

MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

Rubber Modified Roads – State Perspective

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Michigan Scrap Tire Program

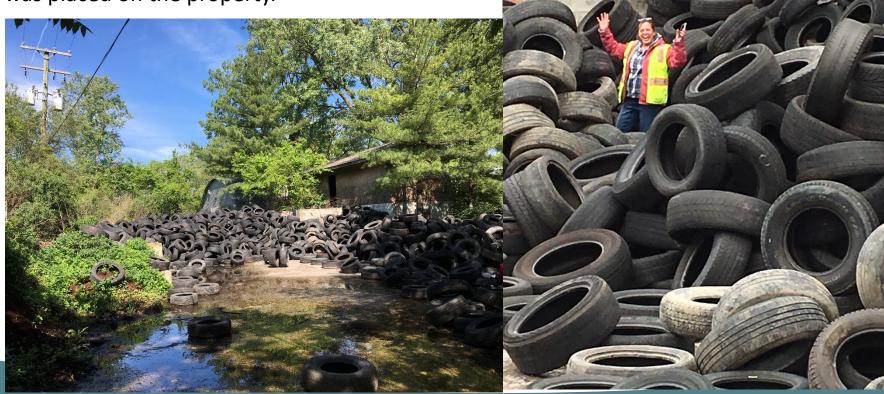
- Part 169 Michigan's <u>Scrap Tire Statute</u> put into place in 1991 to reduce piles of tires & dumping.
- Funded by a \$1.50 fee collected by the Secretary of State
 - SoS keeps a percentage for collecting the fee
- Funding pays for staffing of up to 11 FTE & Program grants.
- Grants
 - Cleanup grants first always then Market Development.



Yes, Dumping can STILL be a Problem

Michigan still has tire dumping – including "urban" dumping.

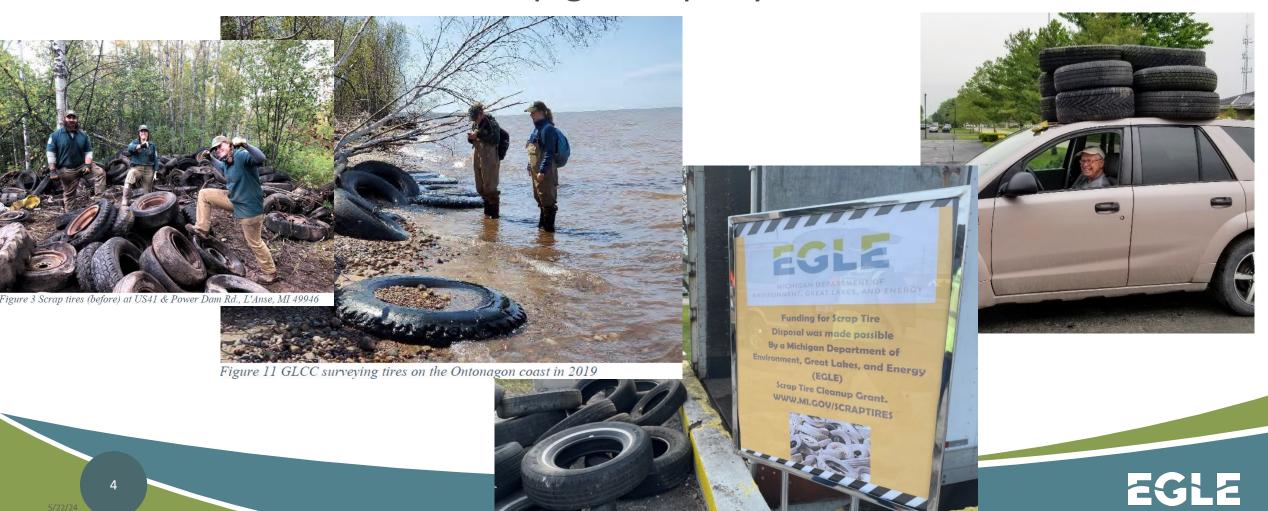
A 2020 Cleanup grant removed 91,949 PTE for a total of \$99,046.65. A lien for the cost of cleanup was placed on the property.





Community Scrap Tire Cleanups

We fund about 100 cleanup grants per year across 83 counties.



Michigan Market Development Grant Program

- 128 Funded MD Projects since 1992.
 - 3 Bridge lightweight bridge decking
 - 5 TDA Tire Derived Aggregate
 - Paving > 300 Lane Miles
 - 3 Concrete
 - 1 Cold Dry Pellet RMA
 - 3 Dry Process
 - 2 DVR Devulcanized Rubber
 - 1 HRTO
 - 1 PCR Polymer Coated Rubber
 - 1 PVA Poly Vinyl Alcohol Fiber
 - 1 Recycled Glass Aggregate
 - 4 RAP/Shingles and RMA
 - 87 RMA/GTR
 - 14 RST
 - 1 Soybean and RMA
 - 1 Slurry Seal
 - 3 Studies (Air Emissions & Markets)



2018 Kalamazoo Project Leads to 2021 Project "100 Lane Miles of Chip Seal" Entech, Cactus Paving & County Road Commissions





2021 – 2024 Rubber Surface Treatment with 11 County Road Commissions







2019 Dickinson County Road Commission County Road 607 Project







2019 Dickinson CRC Project Leads to 2021 & 2023 RMA Projects





Research & Working Toward Specifications

- Research component added to Michigan Scrap Tire Market Development grants in 2018.
 - Application process supports partnerships and universities.
 - University research valuable for working toward specifications.
- National Road Research Alliance (NRRA)
 - Is funding a project with Michigan Technological University (MTU) on M25 in 2024.
- 2024 Michigan DOT State Transportation Innovation Council (STIC) grant
 - Partnership with the County Road Association (CRA) of Michigan for work to develop RST and RMA specifications.
- Michigan and US Scrap Tire Rubber Modified Road Committee provides support for other applications and projects:
 - 2020 NRRA application by MTU
 - 2020 ReMADE Institute Grant
 - Presentations for The Ray, Recycling Organizations, etc.
 - NCAT/NRRA test track installation support
- Technical report & other Resources: **RUBBERIZED PAVEMENT RESOURCES (michigan.gov)**



How Do We Continue to Grow?





Work Toward Overcoming Challenges

- Michigan continues to support development of rubber modified pavements and surface treatments along with tire derived aggregate (TDA) installations.
- Interagency (MDOT, FHWA) challenges. Interested in pilot project involvement.
- Working toward scaling from pilot projects.



We Help the Industry... They Help Us.



Join us for a RST Workshop in the Fall.



Share Information!

- Working toward all Scrap Tire Market Development grant road projects in RoadSoft (Michigan Tech University):
 - Home | Roadsoft

 Working toward sharing final reports and information on through EGLE Scrap Tire website

- Scrap Tire Advisory Committee (STAC) meetings
 - Scrap Tire Advisory Committee (michigan.gov)



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