TOPIC OUTLINE

- **Program Purpose**
- Program History
- Program Funding
- Program Structure
- Program Eligibility
- Application Process
- Contract
- Project Completion
Surface drainage patterns

Sub-surface drainage patterns

Potential Sediment Pollution

PA Dirt and Gravel Road Program
Environmental impacts of road runoff

sediment generation & transport
Environmental impacts of road runoff

sediment generation & transport
PA Dirt and Gravel Road Program

Environmental impacts of road runoff - Sediment Delivery
Environmentally Sensitive Maintenance (ESM) for Dirt, Gravel and Low Volume Roads

- Reduce concentrated drainage.
- Reduce sediment pollution.
- Reduce impact of road on the land.
- Reduce long-term maintenance costs and frequency.

“Better Roads, Cleaner Streams”
TOPIC OUTLINE

- Program Purpose
- *Program History*
- Program Funding
- Program Structure
- Program Eligibility
- Application Process
- Contract
- Project Completion
- Began in 1993 (Dirt and Gravel Road Task Force)
- 1997 (Trout Unlimited initiative)
- $5 Million per year in grant funding
- $1 Million through Bureau of Forestry
- $4 Million through State Conservation Commission
  - Run by County Conservation Districts
  - Local road owning entities (municipalities, SGL, PAFBC, etc.) apply for grant to District

**GOAL:** Long term solutions to reduce stream pollution and maintenance costs from unpaved roads
Roads Grant Funding in Luzerne County To-date

To date (1998-2014):
- 54 Projects Completed
- 3 In-Process
- 5 w/ Contracts Pending (about 28% of potential DGR worksites)

Total grants funded through the District’s Dirt and Gravel Road Program:
- Completed Projects = $844,327
- Projects In-Process = $40,659
- Contracts Pending = $100,896

Additional In-Kind Contributions by Grantees = $357,549
TOPIC OUTLINE

- Program Purpose
- Program History
- Program Funding
- Program Structure
- Program Eligibility
- Application Process
- Contract
- Project Completion
- Act 89 of 2013 (Transportation Bill)

- 7X Program Funding increase
  - $5M Annual Funding $35M Annual Funding
  - $4M to SCC $28M to State Conservation Comm.
  - $1M to Forestry $7M to Forestry

- Low-Volume Paved Roads
  - Minimum $8M (of SCC $28M) for work on paved roads with less than 500 vehicles per day

- Effective FY 2014-15
Allocations to Conservation Districts

- D&G based largely on number and length of worksites, length of unpaved roads.
- LVR based on “potential” miles of LVR in each county, weighted by proximity to stream and % in urban areas.

Allocations at:
www.dirtandgravelroads.org
Luzerne County FY 13-14 Allocations

Dirt & Gravel Roads = $38,002

Low Volume Roads = $0
Luzerne County FY 14-15 Allocations

Dirt & Gravel Roads = $190,365
(5x increase over previous year)

Low Volume Roads = $152,061
TOPIC OUTLINE

- Program Purpose
- Program History
- Program Funding
- Program Structure
- Program Eligibility
- Application Process
- Contract
- Project Completion
STATE CONSERVATION COMMISSION

- Administers statewide program
- Quality Assurance Quality Control
- Allocates money to Conservation Districts
COUNTY CONSERVATION DISTRICT

- Administer program on county level
- Work with applicants on projects and permitting
- Receive money based on verified pollution sites
- Conduct inspection after work is completed
- Keep records and report to State annually
QUALITY ASSURANCE BOARD
- Each County has a QAB
- 3 voting members and 1 non-voting chairman
- Members from District, PAFBC, and NRCS
- Evaluate and prioritize potential projects
- Recommend sites for funding to District Board
GRANT RECIPIENTS

- Own and maintain roads
- Applicants are usually municipalities, but include: 
  PA Game Commission, County Parks, PA Fish Commission, PA DOT
- Apply to conservation District for project funding
- Complete work themselves or have it contracted
- Must attend ESM training to apply for funding
TOPIC OUTLINE

- Program Purpose
- Program History
- Program Funding
- Program Structure
- Program Eligibility
- Application Process
- Contract
- Project Completion
Eligible Applicants for DGLV Program

- Public entities that own roads
- Municipalities (1400+ twps., 800+ boroughs, 50+ cities in PA)
- State entities such as:
  - PennDOT, Game Commission, Fish & Boat Commission
  - County and other Government entities
- Federal roads and private roads are **NOT** eligible
Environmental Sensitive Maintenance (ESM) Training
- 2 day course that covers road maintenance principals
- Certification good for 5 years
- May 26 & 27, 2015 (Tues./Wed.) @ The Woodlands Inn

Annual Maintenance Workshop
- More in depth training than ESM
- ESM certified individual may attend annual workshop at least once every 5 years in lieu of ESM training

*Person in charge of the project must be ESM certified.*
Eligible Roads:

Dirt and Gravel Road
- “Unbound” surfaces
- “gradable”

Paved Low Volume Road
- Surface bound with asphalt, oil, or other binder
- Includes “tar and chip”
- 500 vehicles a day or less – traffic count required
Low Volume Road Project Focus:
- ESM Principals
- Benefit to both road and environment
- Focus on long term improvements
  - Not for routine maintenance such as cleaning inlets, street sweeping, etc.
  - Not for neglected maintenance with no road improvements
  - Must provide a long term benefit to the road and to the environment
LVR Project Focus: *Paying for re-paving*

- Drainage issues must be addressed first
- Base instability issues must be addressed first
- Other necessary ESM principals must be addressed first (Bank stability, road entrenchment, etc.)

*The Luzerne County QAB will consider reimbursement of resurfacing costs for Low Volume Paved Road projects on a case by case basis.*
For example, paying for patchwork only...
Program funds may not be used to convert unpaved roads to paved.

District may fund a project to convert a poorly constructed paved road back to Dirt & Gravel.
Eligible DGLVR Expenses

- No program specific purchase requirements (use established procedures)
- Records of purchases must be kept (by the grant recipient) for 3 years from project completion
- Applicants can apply for the full cost of all materials, equipment, and labor
  - In-kind match is not needed but recommended – Project receives additional points during the prioritization process
Non-Pollution Standards

In compliance with Section 9106 (f)(7) of the PA Motor Vehicle Code the Quality Assurance Board has adopt standards that prohibit use of materials or practices that are environmentally harmful or do not meet the program's "non-pollution" standard. These materials include but are not limited to: noxious weeds, fugitive emissions, and dust control products which may pose a problem if they enter a waterway.

Compliance with all existing environmental laws is a condition of purchase under the contracting agreement between the Conservation District and the applicant. An environmentally suitable substitute for dust control, as determined by the State Conservation Commission, may qualify for payment.
Eligible DGLVR Expenses
- Reimbursement of applicant owned equipment is eligible (@ FEMA rates)
- Equipment can be rented, FEMA rates do not apply
- No purchase or maintenance of equipment

Eligible DGLVR Materials
- Typical materials include pipe, stone, fabric, etc.
- Approved products list on www.dirtandgravelroads.org
Act 89 – Transportation Bill definition of “locally funded” projects does not include DGLVR projects

**PREVAILING WAGE:**
Projects that use contracted labor in which the estimated total project cost exceeds $25,000 (NOT $100,000) are subject to the prevailing wage act.
Eligible DGLVR Expenses - Labor

- Reimbursement of labor and equipment operators is an eligible expense

**PREVAILING WAGE:** Does not apply to projects done with Municipal labor force.
**Contractors**

- Projects may be completed in whole or in part by contractors
- Grant recipients use their standard bidding procedures
- Districts must make payments to the grant recipient, **not the contractors**
Engineering and Permitting Costs

Engineering, permitting, or similar consultant costs are limited to a maximum of 10% of the total contract between the District and the grant recipient.

Example: A district enters into a contract for a pipe replacement. Contract amount is $30,000, but with in-kind match, etc., the total cost is $50,000. What is the maximum amount that can be reimbursed for engineering?
Combined Funds

Program funds can be combined with other funds under certain conditions:

- Detailed accounting of who paid for what
- Other funds may be used as matching funds.
- The project must adhere to the State Conservation Commission’s non-pollution standards.
Combined Funds

“Piggybacking” a project

• If Road-owning Entity planning to repave a road with drainage issues.
• District could fund $40,000 in drainage work before they repave.
• Applicant gets a longer lasting road and pavement without paying for drainage.
In-Kind Contributions:
Å Encouraged, but not required
Å Grantee labor & equipment can be credited at FEMA rates, materials at documented costs
Å Must have documentation of In-Kind contributions
TOPIC OUTLINE

- Program Purpose
- Program History
- Program Funding
- Program Structure
- Program Eligibility
- **Application Process**
- Contract
- Project Completion
TOPIC OUTLINE

- Program Purpose
- Program History
- Program Funding
- Program Structure
- Program Eligibility
- **Application Process**
- Contract
- Project Completion
How Do I Apply?

• District will notify all potential applicants of funding availability and deadlines for application submission
  • Two application rounds per year, one in the spring and one in the fall
  • Applications will be accepted for both the Dirt and Gravel and Low Volume Road projects in both rounds

• Contact District to schedule Pre-App Site Visit
Pre-Application Site Visit

- Determine applicant and worksite eligibility
- Provide technical assistance
- Review potential permitting needed and funding available
- Discuss Off ROW permissions, if applicable
- Evaluate Stream Crossing Replacement and review Policy
- Review Traffic Count Validation form

Must be done prior to application submission
Working *off right of way* is permissible only under certain conditions:

- Must be directly necessary to the successful completion of the project
- Limited in scope to cost effective practices that directly reduce road impacts
- Grant recipient **MUST** obtain written permission before starting the project
- Districts must keep a copy of written permission in the project file
Consent, license and release agreement

between __________________________ (road-owning entity) and __________________________ (landowner)

Whereas,

BACKGROUND: The __________________________ (Herein referred to as “Road Owning Entity”) and the undersigned have agreed that employees, agents or contractors of Road Owning Entity may enter the undersigned’s land to cut, open, maintain, clean and repair drains and ditches on the undersigned’s lands as deemed necessary by the Road Owning Entity to properly maintain the roads for the benefit of the undersigned and all residents. The undersigned acknowledges that he/she has been informed of and understands the scope of the work which the Road Owning Entity intends to perform on his/her lands for this purpose.

AGREEMENT: For and in consideration of the benefits accruing from proper maintenance of Road Owning Entity roads and the undersigned’s drainage facilities, I/we, the undersigned, intending to be legally bound hereby agree as follows:

1. Certification of Ownership of Lands and Authority to Sign: The undersigned certifies that the following persons are all the persons with ownership interest in the property described below (Herein referred to as “Subject Property”) and that, if all owners have not signed this Consent, License and Release, he or she as one of these owners has been authorized by all owners to sign this Consent, License and Release on their behalf.

Owners and Property Addresses:  Property Description

2. Scope of Work (describe work to be done):

3. License & Consent: The undersigned, for and on behalf of all persons with ownership interest in the property, grant(s) a license to Road Owning Entity for use of the Subject Property and consent(s) to the entry of Road Owning Entity officials, employees, agents and contractors onto the above-described property for purposes of implementing the practices described in the “scope of work” above, and for the future maintenance of those practices. This consent shall be valid and effective for the life expectancy of the practices implemented.

4. Release: The undersigned do/does for himself/herself, their spouse, personal representatives, heirs, successors and assigns, forever release and discharge Road Owning Entity, its officials, officers, agents, servants and employees and any other persons or entities acting with or on behalf of the Road Owning Entity (Released Parties) of and from any and all claims, liabilities, actions and demands of any and all nature whatsoever, including but not limited to any and all claims for property damage or bodily injury which may arise from or be in any way related to any acts or omissions of the Release Parties relating to the practices described in the “scope of work” above, and for the future maintenance of those practices.

5. Binding on Successors: This Consent, License and Release shall be binding on Grantors successors, representatives and assigns.

In Witness Whereof, I/we have executed this agreement, certificate, consent and release this _____ day of ________________, 20____

 Printed Landowner Name  Printed Witness Name
  Landowner Signature  Witness Signature
  Date  Date

 Printed Landowner Signature  Date
Stream Crossings:

**NOT bridge replacement program**

**NEW** policy regarding replacement of stream crossing structures with Program funds (both D&G and LVR).

- Allow structural replacement when the structure itself is causing a problem in the stream.
- Existing structures must be undersized and causing stream instabilities to be eligible for replacement.
- New structures must be sized to properly accommodate stream flow, bed load, and aquatic organisms.
The Hourglass...

Undersized crossings erode both up- and downstream of crossing
PA Dirt and Gravel Road Program

Bankful Width Illustration (1.5 – 2 Year Floodplain)

Preparing to measure the bridge opening width, looking downstream.
PA Dirt Gravel and Low Volume Road Program—Stream Crossing Evaluation Form

**Reviewer Information:**

- Date: 
- Reviewer: 
- Entity: 

**Site Information:**

- County: 
- Township: 
- Road Owning Entity: 
- Structure Owning Entity: 
- Road Name: 
- Stream Name: "UNIT for unnamed tributary to" 
- Latitude: 
- Longitude: 
- Site notes: 

**Existing Conditions: quantitative assessment**

Measuring Bankfull Channel Width: Begin first measurement, outside the area of influence of the structure (preferably upstream and at least 5 bankfull widths away from structure) and in a relatively stable area free from influences that may impact cross section (such as debris jams, floodplain obstructions such as fill/roads/etc.). Additional bankfull widths should be measured so that a total of three (with 5 preferred) are collected upstream of the crossing. The second bankfull width measurement should be collected ½ bankfull width upstream of the first measurement. Continue spacing the width measurements ½ bankfull width upstream of the previous measurement until the total number (3 or 5) is collected. Take preceding measurements and average together.

<table>
<thead>
<tr>
<th>Bankfull width measurements:</th>
<th>1)</th>
<th>2)</th>
<th>3)</th>
<th>4)</th>
<th>5)</th>
</tr>
</thead>
</table>

A. Avg. Reference bankfull width: 

B. Existing structure width: 

C. Structure / Bankfull ratio: %

D. Max downstream pool width: ft

E. Max downstream pool depth: ft

F. Vertical Drop at outlet: in

If it is impossible to obtain reference bankfull widths upstream of the structure, downstream widths can be used if they are taken out of the structure influence area.

Width of structure at narrowest point. Add structure widths for multiple baseflow openings (not including any elevated floodplain pipes).

Structure width divided by average bankfull width. (Line B divided by line A)

Width of widest spot on plunge pool (if applicable).

Depth of water in plunge pool at typical flow (if applicable).

Drop or “waterfall” from structure outlet to water level in plunge pool at typical flow.
## Existing Conditions: qualitative assessment

<table>
<thead>
<tr>
<th></th>
<th>upstream</th>
<th>none</th>
<th>slight</th>
<th>moderate</th>
<th>high</th>
<th>severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>G. Stream Bank Erosion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Erosion of banks immediately upstream and downstream of structure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>downstream</td>
<td>none</td>
<td>slight</td>
<td>moderate</td>
<td>high</td>
<td>severe</td>
</tr>
<tr>
<td>H. Stream Bed Erosion</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Evidence of head-cutting at inlet or plunge pool scour at outlet</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>upstream</td>
<td>none</td>
<td>slight</td>
<td>moderate</td>
<td>high</td>
<td>severe</td>
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<tr>
<td>J. Stream Bed Deposition</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Evidence of gavel bar formation</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td></td>
<td>downstream</td>
<td>none</td>
<td>slight</td>
<td>moderate</td>
<td>high</td>
<td>severe</td>
</tr>
<tr>
<td>K. Bank Armoring</td>
<td>unknown</td>
<td>none</td>
<td>intact</td>
<td>failing</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Eligibility for Crossing Structural Replacement with Program Funds

Is the existing structure opening is **equal to or less than 7 square feet** (equivalent to a 36” diameter round pipe): **NO**-see below    **YES**-Eligible

For larger structures, the **all three criteria below must be met in order to be eligible for replacement with Program funds:**

- Existing structure to bankfull width ratio of **50% or less**. What is the existing structure to bankfull ratio (line C above): ______%  
- Show signs of streambank erosion. Is stream bank erosion present (line G above): **YES**  **NO**  
- Show signs of streambed erosion/aggradation. Is streambed erosion/aggradation present (line H&J above): **YES**  **NO**

Is this stream crossing eligible for replacement with Program funds?  **YES**  **NO**
Driving Surface Aggregate

- Only approved aggregate for surfacing unpaved roads (although surfacing is not required on all projects).
- Plasticity Index max of 6 added in 2014 (designed to limit the amount of clay in mix)
- Center creating an “Aggregate Clearinghouse” to have better quality control of DSA
- Why? Historically, statewide, 40-50% of DGR funds spent on DSA. With increase in funding, could be $10-15 million per year on DSA
- Since started statewide testing, 35% of quarries out of specs.
Visit the Quarry

DSA Suppliers Within Luzerne Co.*:
- H&K (Pikes Creek)
- Hunlock Sand & Gravel
- Pennsy Supply (Small Mtn.)

*NOT AN ENDORSEMENT, NEED PROJECT CERTIFICATION
SCC Certification

A certification is **REQUIRED**
-for each job.
-anytime the source material changes.
-**MUST** be collected by project manager with first load of DSA delivered.
-Certification applies to source pile of aggregate, not the quarry as a whole.
-Defensible

**Copy of certification on handout table**
Traffic Count Validation Form for Low Volume Roads

- Goal to verify within reason a road has <500 vehicles per day.

NOT Average Annual Daily Traffic – AADT

Applicant is responsible for providing traffic counts
Dirt, Gravel, and Low Volume Road Maintenance Program (DGLVRP)
Traffic Count Validation Form

TRAFFIC COUNT LOCATION
Road Name and #: ______________________ Road Owner: __________________________
County: ______________________________ Township: ____________________________
GPS Location (if available): ___________W, ___________N
if GPS location not available, describe count location here:
(for example: Traffic count on Smith road, 1 mile north of intersection with 25180, Maple road.)

Traffic Counts can be validated by use of existing data, a level 1 two-hour count, or a level 2 twenty-four-hour
counts. Select the method used below and complete that section of the form.

Existing Data or Extrapolation: For existing traffic data, or extrapolation of existing data, describe the
data used and extrapolation method on the back of this page. If necessary, attach a description of the
data and extrapolation methodology, source and date of traffic counts used, and maps.

LEVEL 1 TRAFFIC COUNT DETAILS (2 hour count)
Count Performed From ___________10 / ___________ Date Time
Describe Count Method: ____________________________________________________________
Count Performed by: _______________________________________________________________
(name) of ________________________________ (organization)
Total Count = ___________ vehicles x 12 = ___________ ADT

LEVEL 2 TRAFFIC COUNT DETAILS (24 hour (minimum) automatic count)
Count Length: 24hr 48hr 72 hour other: __________________
Count Performed From ___________10 / ___________ Date Time
to ___________10 / ___________ Date Time
Counter Used: air tube radar other: ___________
Counter Make/Model: ________________________________
Count Performed by: _______________________________________________________________
(name) of ________________________________ (organization)
Total Count = ___________ 24 hour count = ___________ ADT

Applicant Validation: I hereby swear that this count is accurate as reported here and done in accordance with
State Conservation Commission specifications.

_________________________________________ ___________ ___________ ___________
print name position with applicant signature date

Conservation District Validation: The traffic count data supplied by the applicant is acceptable to the
Conservation District in accordance with SCC and county policy.

_________________________________________ ___________ ___________ ___________
print name position signature date
This form verifies eligibility of a project for 1174 funding as having a traffic count of 500 vehicles per day or less. It must be signed and
retained in the project files.
LVR Traffic Counts

1. **Use Existing Data**
   - Use PennDOT data -
   - Can be used to extrapolate to local roads
   - Counts are valid for 5 years
Penn-Dot Example
LVR Traffic Counts

2. **Level 1 Count (2 hour)** – Simple and quick

- Count traffic for 2 hours at busiest time of day (3-6pm) on a Tue, Wed or Thur.
- Designed to eliminate a lot of very low volume roads with minimal effort
- **Must be done between March 1 and the week before Thanksgiving**
  - No holidays, or the day before or after a holiday
  - Direction of travel or type of vehicle doesn’t matter
  - Only licensed motor vehicles should be counted
  - If you get more than 500 and you want to pursue project do a Level 2 Count...
LVR Traffic Counts

3. Level 2 Count (24 hour)

- 24 hour automated count
- Only total traffic is needed, not vehicle type or hourly breakdowns
- Must be done between March 1 and the week before Thanksgiving
- No holidays, or the day before or after a holiday
- Between 12 AM Tuesday and 12AM Friday
- Only number of vehicle passes is counted, regardless of direction of travel or type of vehicle
Submit Application

• Fillable form available on-line
• Application should include the following:
  • Dirt, Gravel and Low Volume Road Grant Application
  • A 7.5 minute topographic map with worksite identified
  • Off Right of Way Consent form, when applicable
  • Stream Crossing Evaluation Form, when applicable
  • Traffic Count Validation form, if applying for LV funds
SECTION 9106 OF THE PENNSYLVANIA VEHICLE CODE
DIRT, GRAVEL AND LOW VOLUME ROAD MAINTENANCE
GRANT APPLICATION

County
Municipality

ESM Certified Person
Position
Certification Date

Official Name of Applying Agency

Mailing Address

Contact Person
Phone
Fax
E-Mail

Affected Stream or Tributary
Road Name / ID Number
ADT

Proposed Project Start Date
Proposed Project Completion Date

Existing Road Surface Type: □ Unpaved □ Paved

Is project considered an emergency? □ Yes □ No

Top half
1. The applicant is required to identify and obtain all necessary permits before starting the project.

2. Do the materials proposed to be used on the project meet State Conservation Commission conditions for non-polluting?  □ Yes  □ No

3. Identify the proposed work elements:  □ Ditches Improved  □ Ditch Outlets Added  □ Off Right-of-Way Improvements  □ Road Banks Improved  □ Road Base Improved  □ Road Surface Stabilized  □ Stream Crossings Improved  □ Storm Water Improvements  □ Vegetative Management  □ Other ____________________________

4. The applicant is required to obtain the DSA Specification and Certification form prior to DSA placement.

5. Complete Attachment B by drawing a sketch of the proposed project. Attach a copy of a locational map with the project highlighted.

6. Project cost estimate: (attach additional documentation as needed)

<table>
<thead>
<tr>
<th>Materials</th>
<th>Grant Requested Funds</th>
<th>In-Kind Contributions</th>
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<tbody>
<tr>
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<td>Equipment</td>
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<td></td>
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</tbody>
</table>

See Attachment A1

See Attachment A2

Grant Requested $________________________
In-Kind Contributions $________________________
Total Project Value $________________________

Applicant Signature ____________________________
Date ____________________________

Bottom half
Grant Application (Total Grant Requested)

**SECTION 9106 OF THE PENNSYLVANIA VEHICLE CODE**
Dirt, Gravel and Low Volume Road Maintenance
Detailed Estimated Project Expenditures

**GRANT REQUESTED FUNDS**
Use best estimates and complete as much info as possible.

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<thead>
<tr>
<th>Materials</th>
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<tbody>
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<td>Cost $</td>
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<table>
<thead>
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<th>Labor</th>
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<tbody>
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<td>Rate</td>
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<td>Cost $</td>
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</tbody>
</table>

**Total $**  

*FEMA rates are only applicable where municipality-owned equipment is used otherwise use contracted rates.*

**Total Grant Requested:** $________________________ (materials + equipment + labor)

________________________  __________________________  __________________________  __________________________  __________________________
Applicant  County  Municipality  Road Name / ID Number  Date
**Grant Application (Total In-Kind Contributions)**

**SECTION 9106 OF THE PENNSYLVANIA VEHICLE CODE**

**DIRT, GRAVEL AND LOW VOLUME ROAD MAINTENANCE**

**DETAILED ESTIMATED PROJECT EXPENDITURES**

**IN-KIND CONTRIBUTIONS**

Use best estimates and complete as much info as possible.

<table>
<thead>
<tr>
<th>Materials</th>
<th>Equipment</th>
<th>Labor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
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<tr>
<td>Cost $</td>
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</tbody>
</table>

**Total $**

**Total $**

**Total $**

---

*FEMA rates are only applicable where municipality-owned equipment is used otherwise use contracted rates.*

**Total In-Kind Contributions: $** __________________________ (materials + equipment + labor)

---

Applicant       County       Municipality       Road Name / ID Number       Date

---

ATTACHMENT A1
### Instructions:
- Draw a sketch of the proposed project that includes:
  - Compass and North Arrow
  - Project Road Length in Feet or Miles
  - Known Utilities
  - Nearest Intersection and/or Reference Landmarks
  - All Proposed Work (i.e., Cross Pipes, Stream Crossings, Other ESM Practices)
- Attach a copy of a locational map with the project highlighted
- Attach additional project details as necessary
- Write PA One Call Serial Number once obtained
- Install three new pipes (18" Black Plastic SmoothBore) and replace two pipes (18" Black Plastic SmoothBore)
- Install headwalls + endwalls on all pipes
- Grade existing road to a 4% center-crown (1/2" of fall per 1' road width)
- Pour place 6" to 12" wide, reflect center-crown built into base, compact with vibratory roller (minimum 10 tons).
- Keep pipes as shallow as practical and crown a minimum of 2% fall from inlet to outlet.
- Grade side slopes' ditches with adequate fall (stabilize ditches post-grading with contractor's blend grass seed + mulch)

**Materials Estimate:**
- 18" Dia. Smooth Bore Pipe - 60' 17.94' = $600.00
- 15" Dia Smooth Bore Pipe - 100' 7.96' = $100.00
- Drivable Surface Aggregate - 740 tons (power placed + compacted) (for coverage of both Any Mountain + PB Rds)
- 2RC Aggregate - 45 tons (approx 2-trailer loads) (for supplemental pipe bedding)
- Dimensional Wall Stone - 2 palettes = $400.00
- Grass Seed & Mulch Hay = $60.00
- 06+22 New 36x15" BPSB pipe
- 06+22 Design + Replace, pipe 20'x18' BPSB pipe

Total Material Estimate = $18,535.00
Application timeline:

Â District Staff will work with applicants to revise if needed

Â All of the completed applications get forwarded to **Quality Assurance Board (QAB)**
  
  ✓ QAB visits site or photo tour provided by District Staff

  ✓ Reviews applications and evaluates projects based on Board approved ranking criteria outlined in *Evaluation/Prioritization Form*
This document is provided only as an example. County QABs can use as little or as much of the information here as they desire to establish local priorities in project ranking.

Example Dirt, Gravel, and Low-Volume Road Grant Application Ranking 8/13/14

<table>
<thead>
<tr>
<th>Select type of application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unpaved (Dirt and Gravel)</td>
</tr>
<tr>
<td>Paved (Low Volume Road)</td>
</tr>
</tbody>
</table>

Note the validation criteria in Section 1 serve to insure a project is eligible. Feel free to insert additional county specific criteria.

**SECTION 1: APPLICATION VALIDATION**

- Does this road site negatively impact a stream, lake, wetland, or other water body? [Circle choice]
- Will the proposed project reduce environmental impacts to a water body? [Circle choice]
- Is someone from the applying entity “ESM Certified” within the past 5 years? [Circle choice]
- Does the proposed application meet all SCC requirements (non-pollution, pipe size, etc.)? [Circle choice]
- Does the proposed application meet all policies adopted by the local County QAB? [Circle choice]
- Has the applicant identified and agreed to obtain all necessary permits? [Circle choice]
- LVR ONLY: If the traffic count is known at this point, is it 500 vehicles per day or less? [Note: traffic count is required before contract is signed] [Circle choice]

If any of the questions above are answered “NO”, the application is currently not eligible for funding.
SECTION 2: APPLICATION RANKING

SEVERITY OF PROBLEM

Feel free to delete criteria, add criteria, or change weighting of criteria to better fit local County needs.

1. “Modified” Worksite Assessment:
   a. Road Drainage to Stream: none-0  Slight-5  Moderate-10  Severe-15
   b. Wet Site Conditions: Dry-0  Saturated Ditches-3  Roadside Springs-5
      Flow in Ditches-7  Saturated Base-10
   c. Road Surface Condition
      i. LVR EVALUATION: Pavement Condition: good-0  fair, some cracking-5
         Poor, cracking, unevenness-7  Damaged-10  Severely Damaged-15
         Mixed stone/dirt/dust-10  Severe Dust-15
   d. Road Slope: <5% -0  5-10% -5  >10% -10
   e. Road Shape (cross-slope/crown): Good-0  Fair-3  Poor-5
   f. Slope to Stream: <30% -0  30-60% -3  >60% -5
   g. Distance to Stream: >100'-0  50'-100'-3  <50'/crossing-5
   h. Outlets to Stream: None-0  Near Stream-3  Directly to Stream-5
   i. Outlet/Bleeder Stability: Stable-0  Moderate-3  Unstable-5
   j. Road Ditch Stability: Stable-0  Fair-3  Poor-7  Unstable-10
   k. Road Bank Stability: Stable-0  Fair-3  Poor-7  Unstable-10
   l. Average Canopy Cover: Moderate-0  Minimal-3  Heavy-5
   m. Off-ROW Impacts resolved: None-0  Minimal-3  Some-7  Many-10

Modified Assessment Subtotal: ________ (110)
2. **Classification of stream or waterbody impacted:**
   - Warmwater Fishery - 10
   - Coldwater Fishery - 20
   - HQ/EV/drinking water - 30

**EFFECTIVENESS OF SOLUTION**

3. Degree to which project remedies impact to waterbody:
   - Slightly - 0
   - Moderately - 10
   - Highly - 30
   - Almost completely - 50

4. Degree to which project improves road:
   - Slightly - 0
   - Moderately - 5
   - Highly - 10
   - Extremely high - 15

5. Cost effectiveness: How much "environmental benefit per dollar" (benefit per cost)?
   - Low ben/$ - 0
   - Moderate ben/$ - 10
   - High ben/$ - 30
   - Very high ben/$ - 50

**OTHER FACTORS**

6. In-Kind Contributions from Applicant:
   - 1 to 10% - 5
   - 10 – 25% - 10
   - Over 25% - 15

7. Did applicant contact CD about this specific project before submitting application:
   - No - 0
   - Discussed site details with CD - 10
   - Met w/CD on site - 15

8. Is applicant maintaining recently funded Program projects properly:
   - No - 0
   - Recent projects still functional - 10
   - Yes (or first project) - 15

**Point Summary:**

- **Severity of Problem:** (140 possible points)
- **Effectiveness of Solution:** (140 possible points)
- **Other Factors:** (45 possible points)

**TOTAL SCORE:** (300 possible points)

---

* QAB makes funding recommendations based on these criteria
Application timeline -

Â QAB recommendations taken to District Board for action at a Board meeting

Â District Board approves an application

Â District Staff develops and secures a contract

*If your project is not funded you will be notified by the District. If you would like to District to retain the application for future grant rounds you must notify the District in writing.
TOPIC OUTLINE

- Program Purpose
- Program History
- Program Funding
- Program Structure
- Program Eligibility
- Application Process
- **Contract**
- Project Completion
Contracting

- Contract must be in place before anything happens
  - No fund advances can take place without a contract
  - No work can begin without a contract

- Grant application, project sketch and other “canned” documents become attachments to contract.
DIRT, GRAVEL AND LOW VOLUME ROAD MAINTENANCE PROJECT AGREEMENT BETWEEN

________________________ COUNTY CONSERVATION DISTRICT

AND

________________________

Now, this ___ day of _________, ___ the _________ County Conservation District ("district")
and ________________________, known wherein as the "project participant", agree as follows:

(1) _________________________ will conduct, or cause to be conducted, a road maintenance project on specified portions of
    in accordance the Application and Work Plan attached hereto.

(2) This project will be conducted in accordance with standards that prohibit the use of materials or practices that are environmentally harmful and in accordance with the application and work plan attached hereto and incorporated herein. Any changes or modifications to the work plan will be performed to the satisfaction of the district.

(3) This project will be conducted in accordance with the "General Contract Conditions" required by the State Conservation Commission ("Commission"), the "Dirt, Gravel and Low Volume Road Maintenance Program Statement of Policy" as adopted by the Commission and as may be amended from time to time, and the environmental standards approved by the Quality Assurance Board, which are attached hereto and incorporated herein.

(4) The project participant agrees to provide documentation to the district that all required federal, state, or local permits have been obtained prior to project commencement, and further agrees to comply with all such permits as a condition of performing this agreement.

(5) The project participant shall ensure that this contract and all other arrangements entered into pursuant to the implementation of this contract are in conformance with all applicable local, state, and federal laws, rules, and regulations.

(6) The district agrees to fund the eligible costs for this project in an amount up to, but not exceeding, $ ________________.

(7) The project funds will be disbursed by the district to ______________________ in accordance with the attached schedule of payments.

(8) A project participant shall maintain a separate accounting of funds received under the program.

(9) Records must be kept for three years from the date of project completion.

(10) The Commission will have access to all relevant program documents during that time.

(11) Neither the district nor the Quality Assurance Board shall be held responsible for any loss of life, personal injury, or property damages of any kind incurred in performing or completing the work or duties under this contract.

(12) The project participant agrees to work concurrently with the district to complete a copy of the Project Performance Report when the project is completed.

(13) The project participant shall provide the district notice of at least _________ days prior to project commencement.

(14) The project participant shall complete the project no later than _________, unless an extension of time is approved by the district.

(15) The project participant shall obtain and satisfy all requirements as determined by the district.

(16) This document and the attachments hereto constitute the entire agreement between parties.

WHEREFORE, the parties have set their hands on the date indicated, intending to be bound hereby.

FOR THE DISTRICT:________________________

(Signed)________________________(Date)

(Print Name)________________________(Title)

FOR:________________________

(Signed)________________________(Date)

(Print Name)________________________(Title)

List of Attachments:
Attachment A – Grant Application (project specific)
Attachment B – Work Plan (project specific)
Attachment C – General Contract Provisions (PA standard)
Attachment D – Dirt, Gravel and Low Volume Road Maintenance Program Statement of Policy (PA standard)
Attachment E – Quality Assurance Board Standards (county specific)
Attachment F – Schedule of Payments (project specific)
Attachment G – Project Performance Report (project specific)
Contract Amendments

• Contracts can be amended to provide extra time or money
• 20% max.
  • i.e. on a $20,000 contract you could amend to contract once, twice, or more, but the sum total of the amendments can be no more than $4,000
  • Over 20% would require a second, separate contract.
TOPIC OUTLINE

- Program Purpose
- Program History
- Program Funding
- Program Structure
- Program Eligibility
- Application Process
- Contract
- *Project Completion*
Pre-project logistics

- Permits, Pa One-Call
  - It is the responsibility of the grant recipient to insure that all necessary permits are obtained and any other pre-project requirements are met (One-Call, PNDI, etc.)
  - It is the responsibility of the District to verify that permits and pre-project requirements have been met.
  - All necessary permits must be obtained before work can begin or funds can be advanced to applicant.
Pre-project logistics

- Pre-project meeting
  - District will meet on site with grant recipients prior to the start of any project.
  - Contractors and sub-contractors should be encouraged to attend

Project Oversight

Contact the District when work begins
Project Completion

- A final on-site inspection with grant recipient is required for project completion
- Project remediation may be needed if some project elements do not meet program standards
- Project completion report
- Final Payment
- Keep all records for at least 3 years from the date of the completion of the project.
**SECTION 9106 OF THE PENNSYLVANIA VEHICLE CODE**

**DIRT, GRAVEL AND LOW VOLUME ROAD MAINTENANCE**

**PROJECT COMPLETION REPORT**

This form is intended to summarize financial expenditures and work completed for ONE PROJECT and must be filled in upon project completion.

<table>
<thead>
<tr>
<th>County</th>
<th>Municipality</th>
<th>Date</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Project Participant</th>
<th>Work Site ID</th>
<th>Road Name / ID Number</th>
</tr>
</thead>
</table>

**Dirt, Gravel and Low Volume Funds**

Use actual project costs after receipts are totaled.

**Project Commitments:**

- **A. Contract Amount** $ __________
- **B. Amendments (if applicable)** $ __________
- **C. Total Committed (A+B)** $ __________

**Project Expenditures:**

- **D. Materials** $ __________
- **E. Equipment** $ __________
- **F. Labor** $ __________
- **G. Total Expenditures (D+E+F)** $ __________

**In-Kind Contributions**

Includes goods and services from applicant and other sources.

- **H. Materials** $ __________
- **I. Equipment** $ __________
- **J. Labor** $ __________
- **K. Other Sources (list below)** $ __________
- **L. Total In-Kind Value (H+I+J+K)** $ __________
Project Cost Summary

M. Total Project Value: (G+L) .................................. $ ________________

Additional Project Notes: ____________________________

_____________________________________________________________________

I attest that all work elements proposed in the project contract have been completed to the extent invoiced and in accordance with all contract agreements.

_________________________________________  ____________  ___________________________  ____________
Conservation District Rep.  Date  Project Participant Rep.  Date

PAGE 1 OF 2

ATTACHMENT G
<table>
<thead>
<tr>
<th>Ditch Improvements/Outlets</th>
<th>Off Right-of-Way Improvements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turn Outs Installed</td>
<td>Diversion Swales Constructed</td>
</tr>
<tr>
<td>New Cross Pipes Installed</td>
<td>Bank Benches</td>
</tr>
<tr>
<td>Cross Pipes Replaced</td>
<td>Through Drains</td>
</tr>
<tr>
<td>Through the Bank Pipes</td>
<td>Access Drainage Improvements</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Road Base</th>
<th>Road Surface Stabilized</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road Fill Added</td>
<td>DSA Placed</td>
</tr>
<tr>
<td>Full Depth, Chemical,</td>
<td>Sealed Surface</td>
</tr>
<tr>
<td>Mechanical Stabilization</td>
<td>sq yd</td>
</tr>
<tr>
<td>Geo Separation Fabric,</td>
<td>Broad Based Dips</td>
</tr>
<tr>
<td>Grid, or Cell.</td>
<td>#</td>
</tr>
<tr>
<td>Under Drain Added</td>
<td>Grade Brakes</td>
</tr>
<tr>
<td>French Mattresses</td>
<td>Dust Suppressant Used</td>
</tr>
<tr>
<td>Constructed</td>
<td>sq yd</td>
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</tbody>
</table>
### Road Banks
<table>
<thead>
<tr>
<th></th>
<th>sq yd</th>
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</thead>
<tbody>
<tr>
<td>Soil Pinning</td>
<td></td>
</tr>
<tr>
<td>Geo Stabilized Bank</td>
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</tr>
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</table>

### Structural Storm Water Improvements
<table>
<thead>
<tr>
<th></th>
<th>sq yd</th>
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<tbody>
<tr>
<td>Infiltration</td>
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</tr>
<tr>
<td>Detention</td>
<td></td>
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<tr>
<td>Dispersal</td>
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</table>

### Road-Stream Interface
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>High Water Bypass</td>
<td>#</td>
</tr>
<tr>
<td>In-stream Stabilization Structures</td>
<td>#</td>
</tr>
<tr>
<td>Bioengineering</td>
<td>sq yd</td>
</tr>
</tbody>
</table>

### Vegetative Management
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Select Thinning/Pruning</td>
<td>ft</td>
</tr>
<tr>
<td>Seeding/Mulching</td>
<td>sq yd</td>
</tr>
</tbody>
</table>

### Stream Crossings Replaced

- **Stream Crossings Replaced**: ___
- **Bottomless Arch Structures**: ___
- **Box Culverts**: ___
- **Bridges**: ___
- **Circular Culverts**: ___
- **GRS-IBS Spans**: ___
- **Plate Arch Structures**: ___
- **Squash Culverts**: ___

### Other
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All Other Practices Implemented</td>
<td>#</td>
</tr>
<tr>
<td>List Practices</td>
<td></td>
</tr>
</tbody>
</table>
Upcoming Grant Round:

- Upcoming ESM Training – May 26 2015 – May 27, 2015 (Woodlands Inn)
  - Register now at Center for Dirt and Gravel Website
- Applications: Being accepting NOW! Round will be closing Friday May 29, 2015.
- Possible Fall Application Round
- Grant Review: Spring 2015
- QAB Meeting: Spring 2015
- Grant Awards by District Board: Early Summer 2015
- Project Construction: Summer/Fall 2015

* Note: We will notify as soon as dates are confirmed.
In Summary...

- District will notify of any upcoming Center trainings via email and mailings
- Contact us with potential projects ASAP.
- Contact us with any questions ANYTIME!
- Any QUESTIONS???
Thank You
For Coming!!!

PA Dirt and Gravel Road Program