

# Red Swamp Crayfish Update

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# Red Swamp Crayfish Threat

- Most invasive crayfish worldwide
  - Outcompete native species
  - Dig complex burrows causing erosion and infrastructure problems
  - Feed on vegetation and negatively impact water clarity (water becomes turbid)
  - Reproduce in large numbers
- Listed as a prohibited species in 2015 to reduce risk of introductions
  - MI anglers using live crayfish purchased from food markets in southwest MI
  - Available to teachers for classroom projects disposal was identified as high risk





## Red Swamp Crayfish Reports

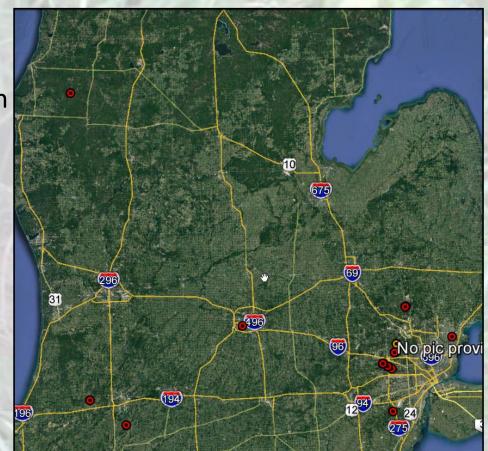
- Initial report to Fisheries Division on July 14<sup>th</sup> from Sunset Lake in Vicksburg (Kalamazoo County)
  - Confirmed by FD
- Second report from Novi Retention pond on July 16th
  - Confirmed by FD
  - Increased awareness through statewide press release, social media, and signage
    - Following up on over 100 public reports since press release was issued





## Red Swamp Crayfish Reports

- Multiple credible reports of the red swamp crayfish
  - Primarily in Southeast Michigan
  - FD is working on verifying reports with multiple techniques
- Most of reports are of native crayfish
  - Helps better understand distribution of native species



# **Potential Sources?**

- Red swamp crayfish were widely available prior to 2015
- Crayfish could have been introduced
  from releases linked to multiple
  vectors
  - Biological supply for schools
  - Live food markets
  - Live bait
  - Pet stores
  - Law Enforcement Division has been active with enforcing regulations to prevent future introductions





# Red Swamp Crayfish Response Plan

#### Goals:

- 1) Determine the distributional extent of the infestations
- 2) Implement and evaluate an early detection monitoring strategy in high risk areas
- 3) Determine the source and relatedness of red swamp crayfish infestations
- 4) Collect baseline biological and physical information that will inform a future assessment of impacts
- 5) Implement and evaluate control measures to increase effectiveness of response efforts





### Implementing the Response Plan

- Building off existing relationship with MSU
- Conducting extensive early detection monitoring based on risk
- Continued intensive trapping efforts
- Continued outreach

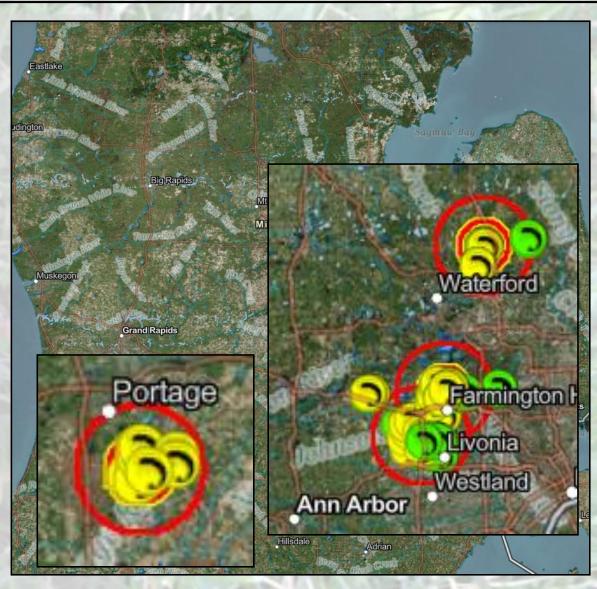
# MICHIGAN STATE





## **Confirmed Red Swamp Crayfish Infestations**

- Sunset Lake
  - No detected spread
- Novi
  - 11 infested pond
- Farmington Hills
   3 infested ponds
- Lake Orion
  - Not confirmed, likely
    White River Crayfish



# Next Steps

- Continued implementation of Michigan's response plan with MSU
- Collaborate with crayfish and AIS control experts to evaluate and implement effective controls
  - USGS, USFWS, MSU, Auburn, others
- Potential field application of chemical treatments in 2018





# Thank You Questions?

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