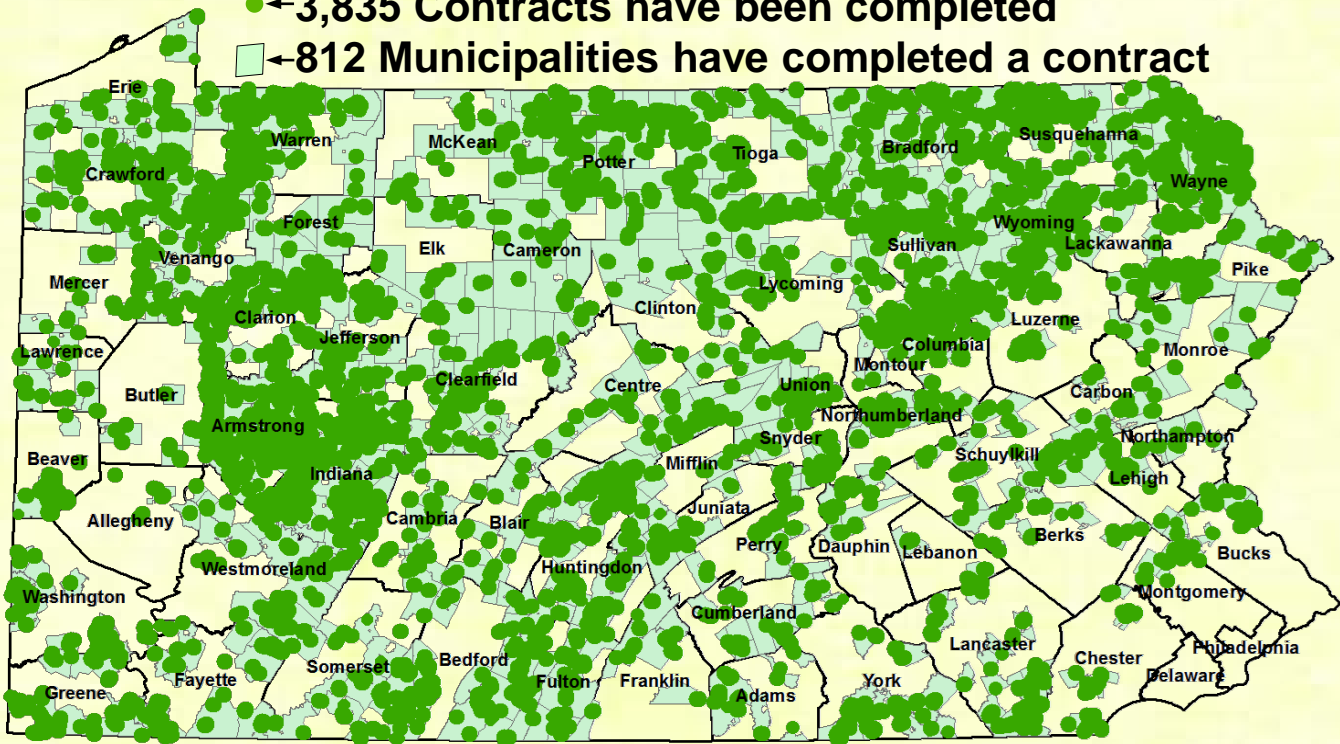


# Pennsylvania Dirt, Gravel, and Low-Volume Road Maintenance Program

## 20<sup>th</sup> Anniversary 1997-2017

● ← 3,835 Contracts have been completed

■ ← 812 Municipalities have completed a contract

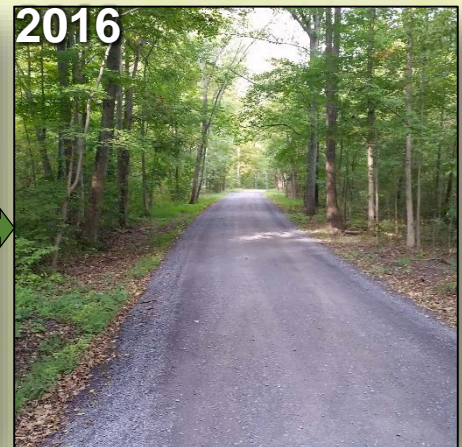


### Time flies when you're stopping mud!

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

#### In the past 20 years:

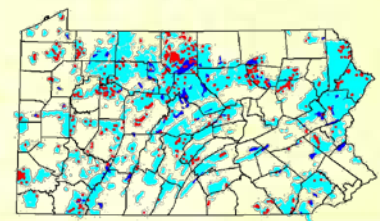
**\$72,000,000** spent on completed projects  
**\$37,000,000** contributed in-kind (51%)  
**3,835** contracts completed  
**16,000** pollution worksites identified  
**812** municipalities received funding  
**243** two-day ESM trainings held  
**10,165** ESM training attendees



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 first projects hit the ground.
- 2000** Driving Surface Aggregate (DSA) developed for unpaved roads.
- 2000** First Geographic Information System developed to track projects. Districts identify over 12,000 pollution sites on roads statewide.
- 2000** "Task Force on Dirt and Gravel Road" that established the program receives the 2000 PA Governor's Award for Environmental Excellence.
- 2003** Program completes its 1,000<sup>th</sup> project.
- 2003** First round of Quality Assurance / Quality Control begins with visits to 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** Program completes its 2,000<sup>th</sup> project.
- 2013** Second round of Quality Assurance / Quality Control visits begins.
- 2013** **Act 89 of 2013 increases funding from \$4 million to \$28 million and dedicates \$8 million of that for paved low-volume roads.**
- 2014** 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** Online Geographic Information System is developed for conservation districts to track project locations, spending, and deliverables.
- 2016** Program completes its 3,000<sup>th</sup> project.
- 2017** **Program's 20<sup>th</sup> Anniversary, Planning for the future...**



900 sites in protected watersheds



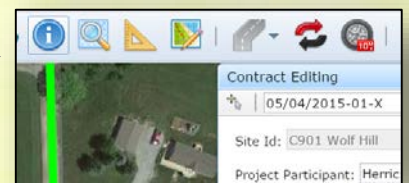
Paver-placement of DSA



QA/QC county visit

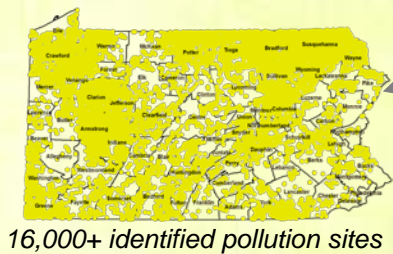


Completed LVR project



GIS project and data entry form

# Planning for the Future...



16,000+ identified pollution sites



Newly paved LVR



Educational project site visit.

**Dirt and Gravel Projects:** 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 possible in the past with limited funding. Over 16,000 identified pollution sites remain statewide.

**Paved Low-Volume Projects:** 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 traffic counts, pavement costs, and other issues.

**CD Capacity:** An increase in funding and more complex projects mean 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.

**Educational Efforts:** Increasing educational efforts, both from the state to districts, and from districts to local applicants, have been helping to get quality projects on the ground.

**Statewide Accountability:** With more funding comes more accountability. Commission staff have ramped up their Quality Assurance / Quality Control efforts to review district programs, and are increasing financial accountability efforts.



This report was prepared jointly by the PA State Conservation Commission and the PSU 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](http://www.dirtandgravelroads.org).

