

# Multi-State Reduction of Polycyclic Aromatic Hydrocarbons from Coal Tar-Based Sealants

supported by a grant from the

U.S. EPA Great Lakes Restoration Initiative

**Al Innes**

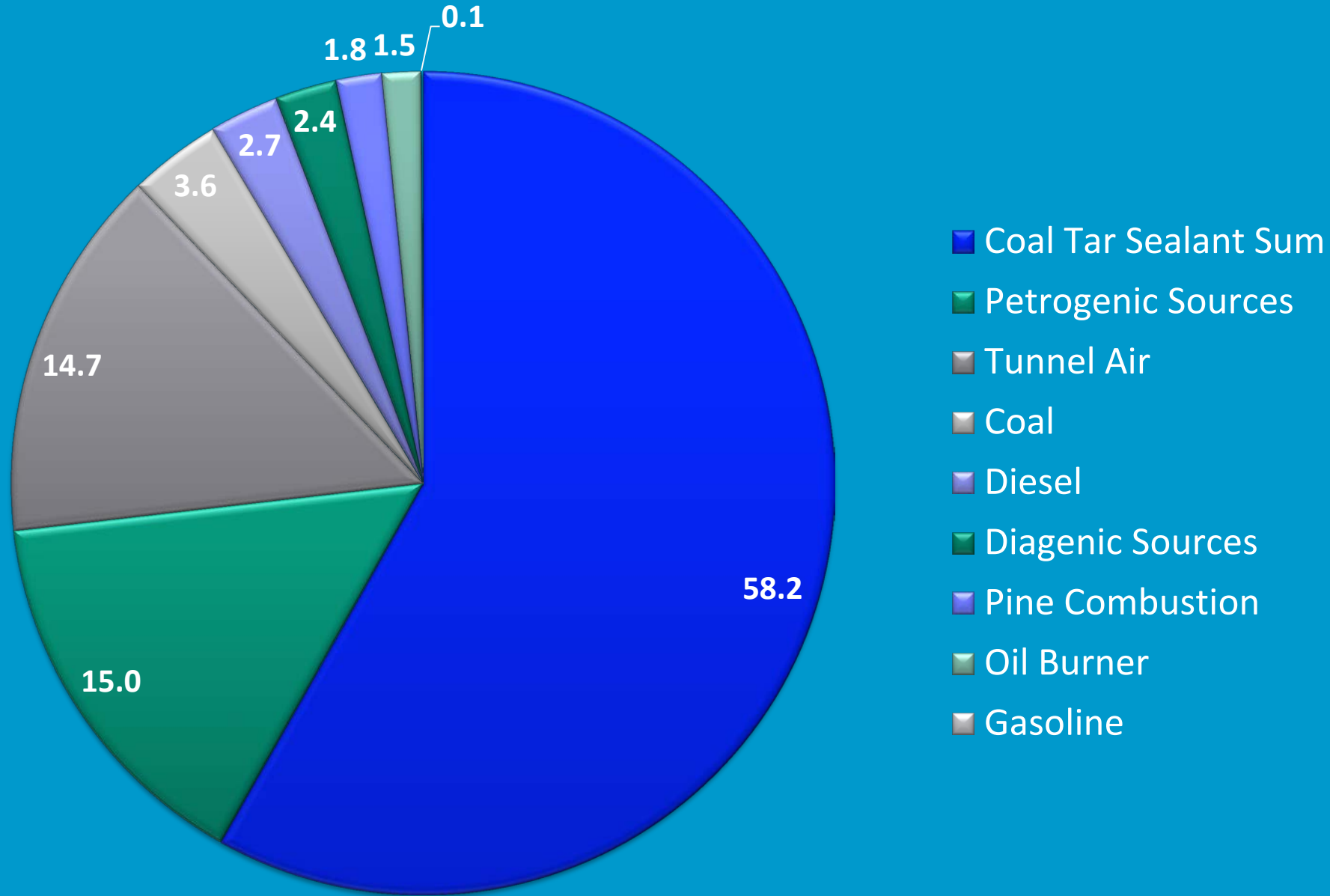
Resource Management & Assistance Division  
Minnesota Pollution Control Agency (MPCA)

Great Lakes Regional Pollution Prevention Roundtable  
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# Issues

- Stormwater ponds are filling up with sediment, some of which is highly contaminated with PAHs – also, concerns in any waters receiving runoff from non-road asphalt
- Environmental and human health concerns with PAHs – potential for cancer and developmental impacts
- Cost of clean-out and proper management in MN is high
- Coal tar sealant still in use especially east of Rockies
- This source is preventable AND safer substitutes exist which are comparable in performance and cost
- Research traces ~60% of the PAHs in urban sediment to coal tar-based seal coats, among other active sources

# MPCA Study: PAH Sources (mean %)



# Great Lakes Restoration Initiative Grant to Promote Phase-out of Coal Tar-Based Sealants

- Grant duration: 10/1/2011 to 9/30/2014
- MPCA leads, with Michigan and Wisconsin collaboration
- Encouraging other interested states and provinces to join in

# Supply Chain Approach to Promote Phase-Out

A. Primary manufacturers (partnership turned down)

B. Regional supplier/contractors

C. Retailers

D. Property owners/managers

1. School districts

4. State, counties, cities

2. Shopping centers

5. Industrial Storm Water RPs

3. National chain retail

6. Others (colleges, hospitals, airports)

E. Residents – not directly targeted, although contact through press releases, web page, and partners

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# Leverage for Outreach and Education

## A. Local bans

1. 24 Minnesota cities have banned as of mid-August 2012
2. Supporting new bans and implementation of bans already enacted

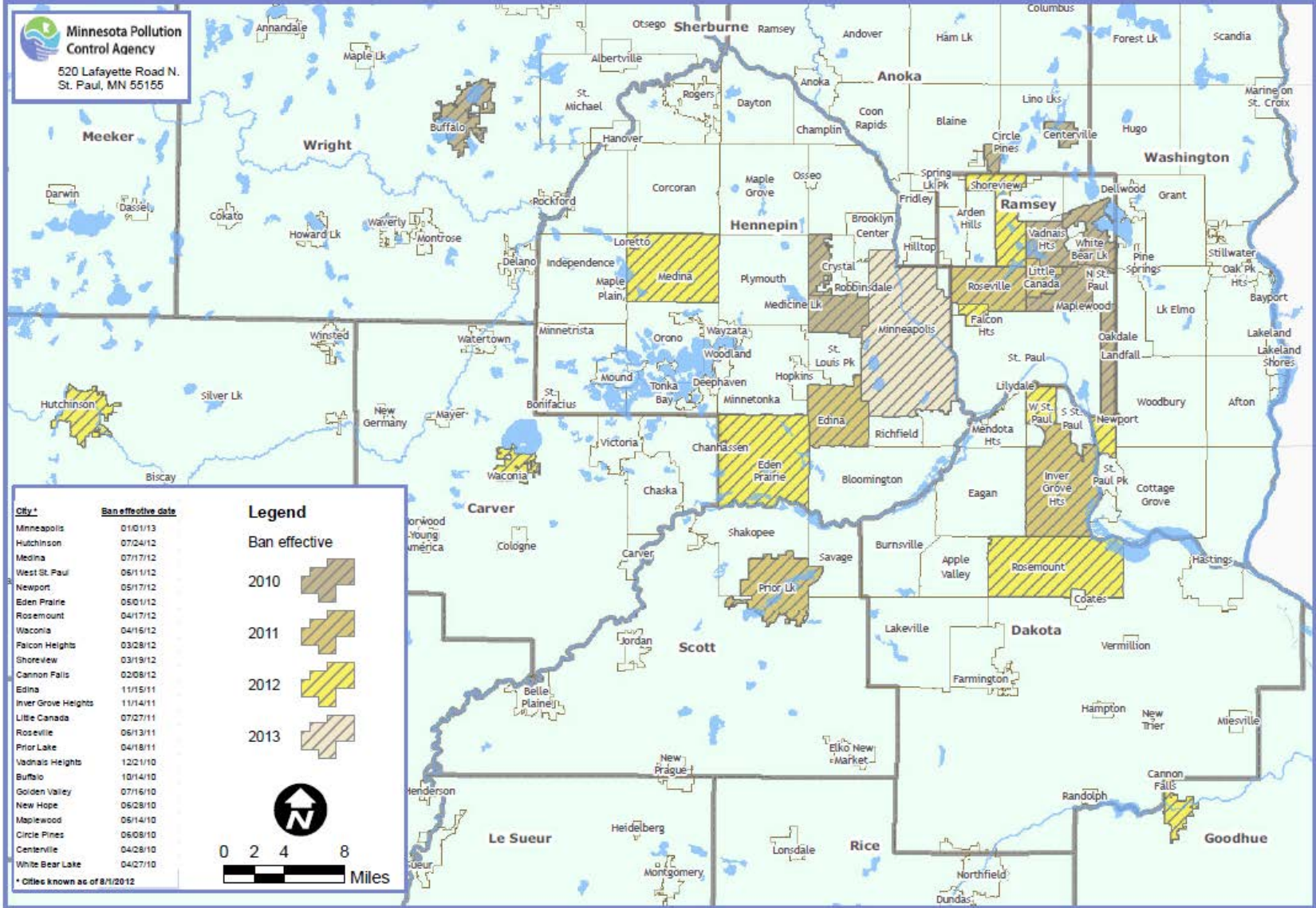
## B. Assistance to municipalities/communities/networks

1. Minnesota Green Corps members (including Duluth/Superior)
2. MS4 permit and guidance (~230 MS4s have obligation for education and outreach)
3. Module in U of M Extension's "Stormwater U"
4. Minnesota City Stormwater Coalition
5. Metro Watershed Partners (MS4 toolkit and general public)
6. Content in the Minnesota Stormwater Manual now under revision

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# Minnesota Cities Banning Coal Tar-Based Seal Coat

**Minnesota Pollution Control Agency**  
 520 Lafayette Road N.  
 St. Paul, MN 55155



# Assistance on Alternatives

- A. Collect independent performance information on alternatives
- B. Develop technical assistance/resources
  1. Outreach to independent pavement preservation/seal coat expertise in MN and elsewhere
  2. Develop guidance for property owners ASAP, plus referral list of who to consult
  3. Exploring partnership with EPA Design for the Environment and experts to validate safer alternatives

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## Further Information

- Al Innes (MPCA), 651-757-2457 or [alister.innes@state.mn.us](mailto:alister.innes@state.mn.us)
- Project work is currently available to collaborating states or provinces on a Google site. If interested in participating and accessing materials, please contact Al Innes.
- MPCA webpage on “Restriction on Coal Tar-Based Sealants” at:  
<http://www.pca.state.mn.us/index.php/water/water-types-and-programs/stormwater/municipal-stormwater/restriction-on-coal-tar-based-sealants.html>