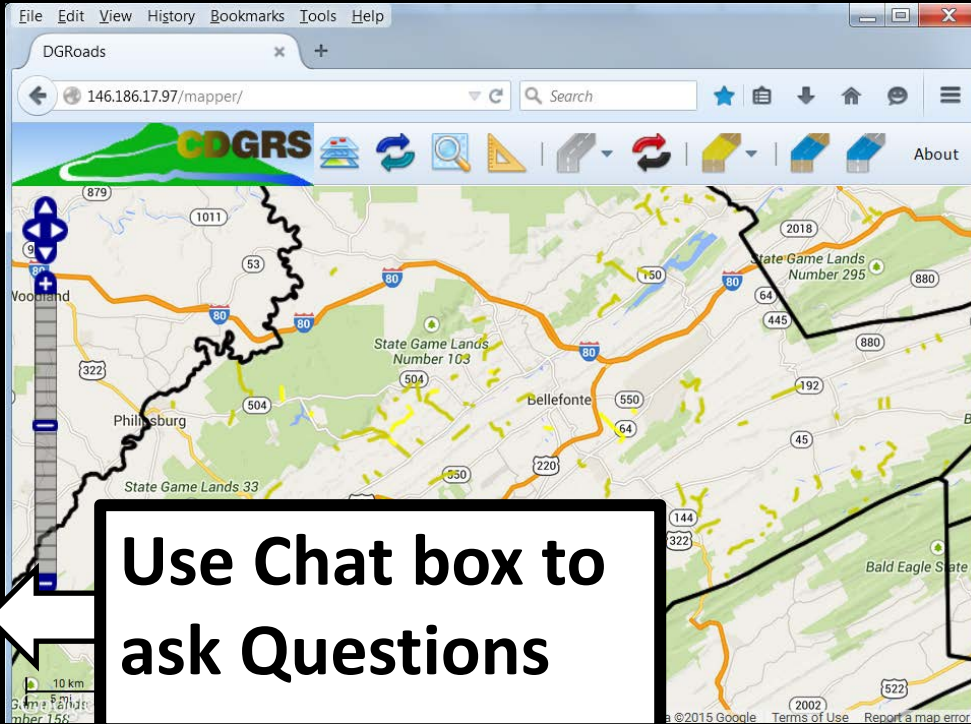
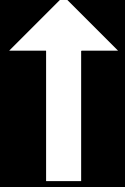
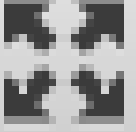


DGRoads GIS Update & Demo



Toggle Fullscreen mode with this button above



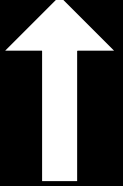
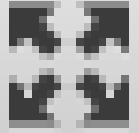
2/27/15

Starts at 10am

If you are reading this, then you are successfully seeing the webinar video. In addition to audio on the webinar, we have opened a phone conference line to allow attendees to listen and ask questions directly: **866-823-7699**. Please use either the webinar audio or conference line, but not both (will produce feedback).

Audio also available via phone: 866-823-7699
For assistance, call: 814-865-5355

**Toggle Fullscreen
mode with this button
above**



**Use Chat box to
ask Questions**

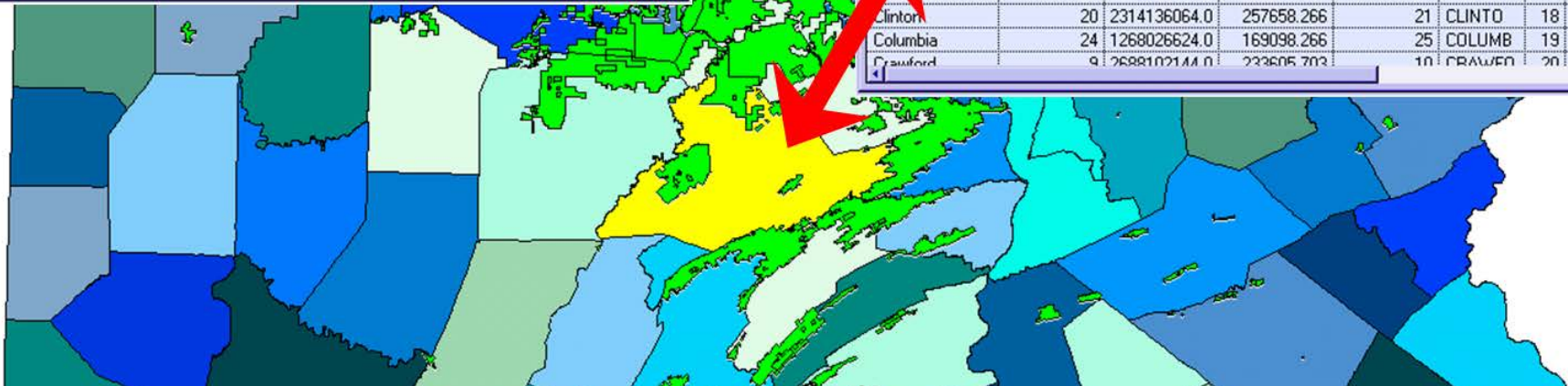
Participant phone lines will be muted
until after initial presentation

Audio also available via phone: 866-823-7699
For assistance, call: 814-865-5355

- **What is a GIS?**
 - Geographic Information System
 - “Map layers + data”

Name01	Area	Perimeter	S_forest	S_forest
SUSQUENOCK STATE FORE	379369.344	3000.776	2	
SUSQUENOCK STATE FORE	289587.781	2710.332	3	
TIOGA STATE FOREST	9141714.000	15985.000	4	
TIOGA STATE FOREST	101774680.00	93204.844	5	
SUSQUENOCK STATE FORE	1024444928.0	660525.000	6	
CORNPLANTER STATE(FOR	401327.563	3600.859	7	
INHOLDINGI	992077.063	4606.233	8	
TIOGA STATE FOREST	7893380.500	14466.008	9	
SUSQUENOCK STATE FORE	1997480.750	7437.423	10	
INHOLDINGI	2805988.500	13350.049	11	
SUSQUENOCK STATE FORE	14907671.000	24742.133	12	
SUSQUENOCK STATE FORE	9031416.000	16447.484	13	
INHOLDINGI	3581242.000	7669.016	14	
TIOGA STATE FOREST	56049128.000	108380.359	15	

Name	County_id	Area	Perimeter	County	Midcounty	Num	Num
Adams	66	1350890752.0	150112.484	67	ADAMS	1	
Allegheny	47	1927008768.0	210459.875	48	ALLEGH	2	1
Armstrong	29	1722442624.0	251584.094	30	ARMSTR	3	
Beaver	39	1150617856.0	139245.297	40	BEAVER	4	
Bedford	57	2628949760.0	232010.766	58	BEDFOR	5	
Berks	45	2240982784.0	206103.078	46	BERKS	6	
Blair	43	1366001792.0	199520.781	43	BLAIR	7	
Bradford	4	3007446784.0	222418.594	5	BRADFO	8	
Bucks	50	1610185088.0	202413.953	51	BUCKS	9	
Butler	28	2059022208.0	180176.234	29	BUTLER	10	
Cambria	44	1796384640.0	198304.266	45	CAMBRI	11	
Cameron	16	1034872320.0	145652.625	17	CAMERO	12	
Carbon	32	1006189312.0	156146.047	33	CARBON	13	
Centre	27	2887200768.0	342583.375	28	CENTRE	14	
Clearfield	60	1966558976.0	248514.469	61	CHESTE	15	
Clinton	22	1573052800.0	205569.391	23	CLARIO	16	
Crawford	26	2987728384.0	268311.438	27	CLEARF	17	
Columbia	20	2314136064.0	257658.266	21	CLINTO	18	
Crawford	24	1268026624.0	169098.266	25	COLUMB	19	
Crawford	9	2688102112.0	233605.703	10	CRAWFO	20	



- **How does DGLVRP use GIS?**
 - Tracking for ~17,000 project sites statewide
 - Location data
 - Financial data
 - Reporting
 - Analysis
 - Since 1999, Districts use DGRoads to track projects and spending, and submit report annually.

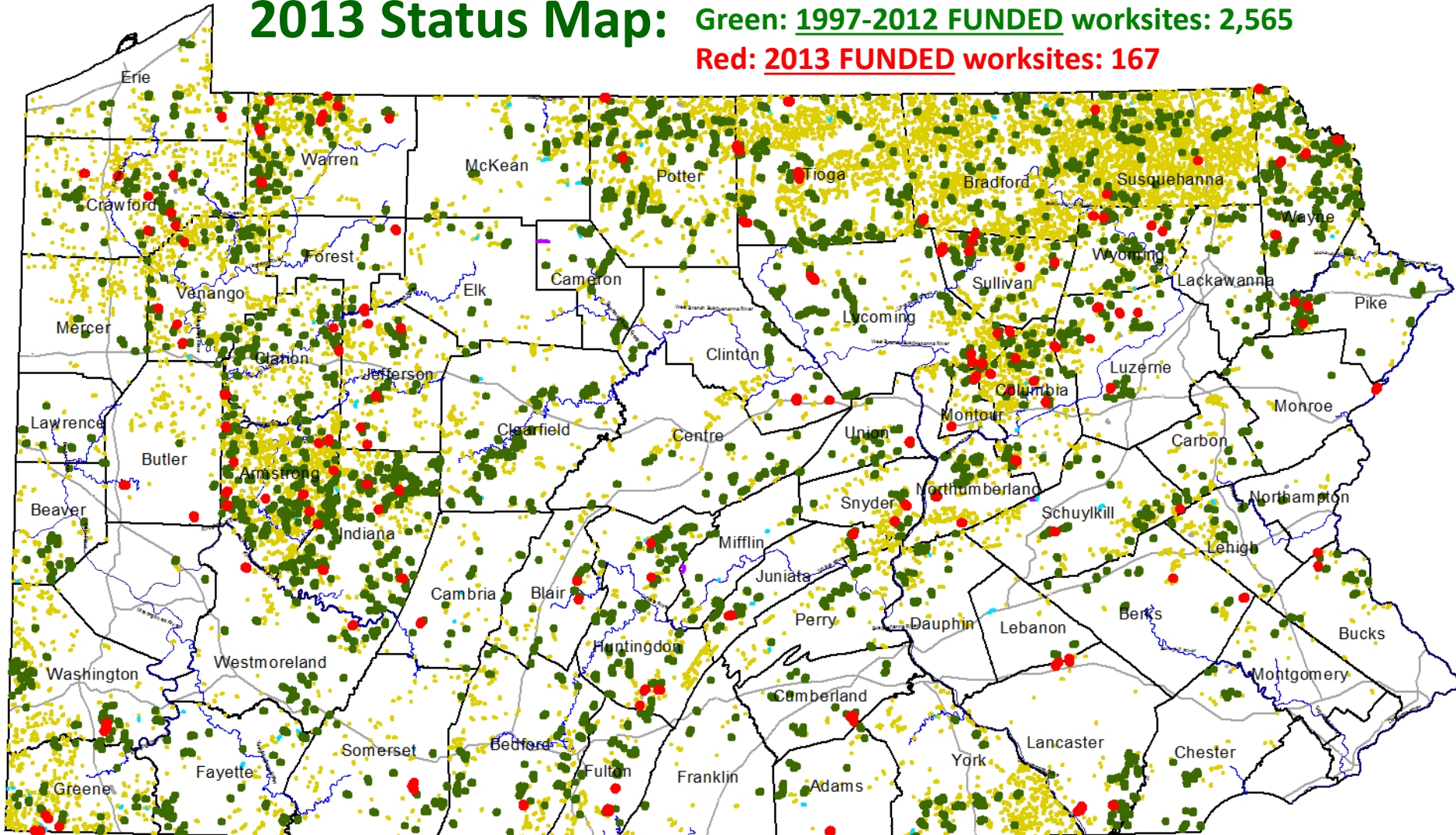
- **How does DGLVRP use GIS?**

Yellow: Unfunded identified worksites: 14,195

Green: 1997-2012 FUNDED worksites: 2,565

Red: 2013 FUNDED worksites: 167

2013 Status Map:



• How does DGLVRP use GIS?

PA Dirt and Gravel Road Maintenance Program 2014 Annual Summary Report



3/2014

DIRT AND GRAVEL ROAD PROGRAM OVERVIEW

Pennsylvania's Dirt and Gravel Road Program provides grant funding to local municipalities in order to reduce environmental impacts and long-term maintenance costs associated with public unpaved roads. The Program was enacted into law in April 1997 as Section 9106 of the PA Vehicle Code, with \$4 million in annual funding for "environmentally sensitive road maintenance." Each year, the State Conservation Commission allocates this funding based on identified need to County Conservation Districts. Townships and other road-owning entities then apply to their local District to address identified pollution problems using environmentally sound road maintenance practices. All grant applicants must complete a 2-day "Environmentally Sensitive Road Maintenance" training course focusing on lowering maintenance costs and reducing stream pollution.

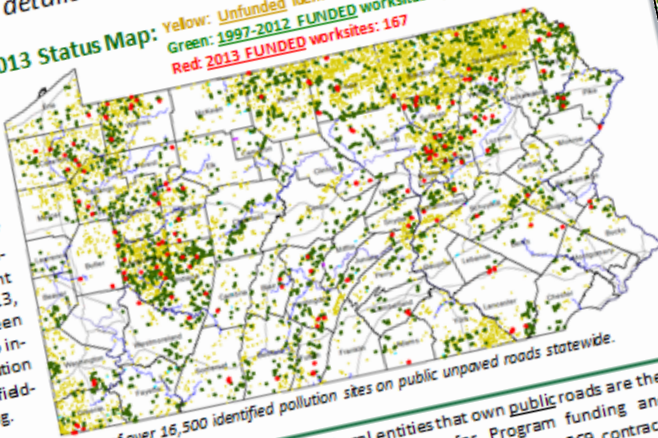
Funding Increase for 2014-15! Dirt and Gravel Road Program funding increases from \$4M to \$20M annually, with an additional \$8M component for paved low-volume roads. details on back

2013 Summary:

Since it began in 1997, the Program has funded a total of 2,565 local road improvement projects spanning 65 Counties and 691 municipalities across Pennsylvania. In 2013 alone, nearly \$3.1 million was spent on 167 completed worksites spanning 47 Counties and 133 municipalities. In-kind contributions from grant applicants stood at 56% for 2013, above the in-kind average of 44% seen over the past decade (although no in-kind is required). Over 14,000 pollution sites on unpaved roads have been field-identified and are awaiting funding.

More Program info:
www.dirtandgravelroads.org

2013 Status Map: Yellow: **Unfunded identified worksites: 14,195**
Green: **1997-2012 FUNDED worksites: 2,565**
Red: **2013 FUNDED worksites: 167**



Map of over 16,500 identified pollution sites on public unpaved roads statewide.

Ownership of 2,869 Completed Contracts to Date:

Boroughs: 51 (\$690K)

Some Comm: 39 (\$430K)

Local entities that own public roads are the ones who apply for Program funding and implement projects. To date, 2,869 contracts have been completed on 2,565 separate worksites (some sites are phased over multiple contracts or re-addressed over time). Townships are by far the largest program participant, accounting for 96% of completed projects. Other public road owners include counties, municipalities, and eligible private entities in the

Education in 2013:

Education is the cornerstone of the Program's success around the state. The Program's two major education efforts, run through the Penn State Center for Dirt and Gravel Road Studies, are the 2-day Environmentally Sensitive Road Maintenance Course (attendance required to participate in the Program), and the Annual Maintenance Workshop.

ESM Course:

A total of 441 people attended the 8 "Environmentally Sensitive Road Maintenance" training courses that were held at various locations around the State in 2013. Since the Program's inception, there have been 214 ESM courses with a total of over 7,000 attendees.

Annual Maintenance Workshop:

The Annual Maintenance Workshop was held in Lewistown, PA in September 2013 and drew a 10-year high of 230 attendees. The two-day conference included presentations by multiple invited speakers and field demonstrations including stream pipe replacement, Driving Surface Aggregate placement, French mattress installation, a look at several complete projects, and more. The 2014 Workshop is scheduled for September 30-Oct 1 in State College, PA.



Attendees watch a paver place Driving Surface Aggregate at the 2013 Annual Maintenance workshop in Union County.

Planning for the Future: Program Changes for 2014-15

At the end of 2013, commonly known as the PA Transportation Funding Bill, made significant changes to Pennsylvania's Dirt and Gravel Road Program. Most significantly: the amount of funding through the State Conservation Commission for work on unpaved roads was increased from \$4M to \$20M annually.

An additional \$8M (minimum annual allocation by law) was made available to expand Program work on "low-volume roads" (LVRs) that have an average daily traffic of less than 500 vehicles per day.

These significant Program changes is well underway. Several advisory groups have been active since the bill passed to address the many questions that need to be answered. These advisory groups consist largely of local road owners, including representatives from the State Conservation Commission, Penn State Center for Dirt and Gravel Road Studies, PennDOT, DEP, PSATS, PSAB, PAFBC, PACD, Trout Unlimited, and others.

Unpaved Roads (\$20M):

Of over 14,000 unfunded identified worksites statewide, finding money to fund this new money will not be a problem in most areas. The type of projects done, and the type of projects done will likely become more diverse, but the principles of local control and balancing benefits with road improvements will remain the same.

Paved Roads (\$8M):

A portion of the Program will require the development of new projects on paved roads. The intent of the Program for paved roads remains the same as when the Program began: "projects should benefit both the road and the community." The new LVR part of the Program is NOT for re-pave roads. Paving costs may be eligible for other programs.



- **What is being updated?**
 - Entirely new system!
 - Old system could not handle capacity of 7X funding.
 - Old system not designed for paved LVRs.
 - Center staff working with 2 subcontractors.

Old System

– Local Install

- Permission issues
- Outdated data
- Data on CD harddrive
- No remote access
- Desktop only

– No overlapping sites

– No LVR support

New System

– Web Based

- Nothing to install
- Live updates
- Data on server
- Access from anywhere
- Offline and tablet mode

– Can overlap sites

– Includes LVRs

DGRoads Online GIS System

- **Multi-user access via secure log-in**
 - **Public Viewer**
 - **CDs can edit data within their county**
 - **State administrators can edit data statewide**
- **Will have ability to overlap sites and track LVR sites.**
- **Should have “offline mode” and work on tablets.**

Poll Question

What default internet browser do you use?

- Internet Explorer
- Mozilla Firefox
- Google Chrome
- Apple Safari
- Other

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DGRoads GIS Update



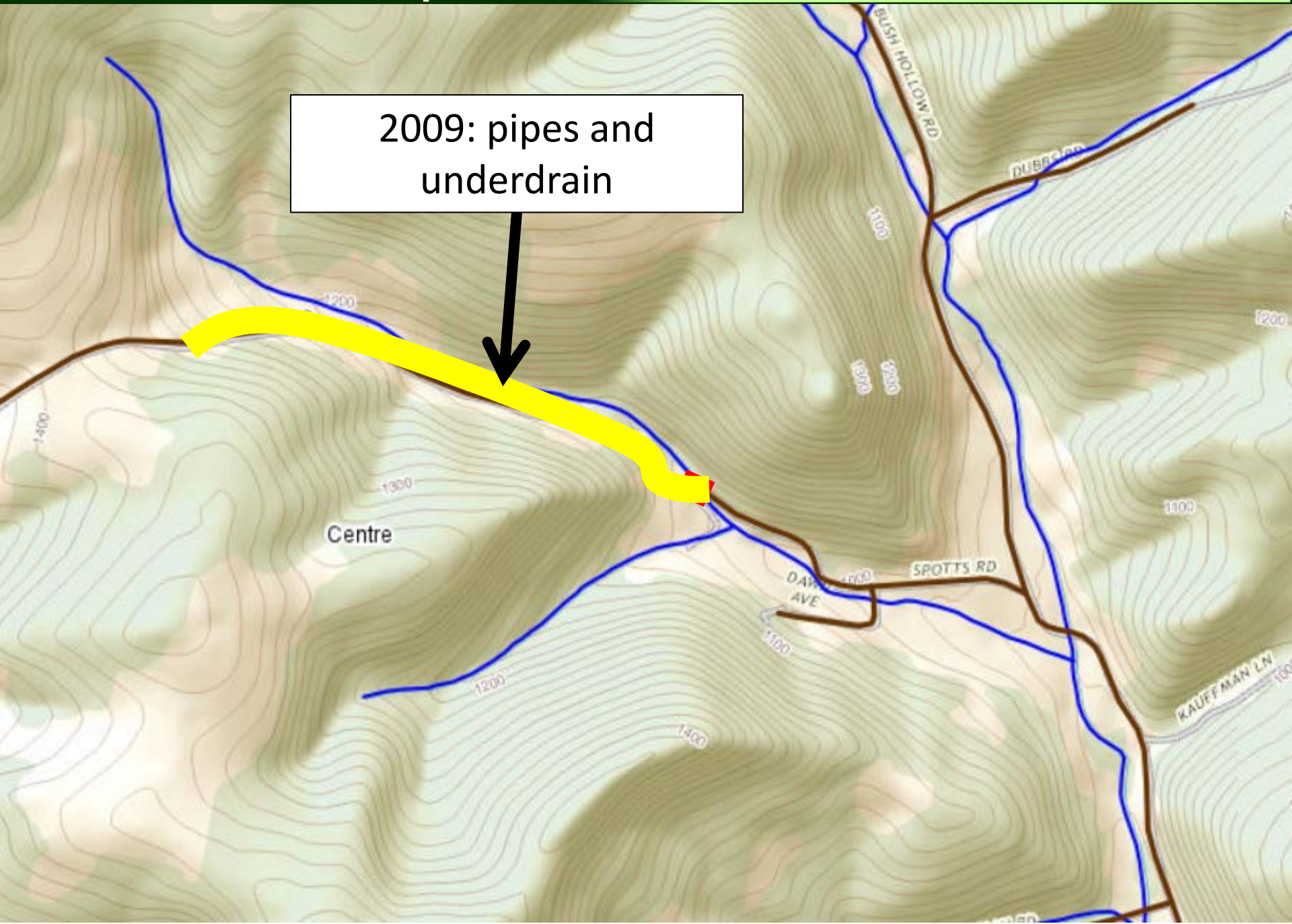
DGRoads GIS Update



2004: stream crossing replacement

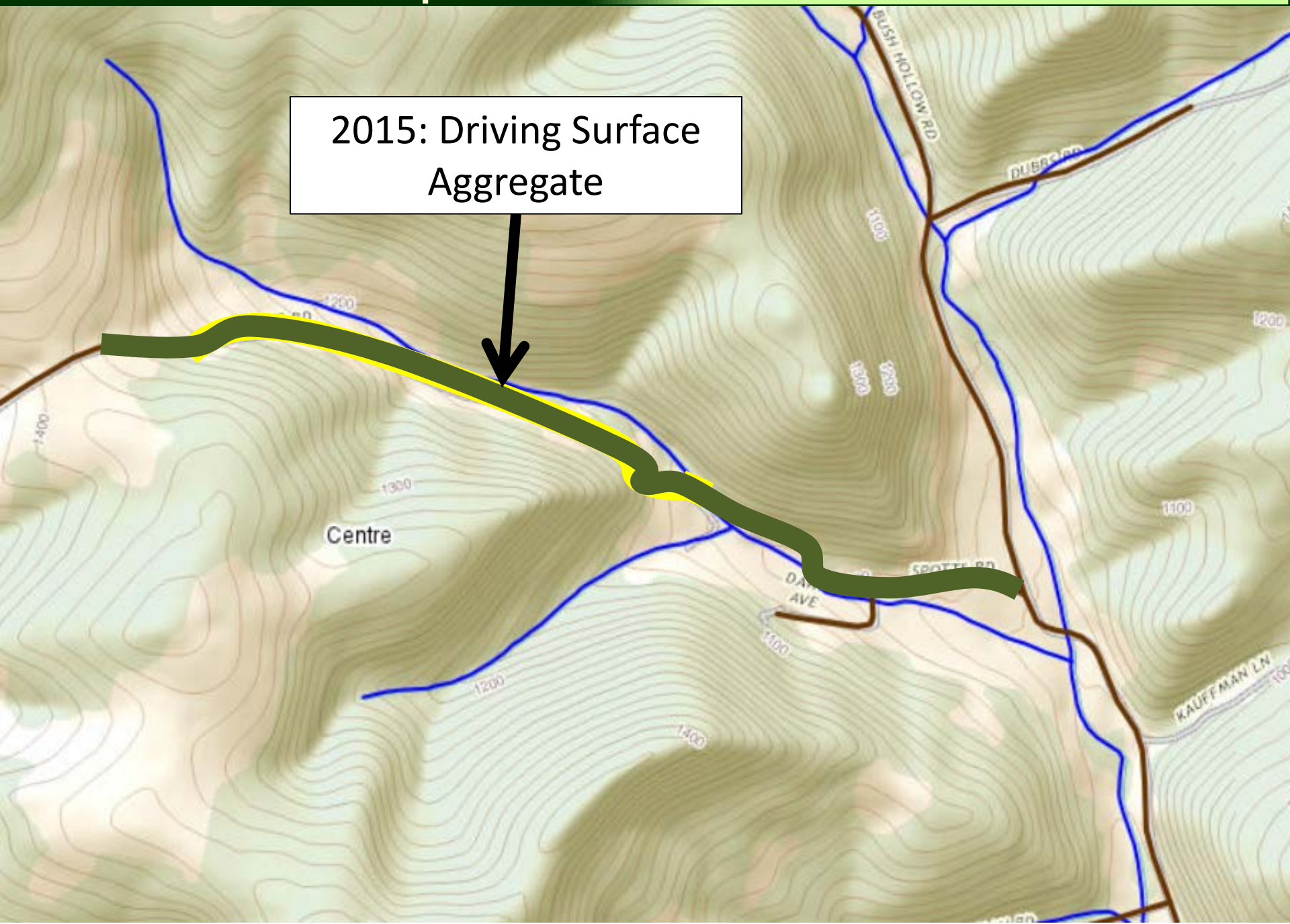
DGRoads GIS Update

2009: pipes and
underdrain



DGRoads GIS Update

2015: Driving Surface
Aggregate



NEW handling of worksites

- **OLD**: One worksite shapefile
- **NEW**: geodatabase of worksites
 - Potential Worksite Layer
 - Completed and contracted sites by year
 - Can turn individual years on and off.
 - Can edit projects in any year.
 - Will allow partial and complete overlaps of worksites.

DGRoads Online GIS System

- **Spring 2014:** Planning began
- **Fall 2014:** Preliminary work began
- **Fall/Winter 2014:** several meetings and demos, continue development
- **Jan 2015:** Last Summary Report done in old system

DGRoads Online GIS System

- **Spring 2014:** Planning began
 - **Fall 2014:** Preliminary work began
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 - **Jan 2015:** Last Summary Report done in old system
-
- **Feb 2015:** “Beta” Version out to GIS test group
 - **April 2015:** Initial limited release for testing.
 - **May-June 2015:** Full release

Please do not input new data into your old GIS.

- **Your 2014 ASR data will show up in new GIS system.**
- **Don't let inability to input data stop you from making contracts and doing business as usual.**

DGRoads Online GIS System Update

