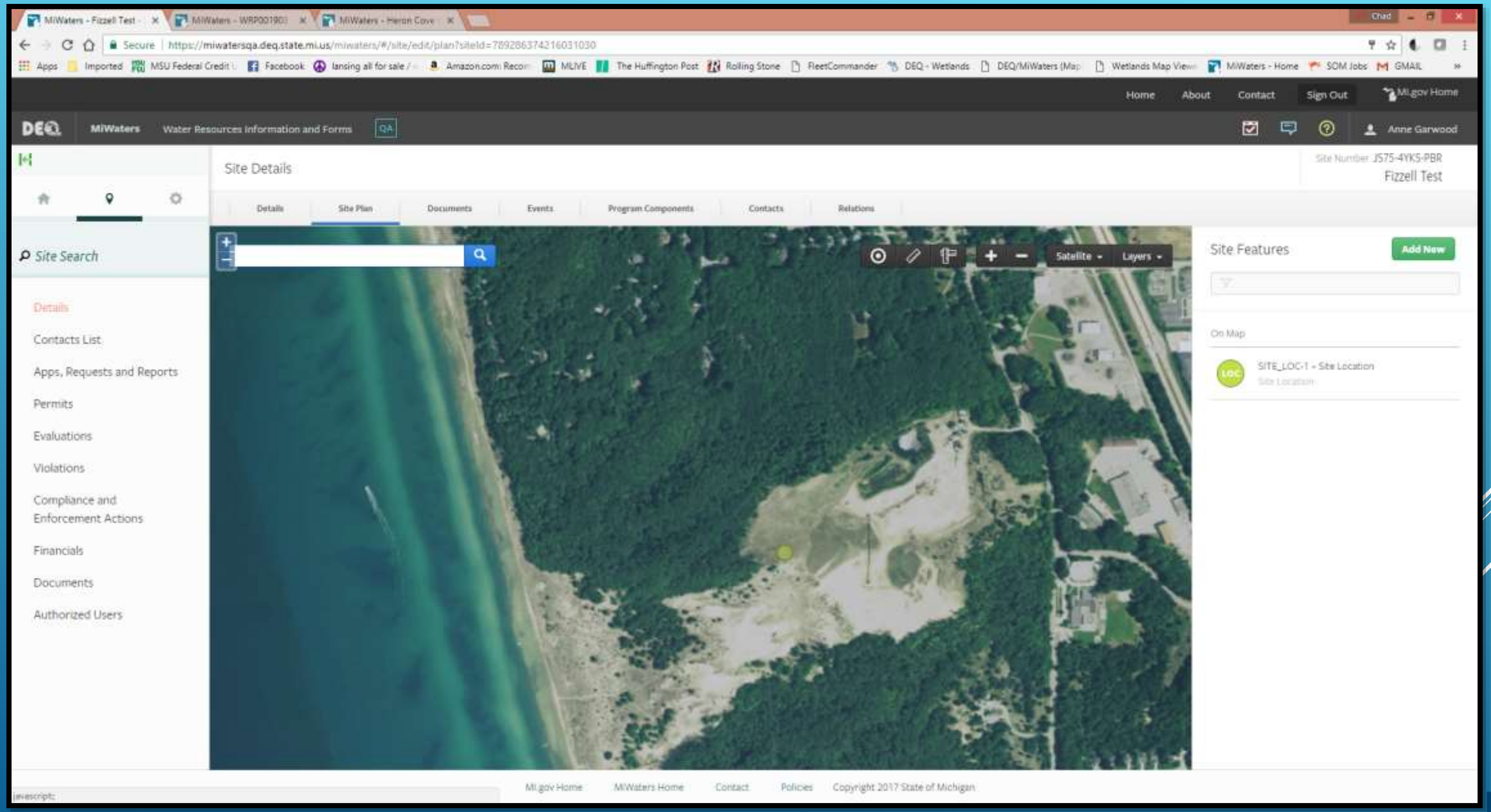
MIWATERS SITES

ESTABLISHING A NEW SITE



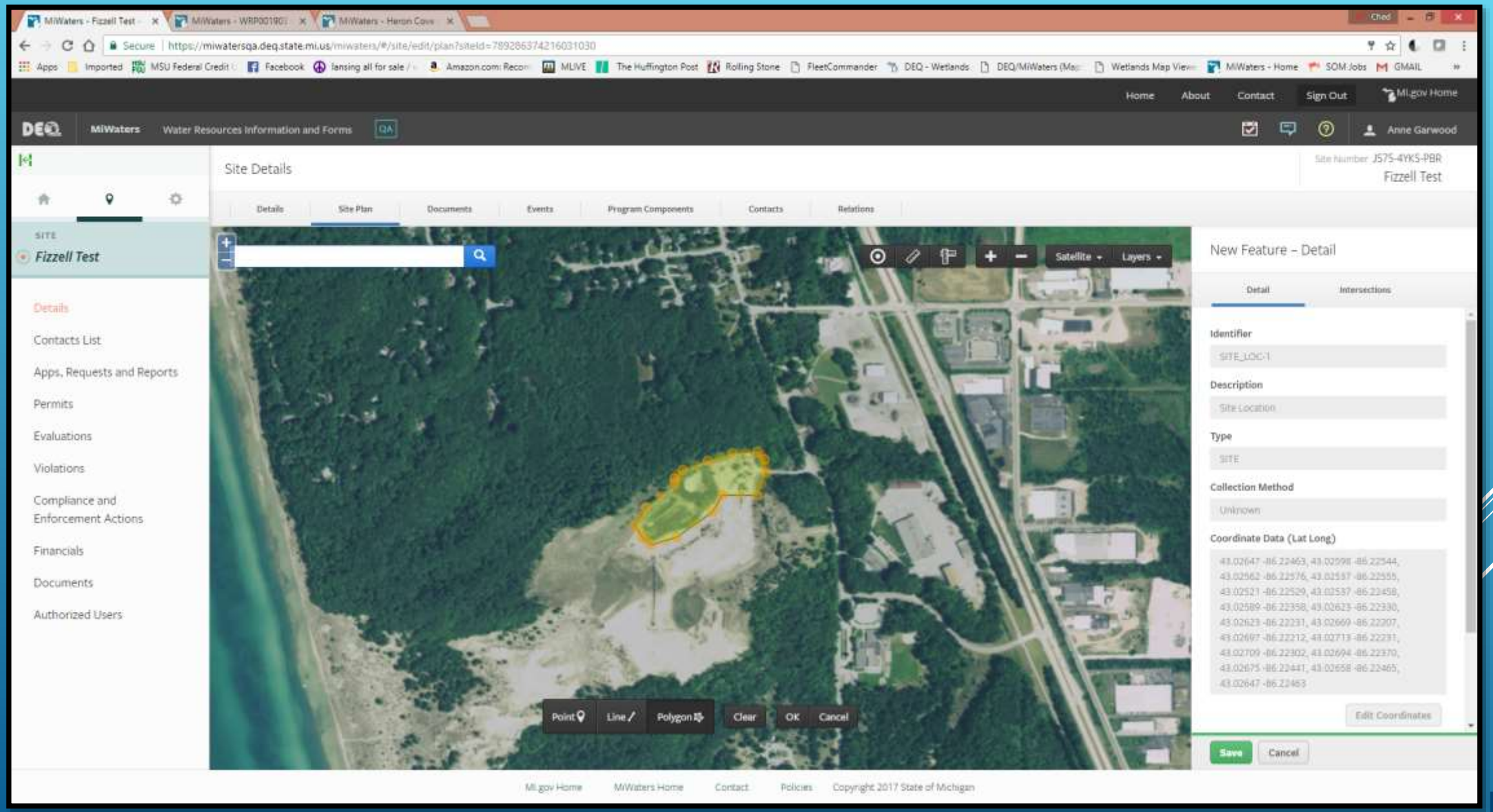
MIWATERS SITES

NEW SITE IN SITE EDITOR



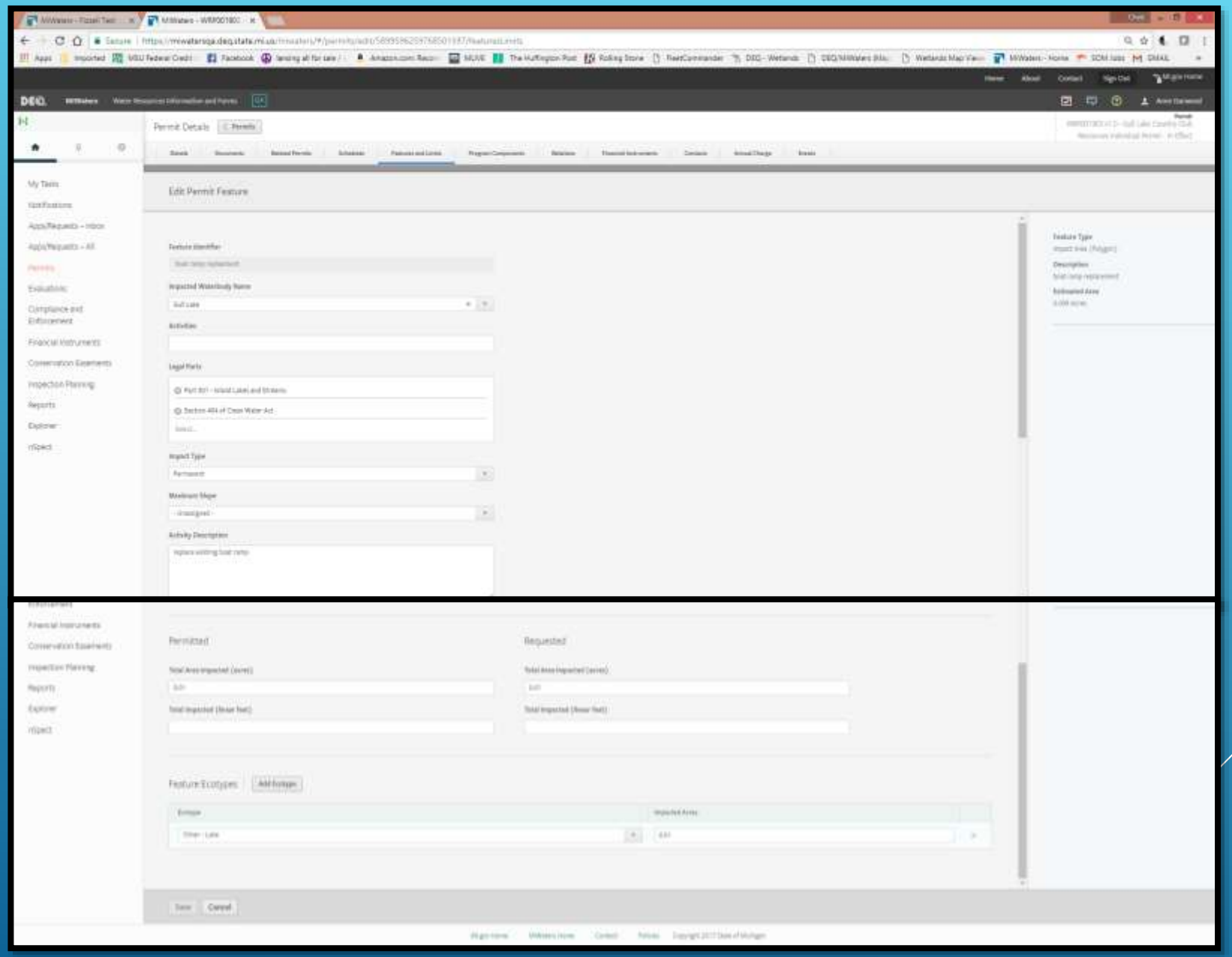
MIWATERS SITES

STAFF EDITING OF NEW SITE



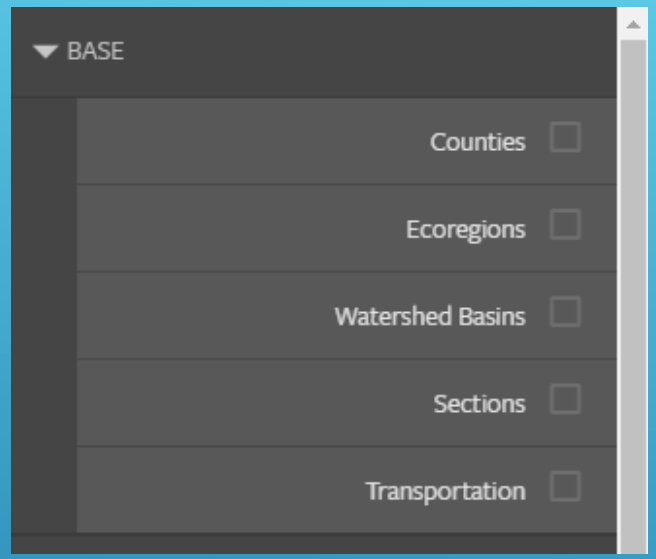
MIWATERS SITES

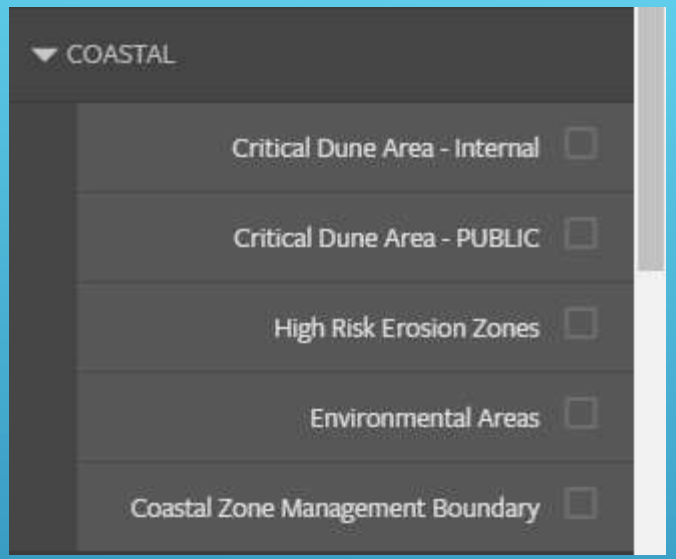
SITE ATTRIBUTION – LEGAL PARTS AND ACTIVITIES

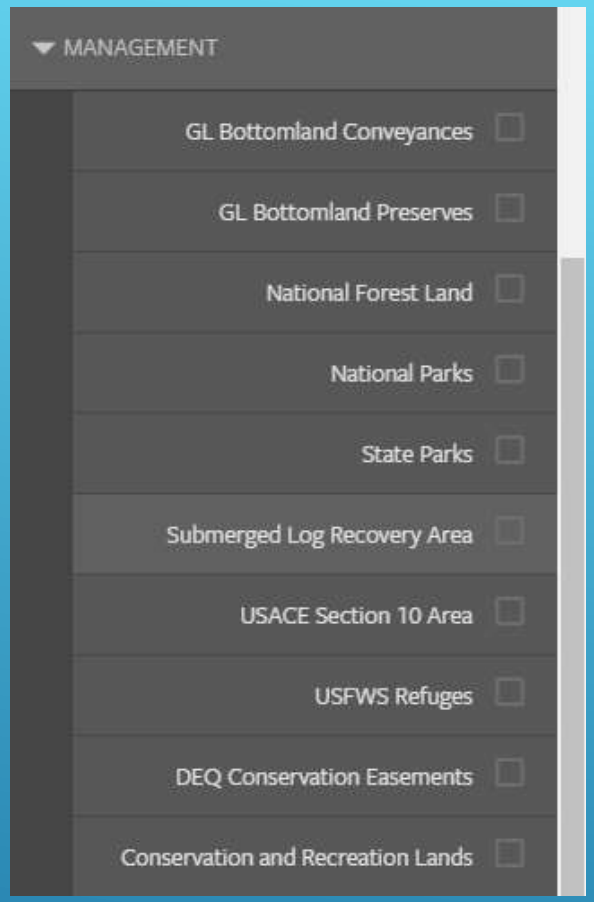


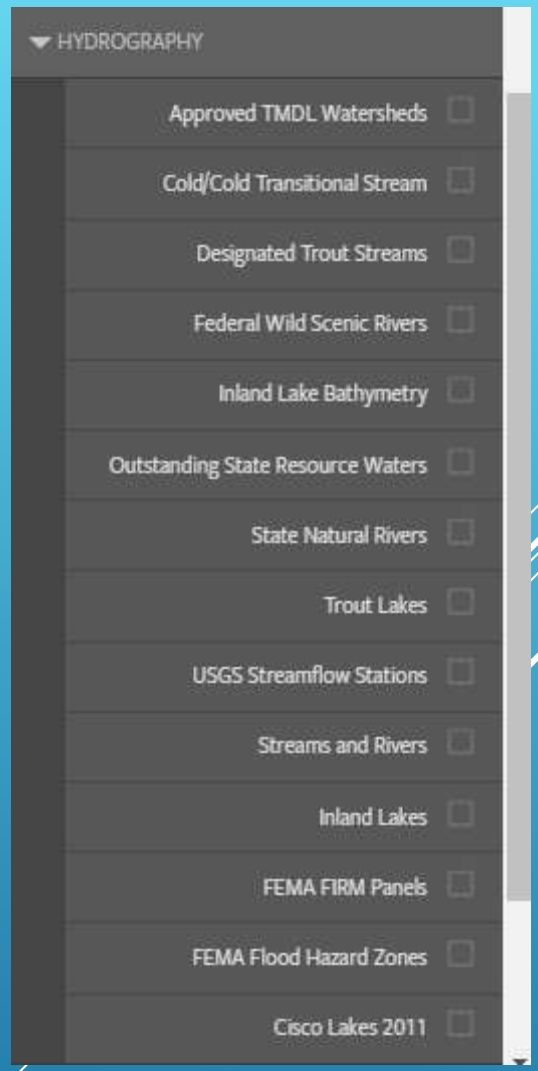
MIWATERS SITE EDITOR

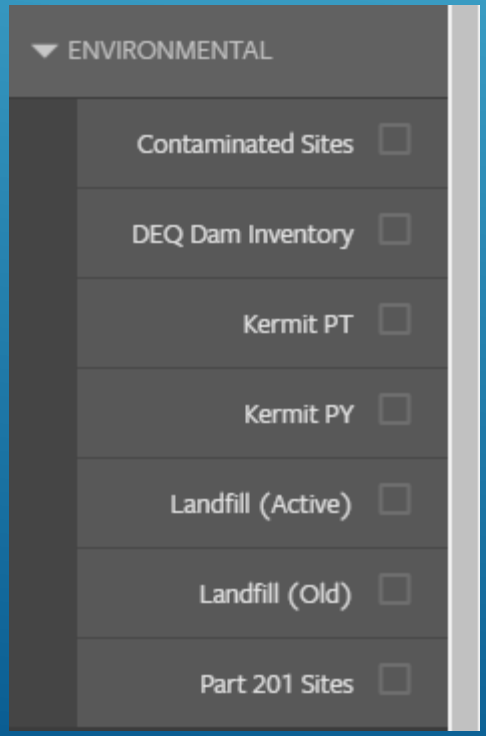
GIS LAYERS AVAILABLE FOR SCREENING

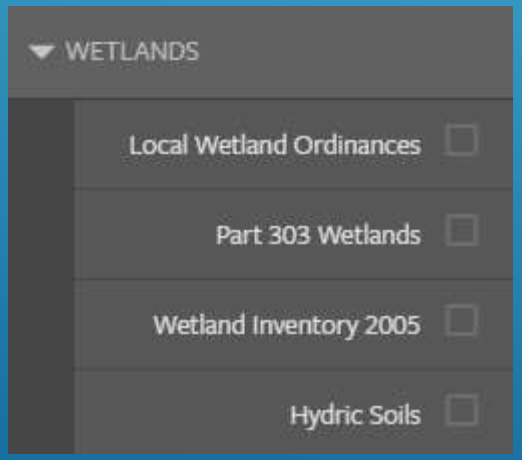






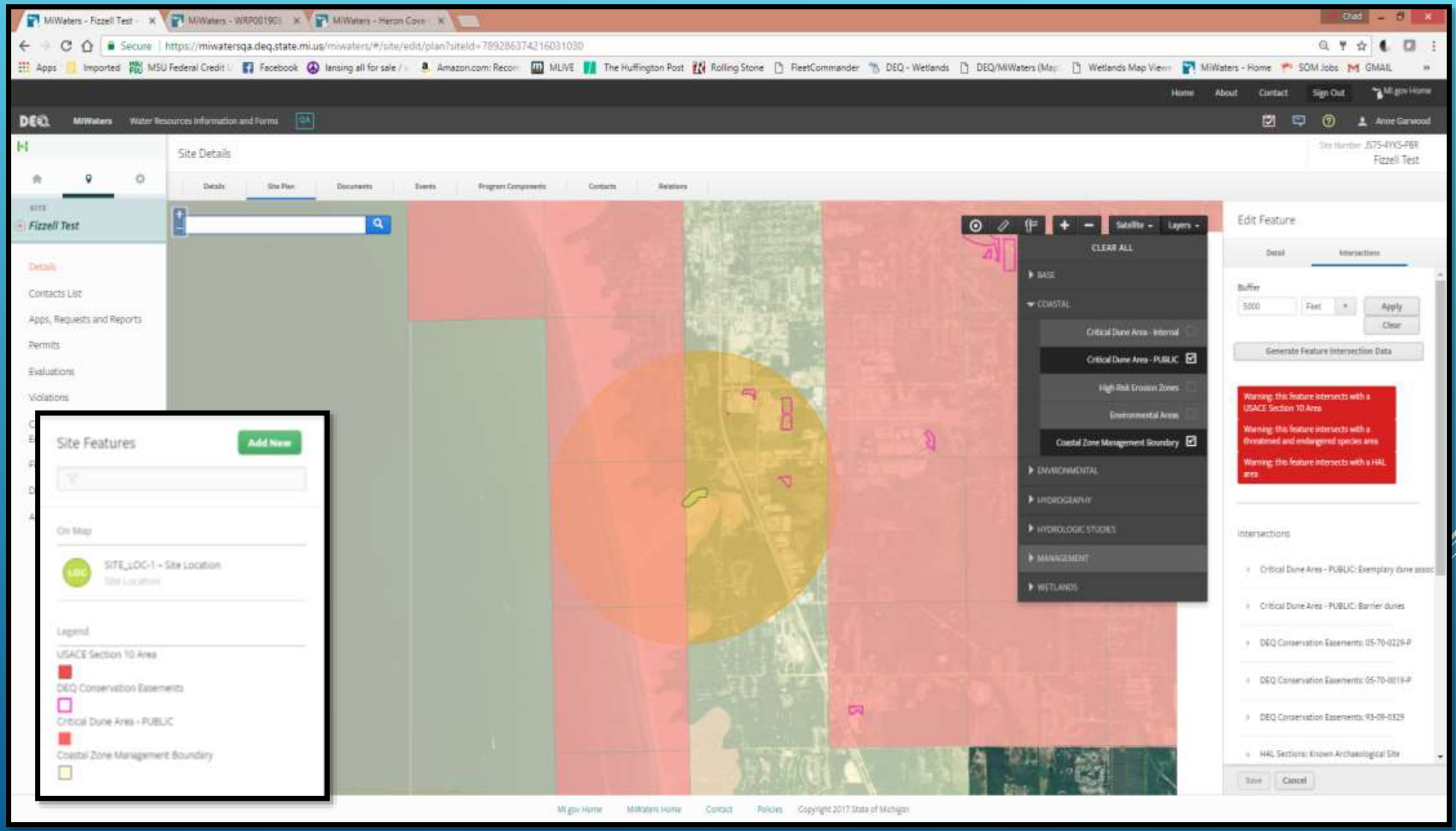






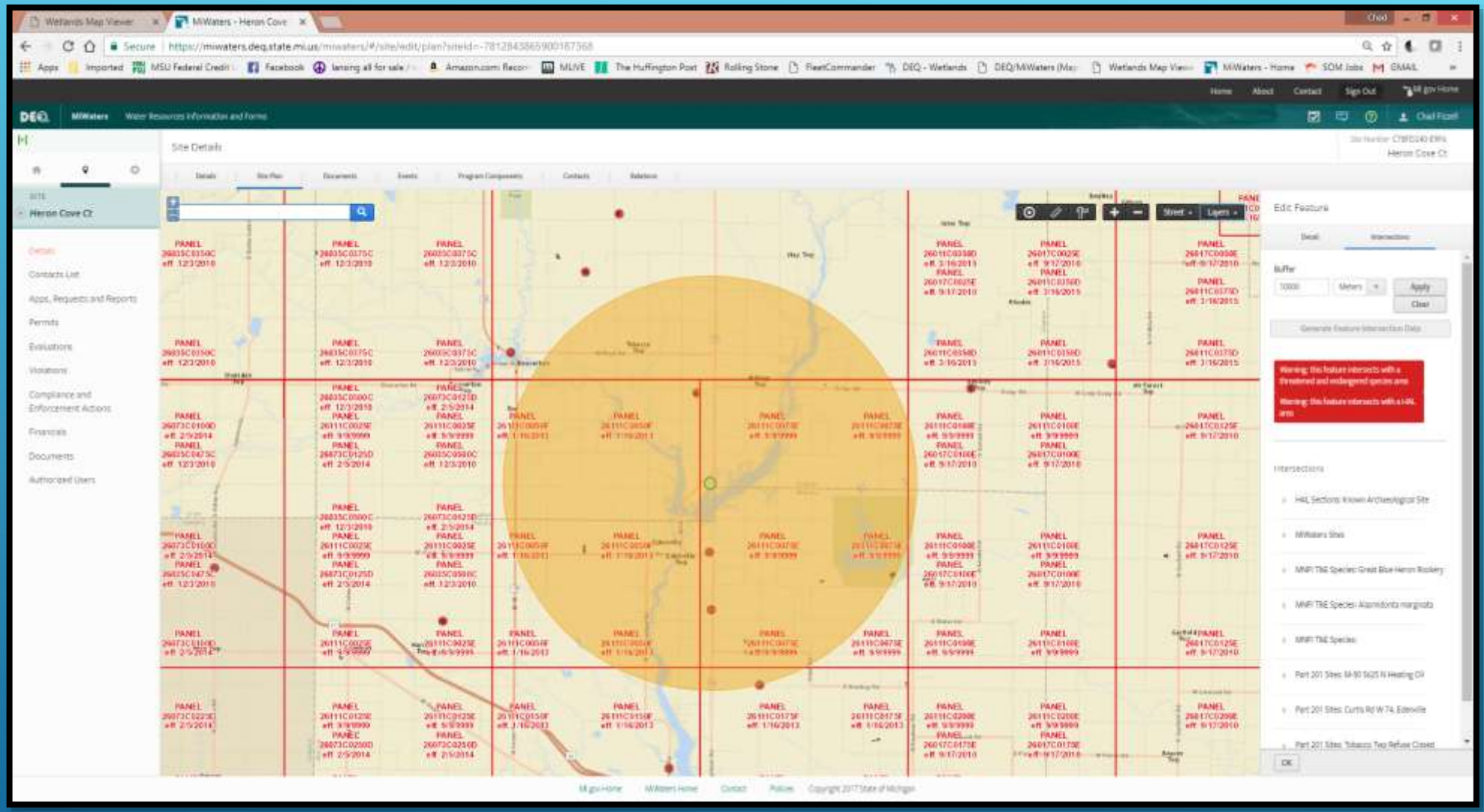
MIWATERS SITES

SPATIAL SCREENING OF SITE BUFFER



LAYER INTERSECTIONS

INTERSECTION RESULTS



Edit Feature

Detail | Intersections

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

Warning: this feature intersects with a HAL area

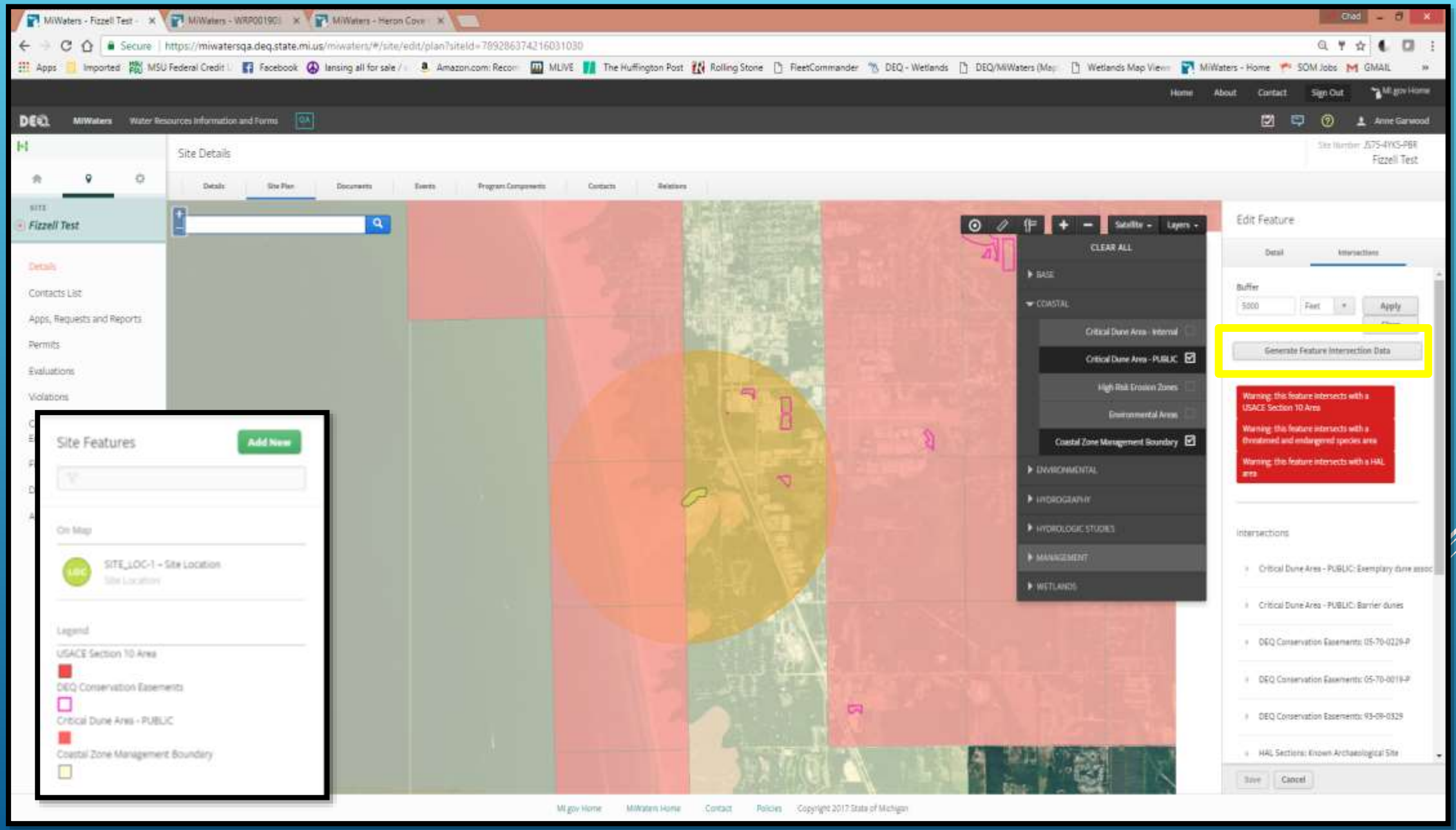
Intersections

- HAL Sections: Known Archaeological Site
- MiWaters 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

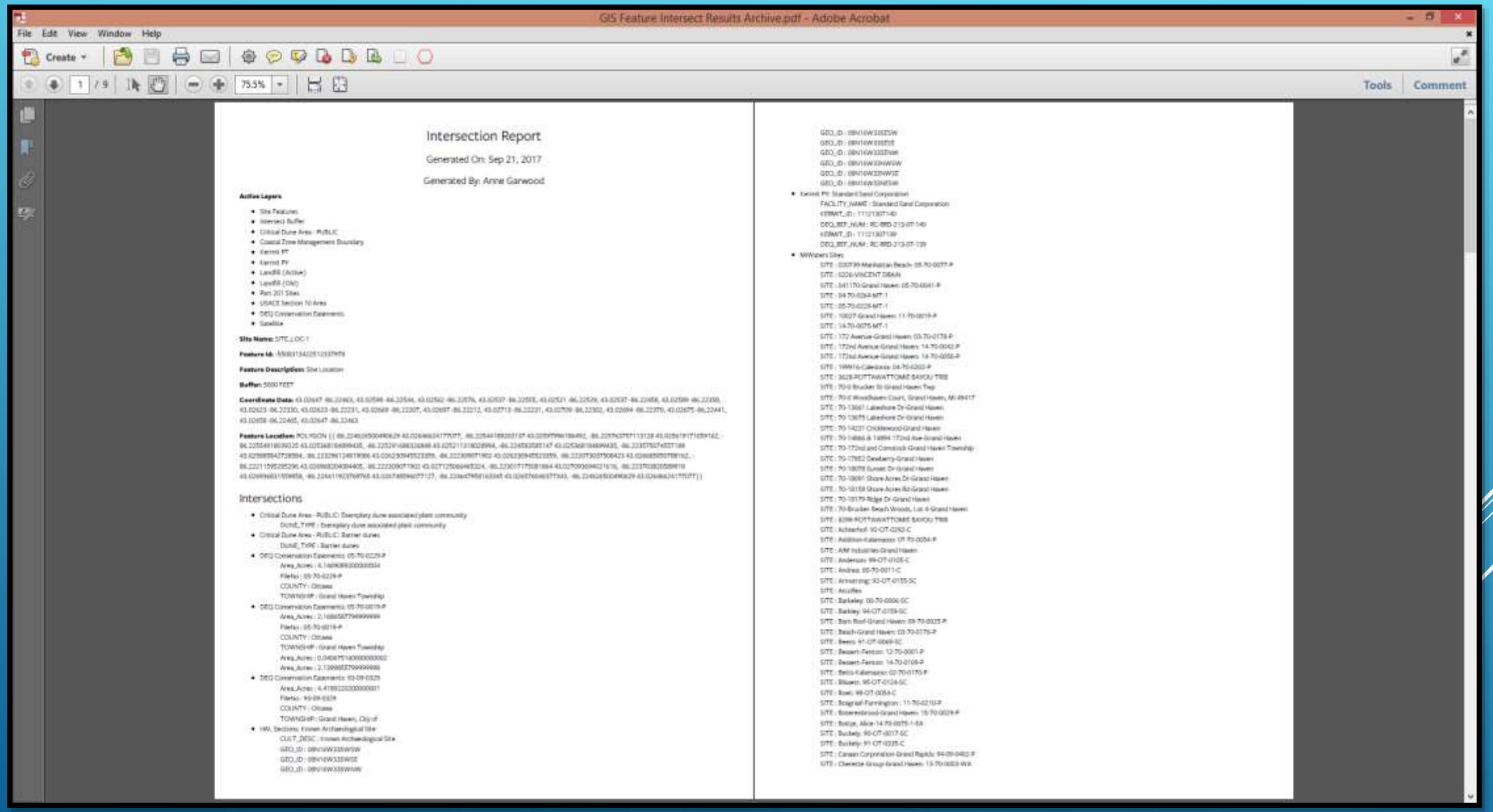
INTERSECTION EXPORT

GENERATE FEATURE INTERSECTION DATA REPORT



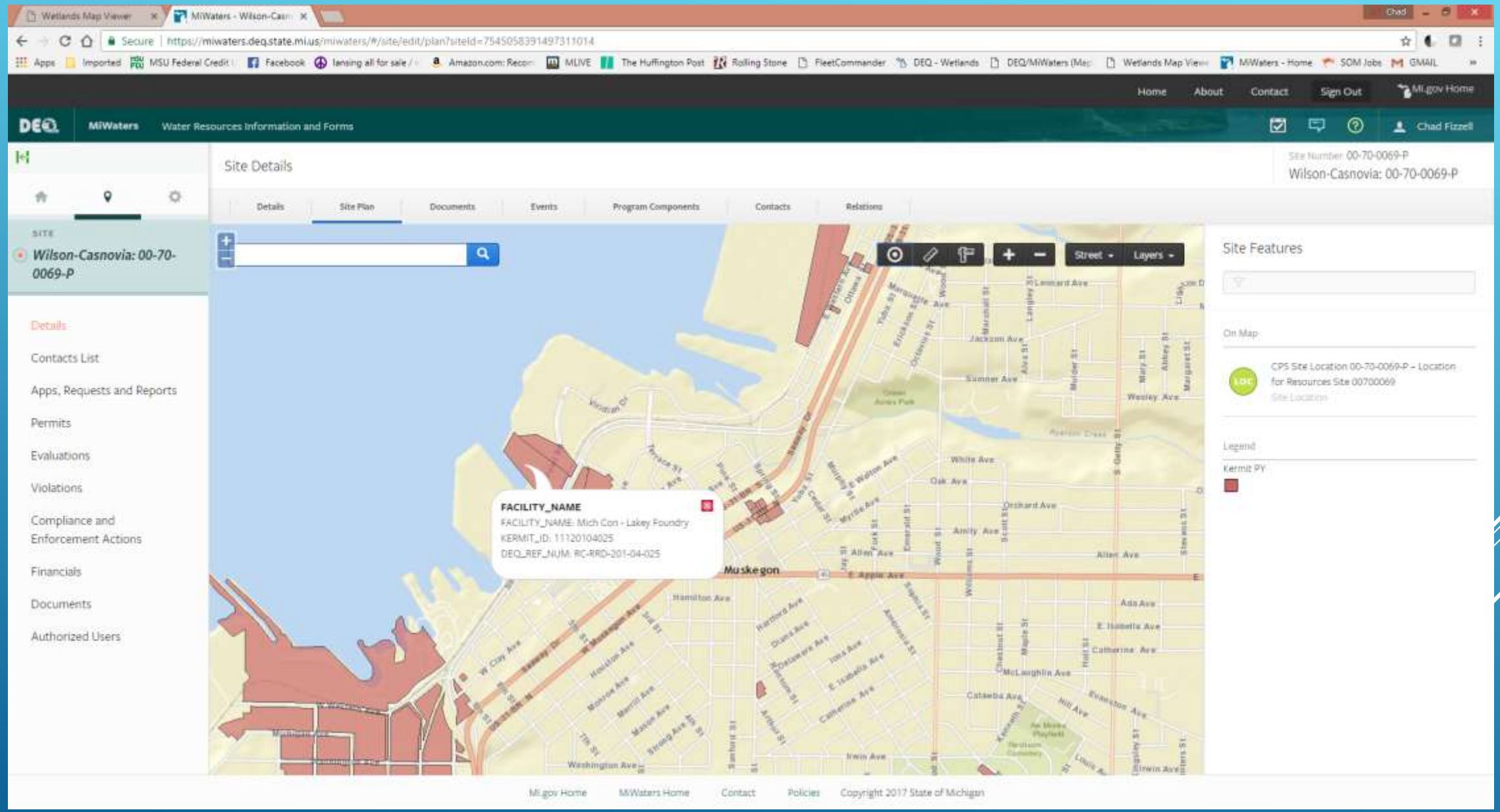
INTERSECTION EXPORT

GENERATE FEATURE INTERSECTION DATA REPORT



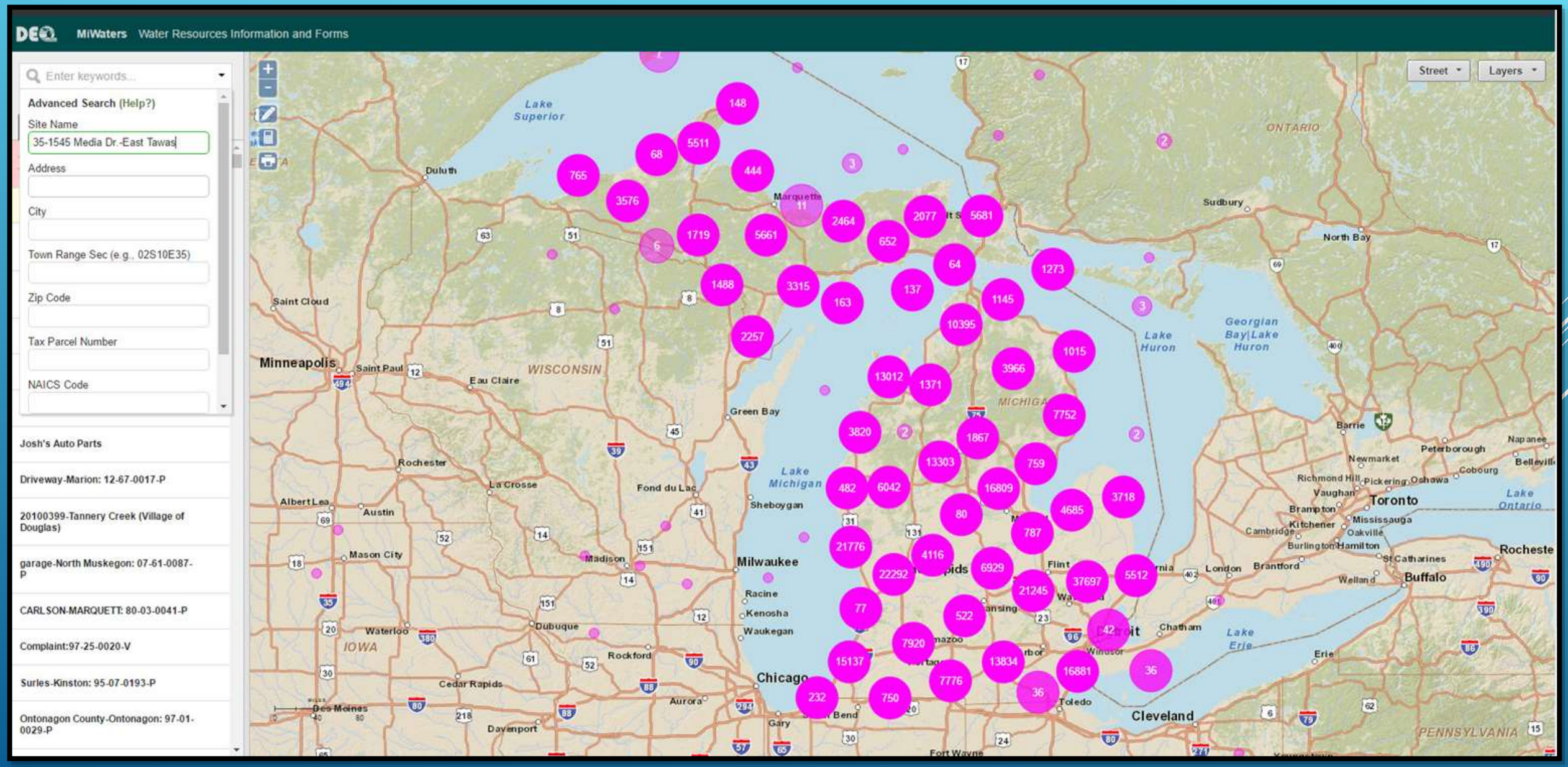
MIWATERS SITES

IDENTIFY TOOL



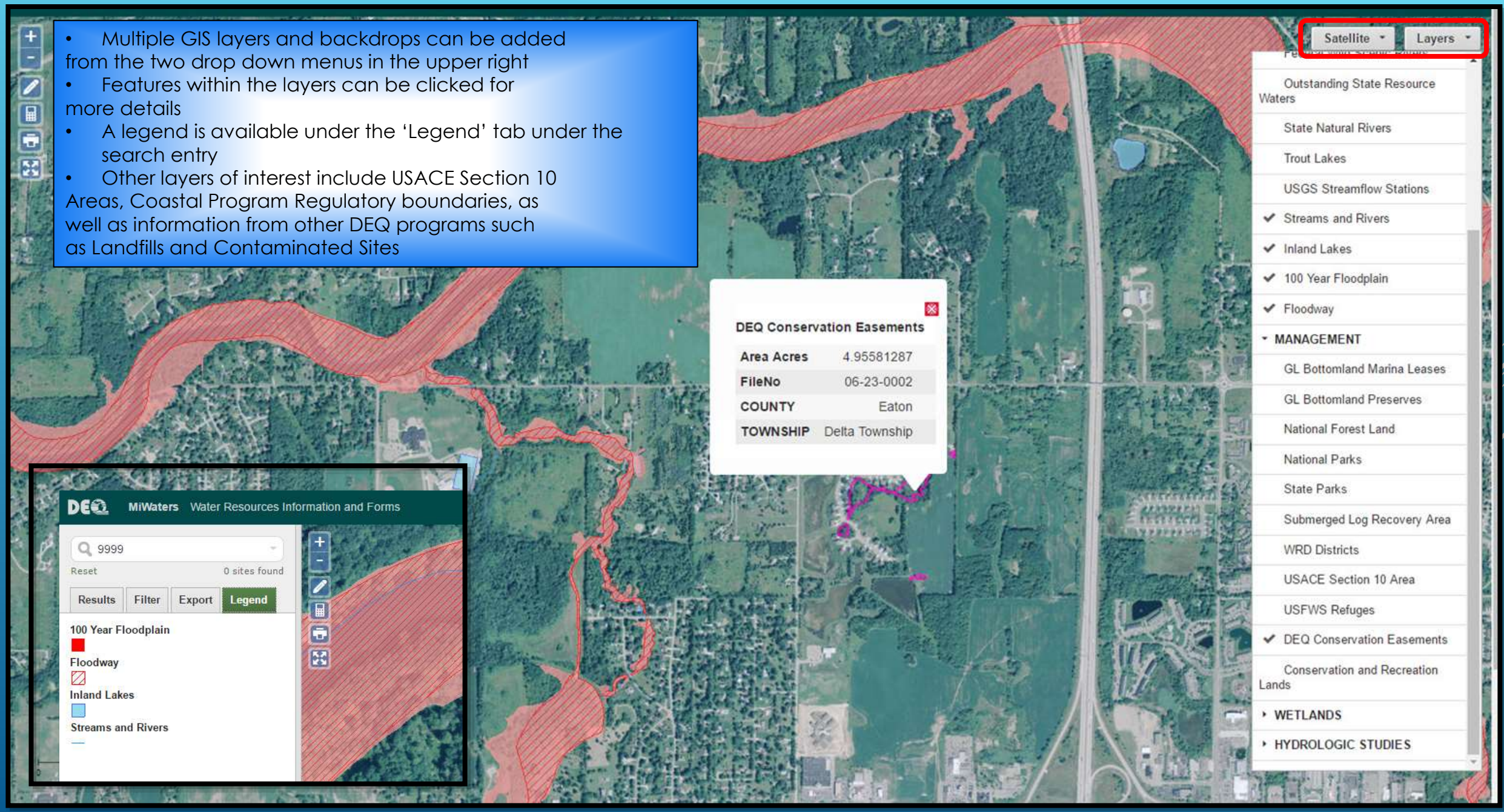
SCREENING TOOLS AVAILABLE TO EXTERNAL CUSTOMERS

SITE EXPLORER



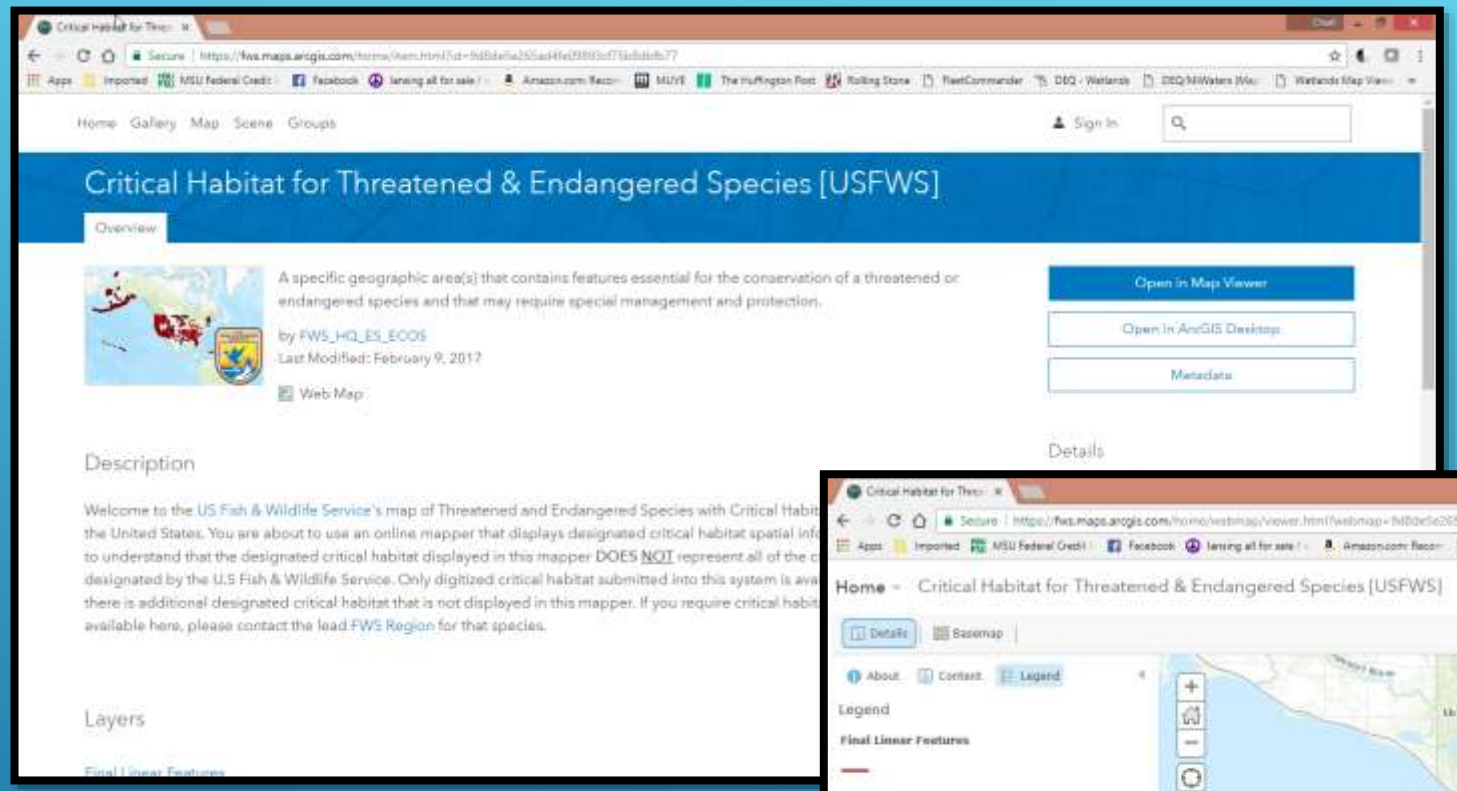
EXPLORING A SITE -- GIS LAYERS

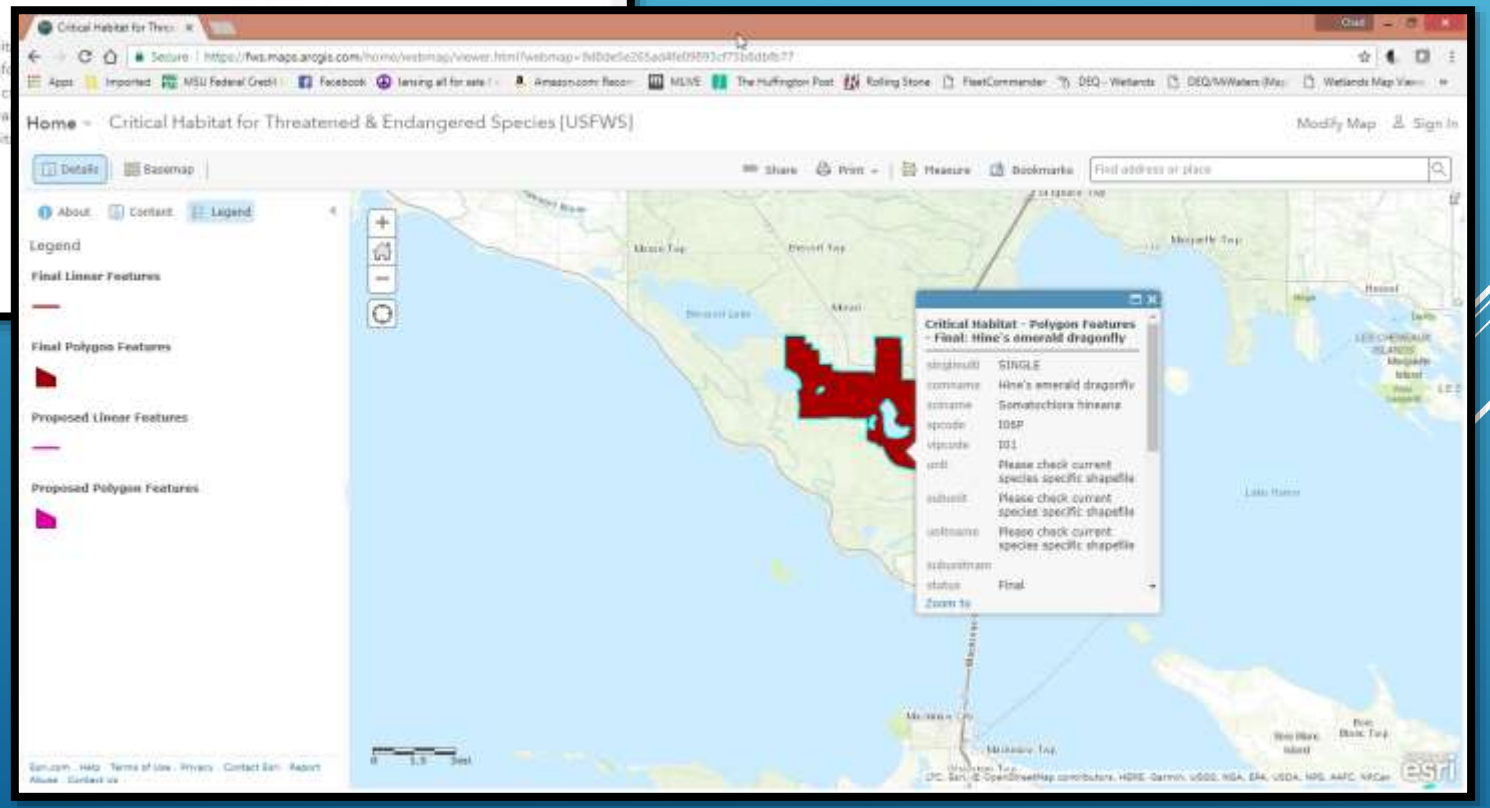
- Multiple GIS layers and backdrops can be added from the two drop down menus in the upper right
- Features within the layers can be clicked for more details
- A legend is available under the 'Legend' tab under the search entry
- Other layers of interest include USACE Section 10 Areas, Coastal Program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



EXTERNAL SCREENING RESOURCES

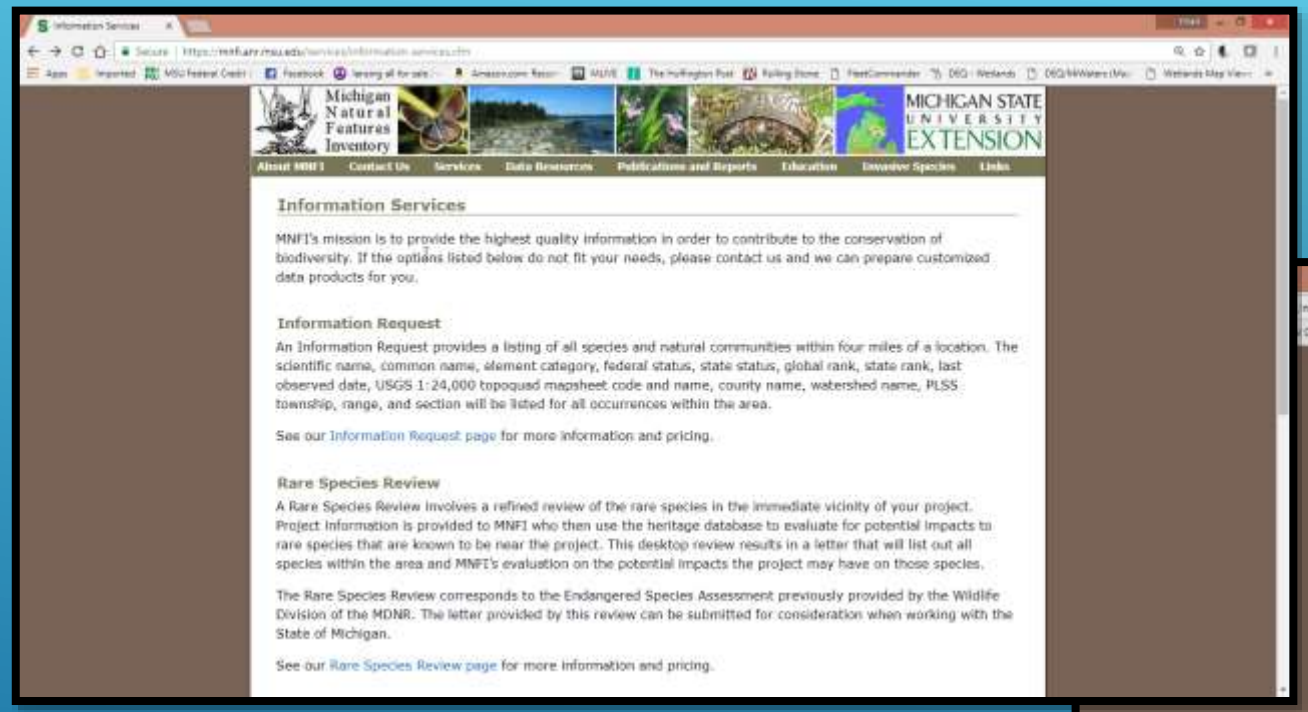
USFWS CRITICAL HABITAT SCREENING TOOL

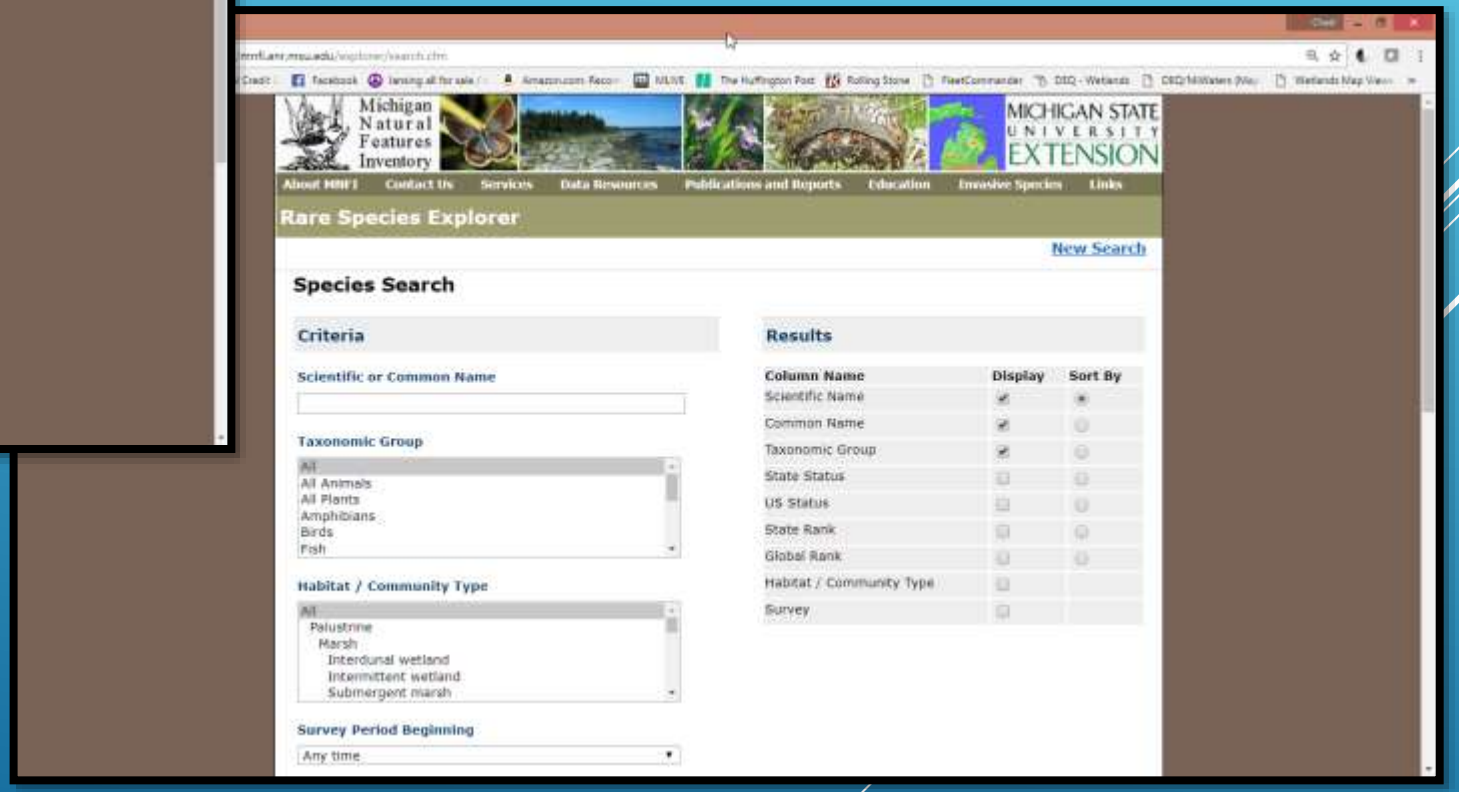




EXTERNAL SCREENING RESOURCES

MNFI RESOURCE SCREENING

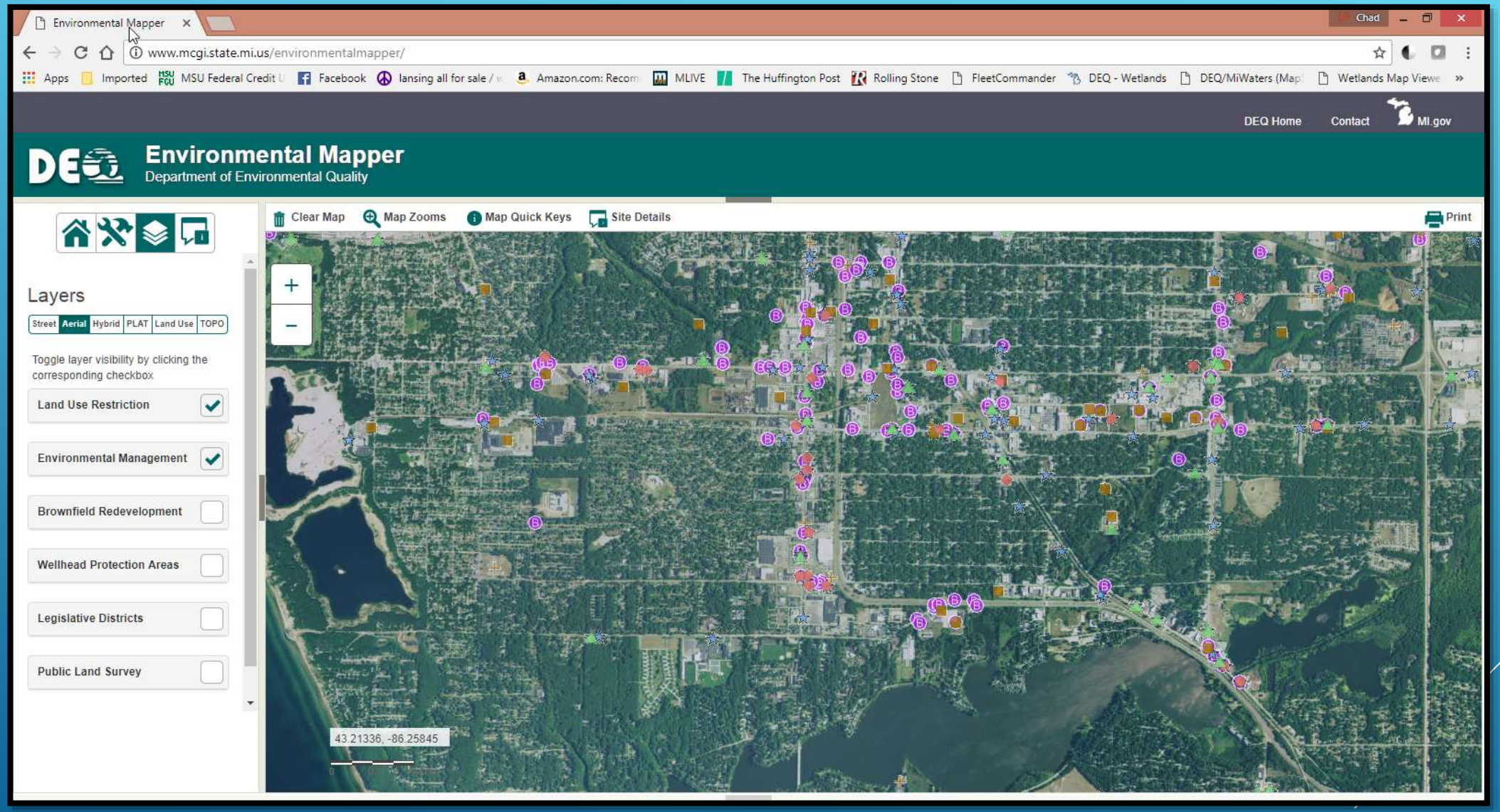




https://mnfi.anr.msu.edu/

EXTERNAL SCREENING RESOURCES

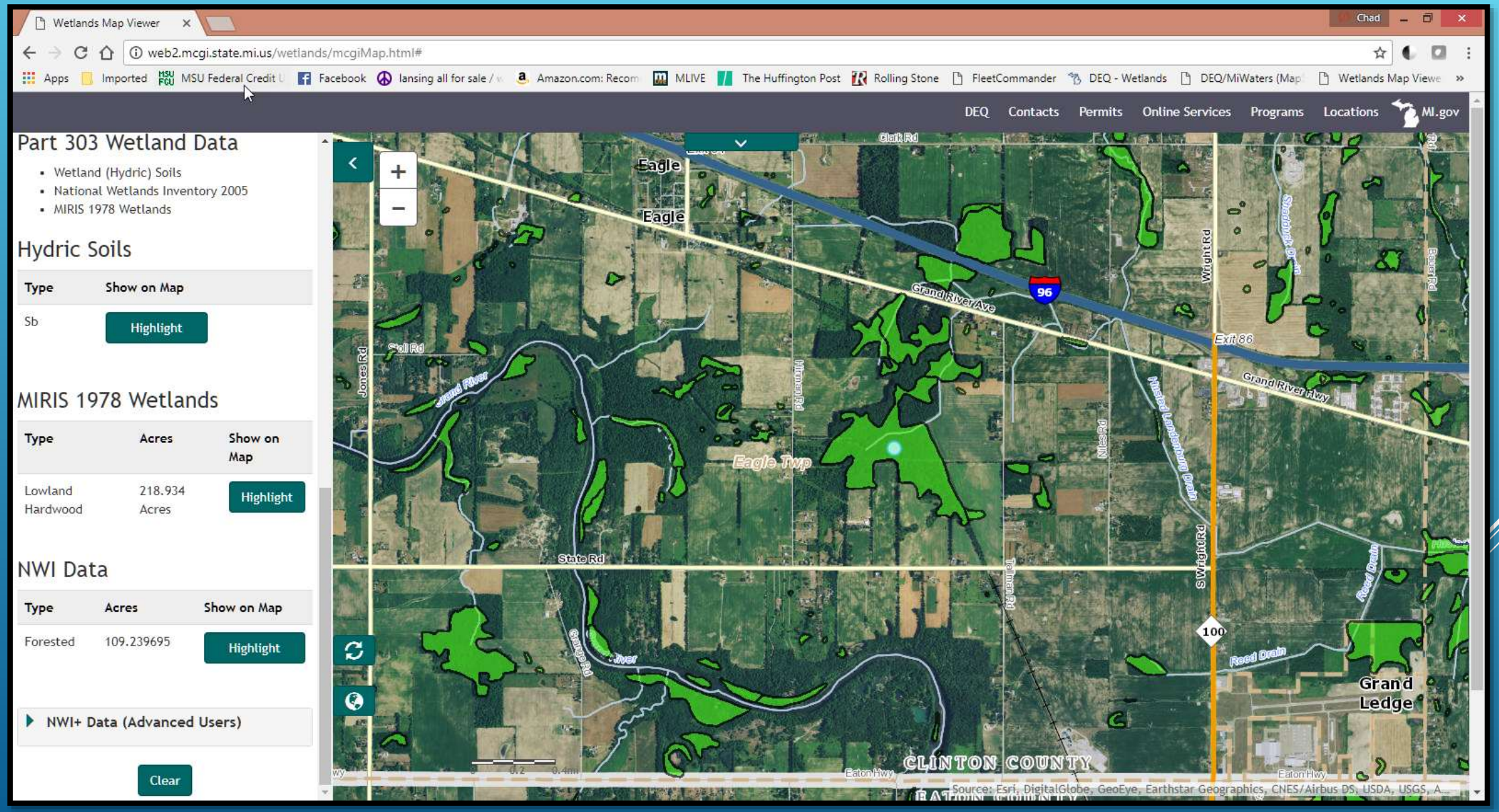
DEQ ENVIRONMENTAL MAPPER



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

EXTERNAL SCREENING RESOURCES

DEQ WETLANDS MAP VIEWER



PROJECT SCREENING &GIS

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