Speakers:

Wayne Kober – Retired PennDOT, former Chairman of the Dirt and Gravel Road Task Force

Barry Scheetz – Retired PSU Professor and former Director of the Center for Dirt and Gravel Road Studies

Karl Brown – State Conservation Commission, Executive Secretary

Jason Hall - DCNR Bureau of Forestry, Recreation Section Chief

Steve Bloser – Center for Dirt and Gravel Road Studies, Director

Eric Chase – Center for Dirt and Gravel Road Studies, Research Assistant

Amy Wolfe – Trout Unlimited, Pennsylvania Coldwater Habitat Restoration Program Director

Jamie Shallenberger – Susquehanna River Basin Commission, Monitoring & Protection Program Manager

Rebecca Schneider – Cornell University, Associate Professor Department of Natural Resources

Matt Royer — Penn State University, Agriculture and Environment Center Director



In 2015 the Dirt, Gravel, and Low-Volume Road Maintenance Program implemented a policy for replacement of stream crossing structures. The policy is aimed at funding undersized crossings, compared to the natural bank-full stream width, and emphasizes replacing crossings that are prone to scour and erosion, prevent aquatic passage, and require frequent maintenance. In 2016, the Program replaced 80 structures and we expect that close to 100 structures will be replaced in 2017.

Successes in Rural Road Maintenance and Ecology Symposium

Tuesday, April 4, 2017, 9:00 am - 4:00 pm

Flex Theater Auditorium

HUB, First Floor, Penn State, University Park, PA

Offered by the Center for Dirt and Gravel Road Studies

The Center for Dirt and Gravel Road Studies at Penn State is hosting a **Successes in Rural Road Maintenance** and **Ecology Symposium** to celebrate the 20th Anniversary of Pennsylvania's Dirt, Gravel, and Low-Volume Road Maintenance Program. The focus of the Program over the past 20 years has been to create a more environmentally and economically sustainable low-volume road network through education, outreach, and project funding. This symposium will highlight some of those project successes and research related to sustainable rural road maintenance and ecology by bringing together road managers, academics, government employees, and the non-profit sector to share their stories and accomplishments.

Schedule:

9:00 - 9:15	Introduction
9:15 - 9:45	Dirt and Gravel Roads Program and Center History
9:45 - 10:15	Dirt and Gravel Roads Program and Center Status
10:15 - 10:30	Break
10:30 - 12:00	Rural Road Research Speakers
12:00 - 1:15	Lunch
1:15 - 2:15	Panel Discussion: Road Impacts at the Watershed Scale
2:15 - 4:00	Poster Session and Social

Supported By:





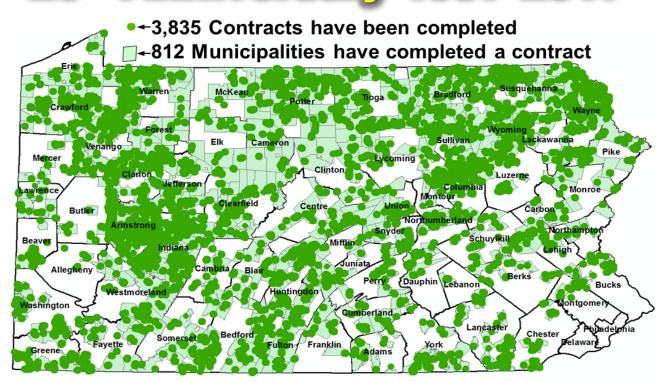




LARSON
TRANSPORTATION
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Pennsylvania Dirt, Gravel, and Low-Volume Road Maintenance Program

20th Anniversary 1997-2017



Time flies when your stopping mud!

In the mid 1990's a group of fishermen became upset that when a summer thunderstorm passed through, mudding their local streams, and ruining their day's fishing. After some investigating for the cause of the sediment, they realized that the roads themselves were the primary cause of the muddy water in the largely forested watershed. Who in that group would have believed that a Program they helped to create through Trout Unlimited, would have generated over \$100 million for improving local roads and reducing stream pollution over the next 20 years.

In the past 20 years:

\$72,000,000 spent on completed projects
\$37,000,000 contributed in-kind (51%)

3,835 contracts completed

16,000 pollution worksites identified

812 municipalities received funding

243 two-day ESM trainings held

10,165 ESM training attendees





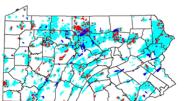


This 15 year old project in Huntingdon County illustrates the **long-term road improvement** practices implemented by the Program, in this case filling the road profile, adding shallow crosspipes, and Driving Surface Aggregate.

Remembering the Past...

1997	Trout Unlimited leads a "Task Force" to establish the Program and
	identifies over 900 pollution sites in protected watersheds.

- 1998 Trainings begin and the first projects hit the ground.
- 2000 Driving Surface Aggregate (DSA) is developed for unpaved roads.
- The first Geographic Information System is developed to track projects, and Districts identify over 12,000 pollution sites on roads statewide.
- The "Task Force on Dirt and Gravel Road" that established the Program receives the 2000 PA Governor's Award for Environmental Excellence.
- 2003 The Program completes its 1,000th project.
- The first round of "Quality Assurance / Quality Control" visits begins, visiting each conservation district to evaluate Program implementation.
- 2008 Conservation Districts complete a second statewide assessment of unpaved roads identifying over 16,000 pollution sites.
- 2009 The Program completes its 2,000th project.
- 2013 The second round of Quality Assurance / Quality Control visits begins.
- Act 89 of 2013 increases funding from \$4 million to \$28 million and dedicates \$8 million of that for paved low-volume roads. DCNR funding increases from \$1 million to \$7 million.
- A new Program Administrative Manual is approved including a host of new policies on traffic counts, stream crossing replacement, and more.
- 2015 The Program's first paved low-volume road projects hit the ground.
- 2015 An online Geographic Information System is developed for conservation-districts to track project locations, spending, and deliverables.
- 2016 The Program completes its 3,000th project.
- 2017 Program's 20th Anniversary



900 sites in protected watersheds



Paver-placement of DSA



QA/QC county visit



Completed LVR project



GIS project and data entry form



16,000+ identified pollution sites



Newly paved LVR



Educational project site visit.

Planning for the Future...

<u>Dirt and Gravel Projects</u>: Since the 2014 funding increase, the average contract value has increased from \$21,000 to \$38,000. This increase is a reflection of the ability to fund larger, more complex, and more comprehensive projects than was possible in the past with limited funding. Over 16,000 identified pollution sites remain statewide.

<u>Paved Low-Volume Projects</u>: Districts are continuing to develop and adapt the paved low-volume road portion of their local Programs. Paved low-volume roads bring many new challenges and opportunities such as: increased off right-of-way influences, more urban settings, stormwater issues, a new set of increasingly urban municipal applicants, and determining policies on funding pavement costs.

<u>CD Capacity</u>: An increase in funding and more complex projects means an increased workload at conservation districts. Districts are working to meet this new demand, with many newly hired "Dirt and Gravel Road Specialists" being hired around the State.

<u>Educational Efforts</u>: Increasing educational efforts, both from the State to districts, and from districts to local applicants, has been helping to get quality projects on the ground.

<u>Statewide Accountability</u>: With more funding comes more accountability. Commission staff has ramped up their Quality Assurance / Quality Control efforts to review district programs, and is increasing financial accountability efforts.



This document was prepared jointly by the PA State Conservation Commission and the Penn State Center for Dirt and Gravel Road Studies. Figures are based on GIS data supplied by Conservation Districts in January 2017. For more information, visit www.dirtandgravelroads.org.

