

**NEW GRANT FUNDING FOR WATER QUALITY IMPROVEMENT PROJECTS  
ALONG THE MARINER EAST 2 PIPELINE CORRIDOR**

**GRANT APPLICATION**

1. **Short Title:** Clover Drive Basin Retrofit
2. **Applicant/Sponsor Information:**

<b>APPLICANT</b>	<b>SPONSOR (Only If different from Applicant)</b>
Organization: <u>Lebanon County Stormwater Consortium</u>	Organization: <u>South Lebanon Township</u>
Street: <u>39 N. 12<sup>th</sup> Street</u>	Street: <u>1800 S 5<sup>th</sup> Avenue</u>
<u>Lebanon, PA, 17046-4931</u>	<u>Lebanon, PA, 17042-7909</u>
City/State/(9 Digit) Zip:	City/State/(9 Digit) Zip:
Contact: <u>Dan Lyons</u>	Contact: <u>James G. Loser, Sr</u>
Tel: ( 717 ) 273 - 9326 Fax: ( 717 ) 273 - 9936	Tel: ( 717 ) 274 - 0481 Fax: ( 717 ) 274 - 1272
E-Mail: <u>dlyons@lebanoncountyredevelopment.com</u>	E-Mail: <u>jim.slt@comcast.net</u>
Federal Employer ID #/SAP Vendor # <u>N/A</u>	Federal Employer ID #/SAP Vendor # <u>23-6000501</u>
3. **Type of Organization:**

<input type="checkbox"/> School District / School	<input type="checkbox"/> Municipal Authority
<input type="checkbox"/> Conservation District	<input type="checkbox"/> Incorporated Watershed Association
<input type="checkbox"/> Council of Governments	<input type="checkbox"/> Incorporated Non-profit Organization
<input checked="" type="checkbox"/> County or Municipality	501(c)(3) status? Yes <input type="checkbox"/> No <input type="checkbox"/>
<input type="checkbox"/> Educational Institution	PA Charitable Organization status? Yes <input type="checkbox"/> No <input type="checkbox"/> Exempt <input type="checkbox"/>
	(must provide proof)
4. **Project Location:**

County(ies): Lebanon Municipality(ies): South Lebanon Township

(Include marked Location Map, a Site Map, and an aerial photo with the project limits clearly marked on all three maps. Refer to form 1010-FM-GC0001f for further description of these required maps.)

Latitude: 40d 18' 55" Longitude: -76d 22' 51"

Percent of Project in the Chesapeake Bay Watershed: 100
5. **Application/Project Category:**
  - a. ☐ **Develop a watershed plan**
  - b. ☐ **Education/outreach**
  - c. ☒ **Design and/or construction**
  - d. ☐ **Operation, maintenance and replacement**
  - e. ☐ **Technical Assistance**
  - f. ☐ **Evaluation, Assessment or Monitoring Tools**
  - g. ☐ **Watershed group organization/support**
  - h. ☐ **Water quality improvement/community recreation**
  - i. ☐
6. **Name of the DEP staff person with whom you consulted about the proposed project (see the DEP Contacts):**  
R. Scott Carney

7. **Budget Summary:** (Must be consistent with attached DEP Task and Deliverable Budget Worksheet forms – do not include cents; round to the nearest dollar.)

Category	Grant Request
Salaries/Benefits	\$2,000.00
Travel	\$500.00
Equipment and Supplies	\$6,000.00
Administration (grant max 5%)	\$3,100.00
Contractual	\$12,300.00
Construction	\$40,000.00
Other	\$3,000.00
<b>Total:</b>	<b>\$66,900.00</b>

8. Will your project be conducted on land you either own or control? Yes ☐ No ☒
9. Will your project be conducted on land owned by other Commonwealth agencies? Yes ☐ No ☒  
 Have you contacted the appropriate agency? Yes ☐ No ☐  
 If yes, identify the person and agency contacted: \_\_\_\_\_ Yes ☐ No ☐
10. Will your project directly or indirectly preclude access to or use of any forested land for the practice of sustainable forestry? Yes ☐ No ☒
11. Is this project consistent with local comprehensive land use plans and zoning ordinances under Acts 67 & 68 of 2000? Yes ☐ No ☐ N/A ☒
12. Will your project address Commonwealth Investment Criteria? Yes ☐ No ☒  
 If you answered "Yes" to #13, complete a and b below.
- |   | Permanent<br>Full-time  | Permanent<br>Part-time | Temporary<br>Full-time | Temporary<br>Part-time |
|---|---|------------------------|------------------------|------------------------|
| 12a. Number of NEW jobs created by project  | _____   | _____                  | _____                  | _____                  |
| 12b. Number of jobs RETAINED resulting from project                                       | _____   | _____                  | _____                  | _____                  |
| 13a. Is your project located in an area designated as an Environmental Justice community? | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |                        |                        |                        |
| 13b. Is your project located in an Act 47 Financially Distressed Municipality?            | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |                        |                        |                        |

14. State the chapter 93 designation for the receiving waters of your project. TSF (Trout Stocking)
15. State the Impairment Source(s), Impairment Causes(s), and Reach Code listed for the receiving waters of your project. (Applicants are encouraged to navigate to <http://data-padep-1.opendata.arcgis.com/> and use the 2016 Integrated Report App to secure this information).

Impairment Source	Impairment Cause	Reach Code (14 digit)
Bank Modifications	Other Habitat Alterations	02050305000559
Urban Runoff/Storm Sewers	Flow Alterations	02050305000559

16. Briefly discuss how the proposed project intends to address the listed Impairment Sources and Causes. Please limit your response to 500 words or less.

This project will directly address the impairments caused by flow and habitat alterations in the Quittapahilla Creek watershed. These impairments are partially a result of increased peak flow rates from urban runoff, impervious surfaces, and storm sewer systems. When impervious surfaces are constructed over areas that were previously grass, meadow, or forest, the natural ability of the earth to absorb stormwater is reduced. More water from every storm event ends up in surface waters which causes more frequent flooding and higher water levels. Secondly, stormwater runs off the land more quickly than it did pre-development. This increases the flow rate in streams and leads to the erosion of streambeds and streambanks. Storm sewer systems also contribute to increased flow rates since the stormwater travels faster through pipes than it does flowing overland. Finally, stormwater picks up trash, debris, sediment, oil, fertilizers, pesticides, and other chemicals as it travels to surface waters. These man-made pollutants degrade water quality and harm the aquatic wildlife species that live in surface waters and depend on the waters for their habitat.

The basin retrofit will provide an additional opportunity for infiltration upstream of surface waters, thereby reducing the volume of stormwater that reaches local streams. Water that is infiltrated in this facility will help recharge the subsurface aquifer and contribute to baseflow in the Quittapahilla Creek. The basin retrofit will also reduce the peak flow rate of stormwater that runs off from the surfaces tributary to the basin retrofit. This is the most important benefit of the basin retrofit and is the primary way that this project will address the flow and habitat alteration impairments. Reducing the peak flow rate of stormwater by retaining it in the basin retrofit for an extended period of time will help reduce the erosive velocity of the water in-stream during storm events, thus helping prevent erosion of the streambed and streambanks. Finally, the basin retrofit will trap pollutants such as sediment, phosphorus, and nitrogen that pollute local waterways and affect the habitats of local fish and aquatic wildlife. These pollutants will settle out of stormwater before the stormwater is released from the basin retrofit via an outlet structure or infiltration. The existing basin treats 14.7 acres of land of which about 30.1% is impervious. Using the developed land loading rates contained in Attachment B of DEP's Pollutant Reduction Plan Instructions, this contributing acreage produces 11,394 pounds of total suspended solids (TSS), 458 pounds of total nitrogen (TN), and 12.3 pounds of total phosphorus (TP) annually. Using DEP's BMP Effectiveness Values for a dry extended detention basin (60% TSS, 20% TN, 20% TP) and a dry detention basin (10% TSS, 5% TN, 10% TP), the project would produce pollutant reductions of 5,697 pounds of TSS, 69 pounds of TN, and 1.2 pounds of TP per year.

17. **Project Executive Summary:** (Please limit to 2,000 words). Use additional sheets if necessary.

This project proposes a retrofit of an existing detention basin located on Clover Drive in South Lebanon Township, Lebanon County, PA. The basin retrofit will involve a modification of the outlet structure to achieve a 24-hour detention of the water quality volume and a soil amendment/vegetation rehabilitation process in the floor of the basin. The basin will capture and retain stormwater, allow for the infiltration of stormwater and recharge of the groundwater aquifer, and reduce pollution to local waterways by allowing pollutants to settle out of stormwater. This project will benefit the Lebanon County Stormwater Consortium (LCSC) and is expected to provide pollutant reductions of 5,697 pounds of TSS, 69 pounds of TN, and 1.2 pounds of TP per year, all of which can be applied to the LCSC's Pollutant Reduction Plan requirements. This project will support numerous objectives of the PA DEP, including those contained in the 2014 update of the Commonwealth of PA Nonpoint Source Management Plan (the PA NPSMP) and those of the Growing Greener program.

Goal #3 of the PA NPSMP is to "improve and protect the waters of the commonwealth from nonpoint source pollution associated with stormwater run-off, as well as streambank and shoreline degradation." This goal is further clarified by several objectives, two of which are met by this project. Objective #3.2 is to "continue to implement the Municipal Separate Storm Sewer (MS4) program through oversight and verification that MS4 communities abide by their permit requirements." This project will achieve reductions in Total Suspended Solids for the drainage area to each basin retrofit, and therefore will help meet the pollutant reduction obligations of the Lebanon County Stormwater Consortium. Furthermore, this project will allow DEP to achieve its stated goal of "work(ing) with municipalities to effectively address nonpoint source pollution issues" as stated in section IV.A of the Nonpoint Source Management Plan, with a particular emphasis on working partnerships between the PA NPS management program and local governments.

Objective #3.4 of the PA NPSMP is to implement 40 new, state-funded stream restoration and/or stormwater management projects annually for the next five years. The primary objective of the Growing Greener program is similar, and it is to restore impaired waters or protect degraded waters within the Commonwealth of Pennsylvania. Sections V.A.4-5 of the PA NPSMP describes the rationale behind these stated goals: changes in hydrology that result from urban development. The proposed basin retrofit meets these objectives as it will reduce stormwater runoff volumes, peak rates of stormwater runoff, erosion in the banks of the receiving stream, and pollutants suspended in stormwater. These benefits will be seen in the receiving stream for the project area, which is an unnamed tributary to the Quittapahilla Creek that is impaired by flow alterations and other habitat alterations.

One of the new requirements of the 2018 Municipal Separate Storm Sewer System (MS4) permit is for eligible municipalities to develop a Pollutant Reduction Plan (PRP) that includes a list of stormwater Best Management Practices (BMPs) that, if implemented, will result in a minimum 10% reduction in Total Suspended Solids (TSS) pollution to local waterways from the MS4 planning area. The Lebanon County Stormwater Consortium (LCSC) joined together in the summer of 2017 to develop and implement a joint PRP and an associated inter-governmental agreement which allows for joint implementation of the PRP. The LCSC consists of six (6) Lebanon County municipalities including Annville Township, the Cleona Borough Authority, the City of Lebanon, North Cornwall Township, North Lebanon Township, and South Lebanon Township. Together, these municipalities represent nearly half of the Census-designated Urbanized Area in Lebanon County.

The joint PRP developed by the LCSC represents a formal watershed-focused plan for much of the eastern Snitz Creek-Quittapahilla Creek HUC-12 watershed. The plan also has limited focus on neighboring HUC-12 watersheds including the Reeds Run-Swatara Creek, Lower Little Swatara Creek, and Headwaters Tulpehocken Creek watersheds. This PRP was submitted to DEP in 2017 and included a preliminary list of sixty (60) BMP projects including new basins (basin retrofit, bioretention basins, extended detention basins), retrofits of existing dry detention basins, riparian buffers, streambank restorations, and other types of BMPs. The proposed basin retrofit is included in the LCSC PRP as project number SQ28.

There is a long history of watershed restoration activities in the Snitz Creek-Quittapahilla Creek HUC-12 watershed that involves many partners. Recently, a stream restoration project funded with nearly one million dollars in grant money was completed on approximately 3,450 linear feet of the mainstem of the Quittapahilla Creek in Annville Township. Construction concluded in 2016 and the project was a culmination of 16 years of work by organizations such as the Lebanon Valley Conservancy, the Quittapahilla Watershed Association, and Lebanon Valley College. The creation of a wetlands area at the headwaters of the mainstem of the Quittapahilla Creek was another significant accomplishment by many of the same partners. This project was substantially completed by 2005 and included the creation of the aforementioned 2.25-acre wetlands area, the construction of a pavilion, and the addition of educational signage. The entire area was designed as an educational facility to be used by the school districts of Lebanon County to learn about wetlands and the environment, and is currently maintained by the Lebanon County Conservation District.

Other projects that are/were smaller in scope have been completed by other parties. The City of Lebanon, another member of the Lebanon County Stormwater Consortium (LCSC), obtained a grant in 2017 to implement projects on four City-owned properties. These projects included a retrofit of an existing dry detention basin to a dry extended detention basin, a 35-foot riparian buffer along 850 linear feet of stream, and tree planting/meadow restoration projects at two vacant properties. Currently, the Doc Fritchey Chapter of Trout Unlimited is working on a 1,200-foot stream restoration project along the Snitz Creek that aims to stabilize the streambanks, provide livestock crossings and fencing, and enhance the in-stream habitat for trout.

The history of watershed restoration activities briefly described in the previous two paragraphs show that Lebanon County is gaining traction for enhanced environmental stewardship. The projects listed above all received significant media attention on local news stations and in the Lebanon Daily News, so residents are aware of the watershed restoration efforts. This media attention has been heightened in recent months as all six of the LCSC municipalities have either already implemented or are considering implementing stormwater user fees. While the fees themselves are unpopular, they have opened up a conversation about watershed restoration and the importance of cleaning up Lebanon County's locally impaired streams. Water quality has become an issue that is located squarely in the public eye, and an opportunity for the education of residents of all ages now presents itself. The Mariner East II Pipeline has received similar media attention for many years (between the planning, legal battles, and actual construction) so the opportunity to draw attention to all water quality issues through news about the pipeline is also present. The municipalities of the LCSC, citizens, students, volunteers, and municipal leaders are gaining an important capacity for knowing about and supporting watershed restoration efforts through the educational opportunities afforded by previous projects and media attention devoted to current and future projects.

As the LCSC moves forward with the implementation of the projects proposed in the Pollutant Reduction Plan (PRP), partnerships with organizations such as the Quittapahilla Watershed Association and Trout Unlimited will be vital. The LCSC has been in contact with the QWA regarding the overlap of the group's missions and divisions of labor that will enable as much work to be done in the Quittapahilla Creek watershed as possible within a short amount of time. Any funding received by a group supporting watershed restoration including the LCSC, QWA, Trout Unlimited, or the Lebanon Valley Conservancy will be amplified since it will in some way serve the needs of all the organizations. For example, should grant funding be received for this basin retrofit, the pollutant reductions achieved will benefit not only the LCSC for its Pollutant Reduction Plan, but will also benefit the QWA's mission of supporting cleaner water in the Quittapahilla Creek and all downstream water bodies and Trout Unlimited's mission of conserving, protecting and restoring North America's coldwater fisheries and their watersheds.

Another benefit to this project would be in laying the groundwork for future restoration and conservation activities in the watershed. The LCSC has yet to implement any projects contained in the PRP, as the PRP is still under review by DEP. The LCSC wishes to get a jump on project implementation and therefore decided to apply for this grant in advance of final approval of the PRP by DEP. The LCSC believes that having no lag time between the introduction of stormwater management fees and the implementation of projects will be invaluable in the long run. Stormwater management is a new idea to many people who just got a stormwater bill and had not been thinking about conservation or stormwater BMPs before, and seeing an immediate impact through the implementation of this grant project would be a great way to link the stormwater bills to tangible watershed improvements right away. If this link is established now, future watershed improvement projects are likely to be better supported by the residents of Lebanon County.

There are many levels of support for this project. The Lebanon County Planning Department is a member of the LCSC and the Lebanon County Redevelopment Authority is the administrator for the LCSC. Both organizations provide valuable services to the group. The project also has the support of U.S. Senator Pat Toomey, PA Representative Russ Diamond and PA Senator Mike Folmer. Letters of support from each of these honorable elected officials are included in this application.

**UPLOAD ALL REQUIRED DOCUMENTS ON THE ADDENDA TAB OF THE ELECTRONIC APPLICATION**

**CERTIFICATION AND SIGNATURE OF APPLICANT (REQUIRED) AND SPONSOR (IF APPLICABLE)**

**Applicant:** I certify that the information in this application is true and correct to the best of my knowledge.

Lebanon County Stormwater Consortium

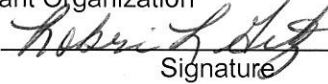
Applicant Organization

June 19, 2018

Date

Robin L. Getz

Printed Name



Signature

Chairperson

Title

**Sponsor:** I certify that the information in this application is true and correct to the best of my knowledge. I certify that I am willing to accept responsibility for a grant on behalf of the applicant.

South Lebanon Township

Sponsor Organization

June 19, 2018

Date

James G. Loser, Sr

Printed Name



Signature

Township Manager

Title

---

**DEADLINE FOR SUBMITTAL IS JUNE 20, 2018**

Please note - your project may also be eligible for funding under Growing Greener. You are encouraged to apply for both grants to maximize your chances to receive a grant. The Growing Greener Plus grant program opens May 14.

SENATE BOX 203048  
THE STATE CAPITOL  
HARRISBURG, PA 17120-3048  
717-787-5708  
FAX: 717-787-3455

101 MUNICIPAL BUILDING  
400 SOUTH 8TH STREET  
LEBANON, PA 17042  
717-274-8735  
FAX: 717-274-7702  
TOLL FREE: 1-877-222-1897

MIKE FOLMER



Senate of Pennsylvania

48TH SENATORIAL DISTRICT

June 19, 2018

COMMITTEES

STATE GOVERNMENT, CHAIR  
COMMUNICATIONS & TECHNOLOGY  
EDUCATION  
INTERGOVERNMENTAL OPERATIONS  
LABOR & INDUSTRY  
RULES & EXECUTIVE NOMINATIONS

E-MAIL: [mfolmer@pasen.gov](mailto:mfolmer@pasen.gov)  
WEB SITE: [senatorfolmer.com](http://senatorfolmer.com)

Honorable Patrick McDonnell  
Secretary  
Pennsylvania Department of Environmental Protection  
16<sup>th</sup> Floor, Rachel Carson State Office Building  
400 Market Street  
Harrisburg, PA 17105

Dear Secretary McDonnell:

I want you to know of my support for the Lebanon County Stormwater Consortium Mariner East II Pipeline Grant Program application in the amount of \$750,000 to further its goals under the joint Pollutant Reduction Plan (PRP) currently under review at the Department of Environmental Protection.

The Lebanon County Stormwater Consortium was formed in 2017 by the Townships of Annville, North Cornwall, North Lebanon and South Lebanon, Cleona Borough Authority and the City of Lebanon for the purposes of completing and implementing a joint PRP to satisfy the requirements of the 2018 National Pollutant Discharge Elimination System permit and to improve the surface waters of Lebanon County.

The grant moneys would be used for wetland construction, bio-retention basin installations and basin retrofits, all in South Lebanon Township, the only member municipality of the Consortium eligible to receive these grant funds. However, the projects mentioned would benefit the Consortium collectively and will have far-reaching benefits to Lebanon County as a whole.

Thank you for your consideration of this important grant for South Lebanon Township and the Lebanon County Stormwater Consortium. Please do not hesitate to contact me with any questions or concerns regarding my support.

Sincerely,

Handwritten signature of Mike Folmer.  
MIKE FOLMER

CC: R. Scott Carney, Chief, Watershed Support Section, PA DEP Office of Water Resources Planning

# United States Senate

WASHINGTON, DC 20510

June 7, 2018

Elizabeth Bowman  
Administrator  
Lebanon County Stormwater Consortium  
c/o Redevelopment Authority of the County of Lebanon  
39 N. 12th Street  
Lebanon, PA 17046

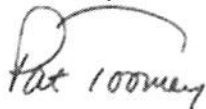
Dear Ms. Bowman,

I am pleased to provide this letter of support for the Lebanon County Stormwater Consortium (LCSC), and its mission to complete and implement a joint Pollution Reduction Plan (PRP), which will satisfy the requirements of the 2018 National Pollutant Discharge Elimination System permit, and improve the surface waters of Lebanon County.

It is my understanding that LCSC seeks to construct wetlands, install bio-retention basins, and retrofit current basins as part of the implementation of the aforementioned PRP. While all of the projects are occurring in South Lebanon Township, it is my understanding that these projects will benefit the consortium collectively, and will have wide-spread benefits for the residents of Lebanon County and beyond. Your desire to initiate these projects and improve the water quality in Lebanon County is to be commended.

Once again, I am pleased to provide this letter of support for the aforementioned project, and I wish you the best of luck for the PRP's future success.

Sincerely,



Pat Toomey  
U.S. Senator



**RUSS DIAMOND, MEMBER  
102<sup>ND</sup> LEGISLATIVE DISTRICT**

2230 LEBANON VALLEY MALL  
LEBANON, PA 17042  
PHONE: (717) 277-2101  
FAX: 717-277-2105

[www.RepDiamond.com](http://www.RepDiamond.com)

June 7, 2018

Secretary Patrick McDonnell  
Department of Environmental Protection  
Rachel Carson State Office Building, 15<sup>th</sup> Floor  
400 Market Street, P.O. Box 8776  
Harrisburg, PA 17105-8776

Dear Secretary McDonnell:

I write on behalf of the Lebanon County Stormwater Consortium who will be submitting an application for the Mariner East II Pipeline Grant program. They are in the process of completing and implementing a joint Pollutant Reduction Plan (PRP) to satisfy the requirements of the 2018 National Pollutant Discharge Elimination System (NPDES).

The Consortium has done a tremendous amount of research on their PRP. Among the projects proposed for funding are wetland construction, bio-retention basin installations, and basin retrofits. All the proposed project are located in South Lebanon Township, which is the only one of the member municipalities eligible to receive these grand funds. However, the receipt of grant funds will benefit the Consortium collectively and the project undertaken will have far-reaching benefits for the residents of Lebanon County and beyond.

I urge your favorable consideration of this project. Please give the Lebanon County Stormwater Consortium every possible priority.

Should you have any questions or need additional information, please do not hesitate to contact me. Thank you in advance for any assistance and support that you can provide.

Sincerely,



Russ Diamond  
STATE REPRESENTATIVE  
102<sup>nd</sup> Legislative District

RHD/jrw

cc: Elizabeth Bowman



*House of Representatives*  
Commonwealth of Pennsylvania  
Harrisburg

145B EAST WING  
PO BOX 202102  
HARRISBURG, PA 17120  
PHONE: (717) 787-2686  
FAX: 717-782-2890

[facebook.com/RepDiamond](https://facebook.com/RepDiamond)



COMMONWEALTH OF PENNSYLVANIA  
BUREAU OF ENVIRONMENTAL PROTECTION  
GRANTS CENTER

## TASK AND DELIVERABLE BUDGET WORKSHEET

Duplicate this worksheet for additional Deliverables

For each deliverable-identify title, associated tasks, and dollar amounts. Tasks listed should include quantifiable units (e.g. feet of stream restoration, miles of riparian buffer, number and type of BMP, etc.)

<b>Deliverable #1</b>	<b>Title: Clover Drive Basin Retrofit</b>		<b>Est. Date of Completion: Fall 2020</b>	
Category	Individual, Staff, or Contractor	Task or Item	Costs	Grant Request
<b>Salaries/Benefits – Grantee Staff Only</b>				
	South Lebanon Township Staff	General project administration	50 hrs @ \$40/hr	\$2,000.00
				\$
				\$
				\$
				\$
<b>Subtotal Salaries</b>				\$2,000.00
<b>Travel</b>				
<b>Miles</b>	Grantee staff, contracted engineer	Project site visits	Miles934@.535/mile	\$500.00
<b>Meals</b>				\$
<b>Lodging</b>				\$
<b>Subtotal Travel</b>				\$500.00
<b>Equip. &amp; Supplies</b>				
	Contractor to procure	Erosion control mats and stakes	4 @ \$1,500 each	\$6,000.00
	Contractor to procure	Headwall bar guards	4 @ \$1,500 each	\$6,000.00
				\$
				\$
				\$
				\$
<b>Subtotal Equip. &amp; Supplies</b>				\$6,000.00
<b>Administration</b>				
	Lebanon County Redevelopment Auth.	Administrator for the Lebanon Co. Stormwater Consortium	5% of project total	\$6,700.00
				\$
				\$
				\$
				\$
<b>Subtotal Admin.</b>				\$6,700.00

Deliverable #1	Title: Clover Drive Basin Retrofit		Est. Date of Completion: Fall 2020	
Category	Individual, Staff, or Contractor	Task or Item	Costs	Grant Request
<b>Contractual</b>				
A. Contractor Salaries				\$
Engineering	To be determined	Project design, construction permit applications	75 hrs @ \$100/hr	\$7,500.00
Township solicitor	Spitler, Kilgore & Enck, P.C.	Review of grant and easement agreements	8 hrs @ \$300/hr	\$2,400.00
LCSC solicitor	Mette, Evans, and Woodside, LLC	Review of grant and easement agreements	8 hrs @ \$300/hr	\$2,400.00
				\$
				\$
B. Other Contractual				\$
				\$
				\$
				\$
				\$
				\$
<b>Subtotal Contractual</b>				\$12,300.00
<b>Construction</b>			Cost/Unit	
A. Materials				\$
Engineered soil mixture	Contractor to install	Soil amendment mixture in the bottom of the basin	1 basins @ \$23,000 ea	\$23,000.00
Outlet structure	Contractor to install	Outlet structure improvement	1 basins @ \$2,000 ea	\$2,000.00
Basin vegetation	Contractor to install	Vegetation to be established in the basin	5 basins @ \$10,000 ea	\$10,000.00
				\$
B. Labor				\$
General	Contractor to provide	Contractor's labor force in excess of above items	50 hrs @ \$50/hr	\$5,000.00
				\$
				\$
				\$
<b>Subtotal Construction</b>				\$40,000.00
<b>Other</b>				
Permit fees	Engineer	NPDES and E&S permit fees	Est. \$3,000.00	\$3,000.00
				\$
				\$
				\$
				\$
<b>Subtotal Other</b>				\$3,000.00
<b>Total</b>				\$66,900.00

**BUDGET SUMMARY**  
**(COMPLETE ONCE SUMMARIZING ALL DELIVERABLES)**

1. Salaries/Benefits	\$2,000.00
2. Travel	\$500.00
3. Equipment and Supplies	\$6,000.00
4. Administration	\$3,100.00
5. Contractual	\$12,300.00
6. Construction	\$40,000.00
7. Other	\$3,000.00
<b>Total</b>	<b>\$66,900.00</b>

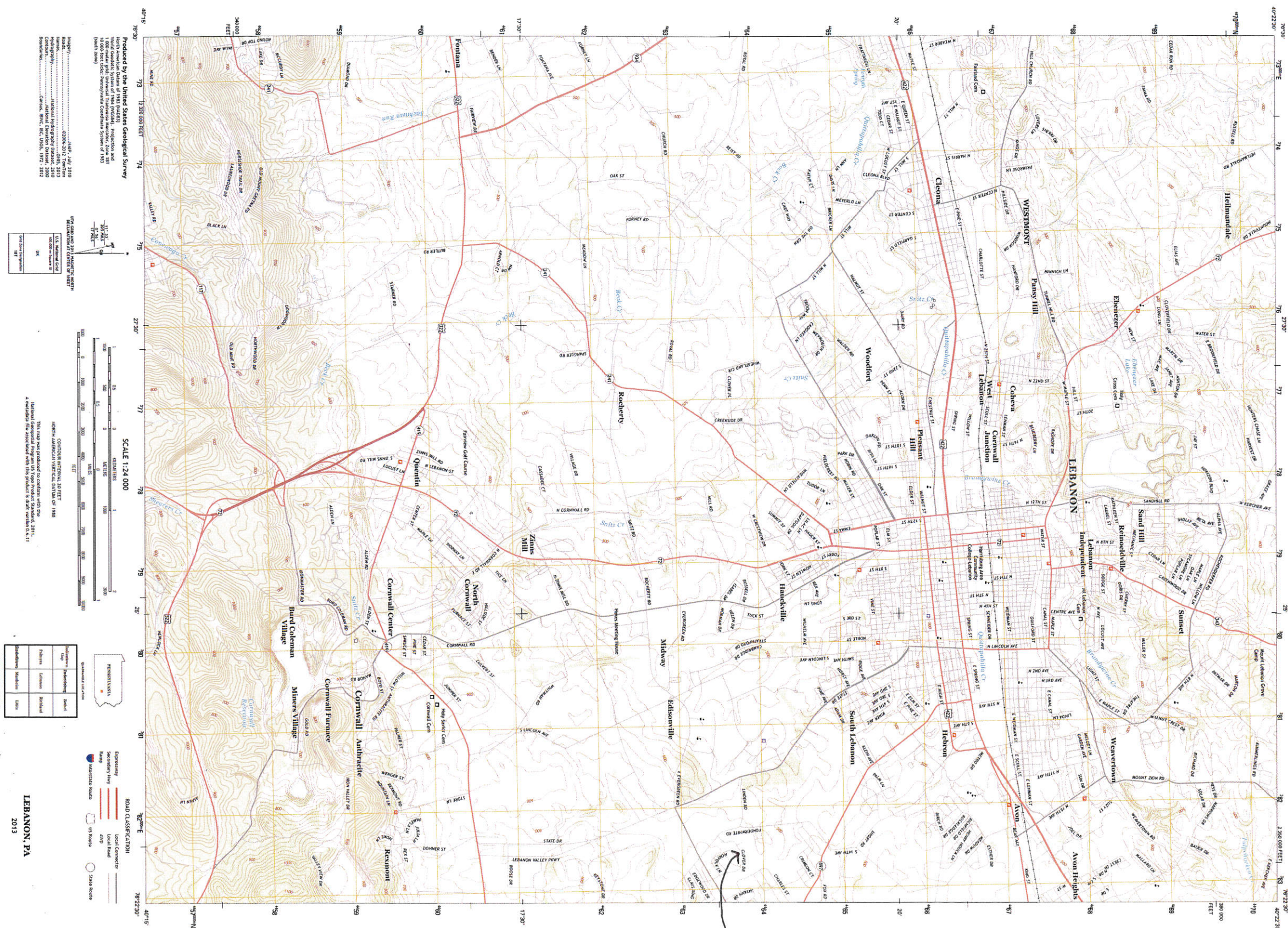




U.S. DEPARTMENT OF THE INTERIOR  
U.S. GEOLOGICAL SURVEY



LEBANON QUADRANGLE  
PENNSYLVANIA-LEBANON CO.  
7.5-MINUTE SERIES



Project  
Location



OUTLET STRUCTURE  
MODIFICATION TO ALLOW  
FOR INFILTRATION OR  
EXTENDED DETENTION

SOIL AMENDMENT AND  
VEGETATION  
REHABILITATION



CLOVER DRIVE BASIN RETROFIT

for

SOUTH LEBANON TOWNSHIP

located in

South Lebanon Township  
Lebanon County, Pennsylvania

**SESI**  
Steckbeck Engineering & Surveying Inc.  
279 North Zinns Mill Road / Suite A  
Lebanon, Pennsylvania 17042  
Phone: (717) 272-7110  
Fax: (717) 272-7348

DATE: 6/13/18

SCALE: 1"=XXX' PROJECT #: XXXX-XX-XXX

Clover Drive Basin Retrofit Aerial Photo







## LANDOWNER LETTER OF COMMITMENT

I, Matthew Schreckengost (property owner) do hereby authorize and agree to permit South Lebanon Township (Applicant) to enter my property, with the intent to design and/or install/replace Conservation Practices/Best Management Practices (CP/BMPs) on my property for the purpose of improving water quality on an unnamed tributary to the Quittapahilla Creek (specific waterway).

I understand that if a grant award is made by DEP, I will be required to execute a Landowner-Grantee Agreement with an Operation and Maintenance Plan. This Agreement will identify specific maintenance tasks and the parties that will be responsible to perform those tasks to ensure that the CP/BMP is properly maintained.

[Signature]  
Property Owner Signature

[Signature]  
Applicant Signature

Matthew Schreckengost  
Property Owner Name (Printed)

James G. Loser Sr  
Applicant Signature (Printed)

13 June 2018  
Date

6-18-18  
Date