

# **PUBLIC WORKS COMMITTEE AGENDA**

**Monday, Oct. 24, 2022**

**9:00 AM**

**Town Hall - In Person**

**104 North King Street**

1. Call to Order
2. Reading and approval minutes – Sept. 26, 2022
3. Visitors
4. Public Comment
5. Unfinished Business
  - a. International Property and Maintenance Code-property maintenance report – Andy to report
    1. 349 W. German St. - Violation notice – Work on house partly finished – Violation sent – Establishing ownership
    2. 110 W. Washington St. – Report by Andy Beall
  - b. Trash in alleys-cleaning and contacting property owners and occupants about trash and grass Issues – Report on ordinance - Enclosure
- c. Recycling Grant-Garbage truck (for glass) – Apply in **2023** – Recycling Committee
- d. Travis Ray – Waiting for response
  - Washington Street-partly paved and improved – Handicap Corners installed before paving – Spring – Corners are completed – on schedule to pave, 2023
  - German Street - pave Princess to Mill Street – going East – work planned for 2023
  - Princess Street-dip – Bridge crew to assess – Drainage pipe rusting out under road
  - Duke Street – Water problem – Ponding – Both west and east corners to be improved by DOH
  - Re-do Crosswalk decals – Partly completed – more areas to complete
  - Grate/Drainage area at Mill & German St needs to be assessed.
  - Orange corner plates on handicap corners have been repaired
  - Inspect German St. at crossing of “Town Run” – Bridge Crew to assess – no report
- e. Sidewalk Survey – Most severe hazardous sidewalks have been repaired – Corner of High St. and Mill St. needs work – Second Phase of sidewalk repair will be coming soon
- f. FEMA Study – ongoing
- g. Market House – Report by Ronnie Crockett - Enclosure
- h. Sidewalk Training – Dr. Van Eck – December, 2022
- i. Stormwater – St. Agnes Catholic Church + Shepherd Village – Stormwater Proposal - Enclosure
- j. Cable, Phone, etc. – Lines hanging from poles
- k. Lighting in Town
- l. Public Restrooms
- m. Expanding Green Space
- n. Driveway Ordinance – Title 9 and Title 11 - Enclosure

9/21/2022

o. Fall Clean-Up week – November 7 - 11<sup>th</sup>, 2022

6. Mayor's Report

7. Adjournment

## **PUBLIC WORKS COMMITTEE MINUTES**

**Monday, SEPT. 26, 2022**

**9:00 AM**

**Town Hall - In Person**

**104 North King Street**

1. Call to Order – 9am; Jim A., Chris S., Marty A. / Staff – Frank W., Andy B.
2. Reading and approval minutes – Aug. 30, 2022, Chris S. motion to approve, second by Marty A., approved.
3. Visitors – Matt Pennington, Rebecca Parmesano – Matt P. presented a proposal for performing a stormwater evaluation in town, paying particular attention to certain problem areas. This evaluation will determine what green infrastructure mechanisms can be implemented to help address stormwater issues. Ms. Parmesano is an impacted owner who resides near St. Agnes and is willing the help find grant funding. Chris S. expressed his frustration that the proposal was not in the packet. The written proposal will be circulated and will be considered at a future meeting.
4. Public Comment – None.
5. Unfinished Business
  - a. International Property and Maintenance Code-property maintenance report – Andy reported:
    1. Lambert – ongoing, attempting to sell;
    2. 349 W. German St. - Violation notice – Work on house partly finished – Violation sent – Establishing ownership
    3. 110 W. Washington St. – Public Nuisance – violation notice issued to close house.
  - b. Trash in alleys-cleaning and contacting property owners and occupants about trash and grass  
Issues – Shepherd students have assisted, new large bins have been installed at Apex, plan to purchase more large bins to place behind Betty's.  
Chris S. to research trash ordinances, with the intent to ensure that owners (landlords) can also be held responsible to trash issues at rental units.
  - c. Recycling Grant-Garbage truck (for glass) – Apply in **2023** – Recycling Committee – no update.
  - d. Travis Ray – Waiting for response – no update, Frank W. to keep following up.
    - Washington Street-partly paved and improved – Handicap Corners installed before paving – Spring – Corners are completed – on schedule to pave, 2023
    - German Street - pave Princess to Mill Street – going East – work planned for 2023
    - Princess Street-dip – Bridge crew to assess – Drainage pipe rusting out under road

- Duke Street – Water problem – Ponding – Both west and east corners to be improved by DOH
- Re-do Crosswalk decals – Partly completed – more areas to complete
- Grate/Drainage area at Mill & German St needs to be assessed.
- Orange corner plates on handicap corners have been repaired
- Inspect German St. at crossing of “Town Run” – Bridge Crew to assess – no report

e. Sidewalk Survey – Most severe hazardous sidewalks have been repaired – Corner of High St. and Mill St. needs work, only one more dangerous section as per Frank W., sidewalks to be reevaluated.

f. FEMA Study – ongoing – no update.

g. Market House – renovations needed – waiting on estimates, committee inspection scheduled for 10/6, at 9am.

h. Sidewalk Training – Dr. Van Eck – Marty A. – sidewalk training to be scheduled on three (3) Thursdays in Dec.

i. Stormwater – St. Agnes Catholic Church + Shepherd Village – See above report by Pennington.

j. Cable, Phone, etc. – Lines hanging from poles – some progress has been made, Chris S. to review utility contracts, Marty A. to draft letter, Butcher to be invited to next meeting.

k. Lighting in Town – Marty A. – Should we get studies to determine what can be done with the lights in town? Can street lights be placed on shorter poles? Andy B. – we had a study done, most public input was against changing the lights. Jim A. – new solar facility on I81 may help provide power. Andy B. to provide info to Marty A. Marty A. to continue researching.

l. Public Restrooms. – Marty A. – What options does the public have for restrooms in town? Jim A. – sign will be placed outside of Town Hall to provide notice of public restrooms.

m. Expanding Green Space – Marty A. – any developments on a new green space in town? Chris S. & Marty A. to explore forming a subcommittee on this project.

6. Mayor’s Report – None.

7. Adjournment – Chris S. motion to adjourn at 10:29am, second by Marty A., approved.



#### Section 11-604 Use of county landfill

Municipally operated refuse service or any private scavenger service shall use the Jefferson County landfill or any other disposal site as designated by town council.

#### Section 11-605 Duty of resident, .etc. , to subscribe to and pay for collection, removal and disposal service

All residents or business houses residing in or doing business within the town shall subscribe to, use and pay for the collection, removal and disposal service provided by the town or by an approved private scavenger having a permit from the town as provided in this chapter.

It shall be unlawful for any person to neglect or refuse to subscribe to such service and to pay therefore at the rates established by the town council for the type of service furnished each such person or business house.

#### Section 11-606 Rules and regulations

The town council may prescribe, publish, promulgate and enforce reasonable rules and regulations, deemed necessary or proper, consistent with this chapter to carry out the objects and purposes thereof and for the safety and health of the citizens of the town in respect to the collection, removal and disposal of refuse as herein defined. It shall be unlawful for any person to fail, neglect or refuse to comply with such rules and regulations.

#### Section 11-607A Specifications for refuse containers

Standard containers for the storage of refuse shall be substantially made of metal or plastic, leak proof and water tight, shall have a capacity, approximately of not less than five or more than 20 gallons for trash and garbage and not less than 5 nor more than 10 gallons for ashes and shall be equipped with an adequate carrying bail or carrying handles, with a tight cover, or shall otherwise be prescribed by the state, county or local health officials, provided, however, that ashes and dry trash which will not constitute a health hazard may be placed in substantial wooden containers.

#### Section 11-608 Location of containers

Where alleys are used by the municipal refuse collectors, containers shall be placed on or within six (6) feet of the alley line in such a position as not to intrude upon the traveled portion of the alley. Where streets are used by the municipal refuse collections, containers shall be placed adjacent to and back of the curb, or adjacent to and back of the ditch or street line if there be no curb, at such times as shall be scheduled by the municipality for the collection of refuse therefrom. As soon as practicable after such containers have been emptied, they shall be removed by the owner within, or to the rear of, his premises and away from the street line until the next schedule time for collection.

#### Section 11-609 Permit for private refuse collectors

No private scavenger shall engage in the collection, removal or disposal of refuse without first obtaining a permit from the town council to render such services.





# Shepherdstown Green Infrastructure Concept Plan

September 13, 2022



Submitted to:

John A. Beall  
Planning & Zoning Administrator  
Corporation of Shepherdstown  
104 North King Street  
P.O. Box 248  
Shepherdstown, WV 25443



Submitted by:

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# Downstream Strategies Proposal

## Shepherdstown

### Green Infrastructure Concept Plan

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## 1. INTRODUCTION

Downstream Strategies appreciates this opportunity to submit this proposal for a Green Infrastructure (GI) Concept Plan for the Corporation of Shepherdstown for St. Agnes Catholic Church and other areas within the Corporation limits that reduces flash flooding while complementing the town's unique character. This plan will serve as the basis for future grant funding applications and implementation.

## 2. COMPANY PROFILE AND QUALIFICATIONS

Downstream Strategies is a West Virginia-based environmental and economic development consulting firm with offices in Morgantown, Berkeley Springs, Davis, and Lewisburg. Founded in 1997, Downstream Strategies is considered *the* go-to source for objective, data-based analyses, plans, and actions that strengthen economies, sustain healthy environments, and build resilient communities. We combine sound interdisciplinary skills with a core belief in the importance of protecting the environment and linking economic development with natural resource stewardship. We do consulting with a conscience.

Through our decades of work in West Virginia and the region, we are proud to be recognized as leaders in water science, policy, planning, and implementation. A core component of our work focuses on helping communities learn about, plan for, and implement new solutions. As detailed below, we have consulted for numerous agencies, towns, and nonprofits throughout West Virginia, including in the Eastern Panhandle and the Chesapeake Bay Watershed.

We are experts in Chesapeake Bay-related green stormwater infrastructure planning, design, and construction. Our staff is experienced in all scales of GI projects, ranging from watershed-scale stream restoration projects to bio-retention rain gardens. We recognize and value GI's co-benefits and social infrastructure, serving the people living in the community in addition to providing protection from flash flooding and pollution.

Our staff can deliver construction-grade drawings, conceptual renderings, and customized maps with software packages such as AutoCAD, Adobe Graphic Design Suite, and ESRI ArcGIS. We have significant field experience with GPS data collection and surveying. Our project managers systematically use project management plans and practices to ensure that the entire project team produces the best quality results that meet or exceed our clients' expectations—and that are on time and on budget.



### 3. KEY STAFF

#### **Matt Pennington, Senior Planner**

*Mr. Pennington will manage this project and be the primary point of contact with the client. He will also take the lead in watershed analysis, GI concept design, and public engagement.*

Mr. Pennington is an environmental, community, and economic development planner with extensive expertise helping local governments and organizations balance economic and population growth with the preservation of natural resources. He is an award-winning stormwater professional and focuses on comprehensive planning, GI design and implementation, hazard mitigation, and securing grants for community projects and programs. Mr. Pennington oversaw the development for the Town of Paw Paw's GI plans and installations and provided technical support for the Town of Bath's various GI plans and projects. In 2018, he led the Local Engagement Initiative on behalf of the West Virginia Department of Environmental Protection and is the former chair of the U.S. Environmental Protection Agency's Chesapeake Bay Program Local Leadership Workgroup. He works from Downstream Strategies' Berkeley Springs office. Mr. Pennington holds a B.S. in Urban and Regional Planning from Frostburg State University.



#### **Evan Hansen, Principal**

*Mr. Hansen will take the lead in editing the GI report.*

In Mr. Hansen's 30+-year consulting career, he has managed interdisciplinary research teams, performed quantitative and qualitative policy and scientific analyses, provided expert testimony, developed computer tools, and provided training. Mr. Hansen helped develop a GI implementation plan for Martinsburg to guide implementation of new stormwater management projects in an area with limited or no stormwater infrastructure. He researched policies that promote or hinder the use of GI stormwater practices and worked with local government officials to implement GI projects. Mr. Hansen has also organized Clean Water Act training workshops on issues including stormwater. He represents Monongalia County in the West Virginia House of Delegates.

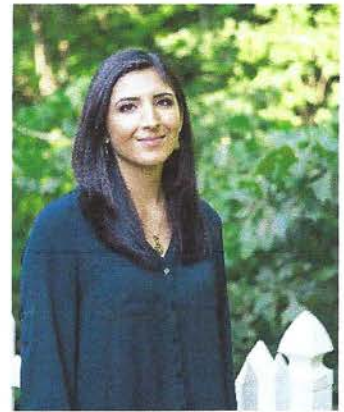
Mr. Hansen earned a B.S. in Computer Science and Engineering from M.I.T. and an M.S. in Energy and Resources from University of California, Berkeley. This interdisciplinary degree combines public policy, economics, environmental science, and engineering.



**Kasey Osborne, Project Scientist**

*Ms. Osborne will collaborate with Mr. Pennington to develop the conceptual GIS designs and report*

Ms. Osborne has broad experience in natural resources, ecology, wildlife biology, scientific and public communication, and geospatial information science. She has worked with university research affiliates, state agencies, and private entities where she focused on joining research with place-based development and policy. She aims to help cultivate a sustainable and interconnected environment and economy. For this project Ms. Osborne will act as the primary GIS technical resource and will also offer important subject area expertise.



Ms. Osborne earned a B.S. in Biological Sciences with a focus in conservation, soundscape ecology, and GIS in 2017. She earned an M.A. in Professional Writing and Editing from West Virginia University in 2019



## 4. EXPERIENCE

The projects below highlight selected relevant experience related to GI planning and implementation. Section 9 provides reference names and contact information for several of these projects.

### **Town of Bath Innovative Green Infrastructure (2022)**

*Client: Town of Bath*

Downstream Strategies worked in collaboration with Town of Bath appointees to design an innovative stormwater feature at the Berkeley Springs Train Depot. Using hügelkultur berms, a centuries-old agricultural method, in combination with modern bioretention techniques, this design reduced material costs while capturing and treating stormwater runoff that contributes to flash flooding in Bath. A critical element to this project's success was Downstream Strategies' and Bath's communication throughout the design process, as this never seen before innovative stormwater practice was developed.

### **Shepherdstown Green Infrastructure (2020)**

*Client: Corporation of Shepherdstown*

Before joining Downstream Strategies, Matt Pennington provided technical assistance, analysis of public properties, and conceptual designs to Shepherdstown, West Virginia. After reviewing many conceptual options, town officials selected a GI site that contributed flooding to a nearby property. Mr. Pennington developed detailed designs and calculated material volumes, cost estimates, and pollutant load reductions. He also provided construction oversight.



### **Martinsburg Green Infrastructure Plan (2019)**

*Clients: National Fish and Wildlife Foundation, City of Martinsburg*

In partnership with the City of Martinsburg, Downstream Strategies, Harbor Engineering, and Canaan Valley Institute secured a Chesapeake Bay Technical Capacity Grant from the National Fish and Wildlife Foundation in 2017 to develop an implementation plan for GI demonstration sites in Martinsburg, West Virginia. The team created conceptual designs for 10 potential sites for GI improvements, created detailed designs and cost estimates for the three highest-priority sites, and developed educational materials to engage the public and secure broad support for GI solutions within the community.



### **Paw Paw Green Infrastructure Plan, Design, and Installation (2020-2021)**

*Client: Town of Paw Paw*

Before joining Downstream Strategies, Matt Pennington provided GI technical assistance, analysis, and conceptual designs to the Town of Paw Paw, West Virginia. The plan focused on flood reduction practices that could be installed by Paw Paw's Public Works crew. Mr. Pennington provided hands-on training on GI design, installation of bio-retention, and riparian tree plantings. A two-day workshop welcomed other Eastern Panhandle organizations and stormwater utilities for a natural streambank stabilization training.

### **South Berkeley Recycling Center Rain Garden (2018)**

*Client: Canaan Valley Institute*

Downstream Strategies designed and constructed a rain garden demonstration project at the South Berkeley Recycling Center in Inwood, West Virginia. The small wetland acts as a biofiltration unit that removes pollutants from runoff coming from the dirt and gravel driveway and from yard waste—before the pollutants reach nearby streams. Native plants were used in the constructed wetland, which was designed to highlight the beauty and value to wildlife of native wetland species.



### **Evitts Run Green Infrastructure Park (2014)**

*Client: City of Charles Town*

Downstream Strategies and Harbor Engineering provided technical assistance, permitting guidance, and design services for revitalization of the 12-acre Evitts Run Park brownfield site. The objective of the project was to utilize GI and low-impact stormwater best management practices to mitigate stormwater flows from existing and future development and adjoining agricultural lands. Technical assistance included reviewing existing environmental studies, performing topographic and boundary surveys, and designing a two-acre wet pond with integrated GI elements along Evitts Run. The project team assisted with preparing and obtaining necessary permits and provided construction specifications suitable for implementation. The final design included signs, educational features, and fixtures to educate the public on the benefits of GI and showcased the cooperative efforts between the cities of Charles Town and Ranson.

### **Plants Not Pipes: Promoting Green Infrastructure and its Side Benefits in Region VI (2010)**

*Client: Region VI Planning and Development Council*

This report is part of a broader project to introduce GI to communities in north-central West Virginia and to provide tools to encourage more widespread use of the techniques. It focused not just on reducing the volume and pollution levels of stormwater runoff, but also on GI's side benefits, ranging from reduced maintenance and water utility costs to improved aesthetics and air quality.

### **Blue Ridge Mountain Communities Area Watershed Plan—Future of the Mountain: A Common Vision for the Jefferson County Blue Ridge Mountain Communities Area (2010)**

*Client: Jefferson County Commission*

The Blue Ridge Mountain Communities Area in Jefferson County, West Virginia lies within the Shenandoah River watershed, a major tributary that affects the water quality of the Chesapeake Bay. This common vision document is based on a facilitated public outreach process with the residents and stakeholders, and it lays the foundation for a watershed plan.



**Blue Ridge Mountain Communities Area Watershed Plan: Engineering Report (2010)**

*Client: Jefferson County Commission*

This engineering report provides recommendations to the Jefferson County Commission and Planning Commission and is a component of the watershed plan for the Blue Ridge Mountain Communities Area. It outlines stormwater best management practices for steep slope watershed management, as well as recommendations for impervious surface cover limits and improved road access.

**Stream and Wetland Restoration (Ongoing)**

*Client: Numerous clients, including West Virginia Department of Environmental Protection (WVDEP) In Lieu Fee Program and private clients*

Downstream Strategies has designed, built, and monitored numerous stream and wetland restoration projects across West Virginia. Successful projects have been completed in Logan, Randolph, Jackson, Roane, Jefferson, Hancock, Tucker, Harrison, Hardy, and Pocahontas counties in West Virginia as well as Garrett County, Maryland.

**Morgan Wetland Restoration (2020)**

*Client: WVDEP In Lieu Fee Program*

The Morgan Wetland in Jefferson County is unique among West Virginia wetlands because it is dominated by rare, wetland soils called marl soils. After years of agricultural use, especially as a pasture for livestock, West Virginia Farmland Protection established a conservation easement to protect the site. Downstream Strategies restored the site by converting pastureland back to wetlands and enhancing the existing wetlands. The site is now flourishing with native plants that support a wide variety of animals that depend on wetlands to survive.

## 5. PROJECT UNDERSTANDING

We understand that the Corporation of Shepherdstown seeks to create a GI concept plan for St. Agnes Catholic Church and other areas within Corporation limits. This concept plan will require collaboration with town representatives, as well as with other partners at St. Agnes, Shepherd University, and other property owners.

Downstream Strategies understands this project is in the karst topography of Jefferson County. This limestone geology will require additional components to limit GI infiltration.

Finally, our team is intimately familiar with the limited capacity and resources of Shepherdstown to maintain GI practices. Our concept recommendations will be designed to limit long-term maintenance and management costs.



## 6. PROJECT APPROACH

GI uses vegetation and soil to address flooding, as opposed to gray infrastructure, which uses pipes and concrete. GI practices can range from planting trees and native perennial flower gardens to rain gardens and wetland development. Our team focuses on two essential green rules of thumb: 1) listen to the priorities of local communities, and 2) examine those priorities through an environmental lens supported by various funding agencies.

The most effective GI practices are not found on paper; they are found in our landscapes and serve their inhabitants. They are locally understood, accepted, and supported. And they are typically financed with assistance from agencies promoting GI's ecological results to help overcome economic obstacles.

Based on our experience with similar projects in West Virginia and elsewhere, we propose completing this project in two work sprints:

- **Sprint 1:** St. Agnes Campus Green Infrastructure Concept Plan
- **Sprint 2:** Shepherdstown Comprehensive Concept Plan

Our team will undertake the following tasks to plan and deliver a preliminary project design that meets the Scope of Work and timeline.

After executing a contract, we will immediately organize a kickoff meeting with the Corporation of Shepherdstown representatives and any other appropriate stakeholders. The primary objectives of this meeting are to:

1. introduce our team to key project participants;
2. manage project expectations and thoroughly discuss the proposed scope of work, timeline, and a pathway to completion;
3. better understand the Corporation's priorities, capacity, and stormwater problem areas;
4. share existing relevant community plans and studies;
5. develop a short list of publicly owned properties where GI practices can be installed; and
6. identify methods for stakeholder engagement, including a community engagement workshop.

### 6.1 Sprint 1: St. Agnes Campus Green Infrastructure Concept Plan

#### 6.1.1 Task 1: Develop preliminary St. Agnes green campus concept plan

Based on the feasibility of incorporating stormwater practices on the St. Agnes campus, Downstream Strategies will develop and evaluate preliminary design concepts that respects the character of St. Agnes Catholic Church, while providing the greatest benefit in flood protection.

#### 6.1.2 Task 2: Present preliminary concepts

The above-mentioned plan will be presented to representatives of Shepherdstown, St. Agnes, and other stakeholders at a GI workshop. This will be an opportunity to learn more about GI, provide input, and ask questions.

If parties are interested in proceeding, any comments and feedback will be integrated into a final Conceptual St. Agnes Green Campus report, to be completed in a future Scope of Work.

## 6.2 Sprint 2: Shepherdstown Comprehensive Concept Plan

### 6.2.1 Task 1: Perform community watershed survey and data collection

Downstream Strategies will conduct an analysis of Shepherdstown's drainage area, topography, and land cover to understand potential flooding hazards and create an overview profile of the community and watershed.

### 6.2.2 Task 2: Create list of candidate green infrastructure sites

A desktop review of any installation constraints such as public ownership, flooding hazards, utilities, rights of way, and easements will be conducted to generate a list of feasible sites for GI best management practices that address not only flash flooding and pollution, but also community priorities.

Candidate sites will be ranked based on prioritization criteria developed in collaboration with Shepherdstown. Criteria may include, for example, stormwater volume capture, ease of implementation, and pollution reduction.

All candidate sites will be formally cleared by MISS Utility (WV 811) to ensure that proposed GI practices will not damage existing infrastructure.

#### Incorporating GIS

Downstream Strategies is a leader in geospatial data integration and routinely uses a variety of ESRI tools. We will use GIS as a cartography tool to produce visually engaging maps to support the workshop and final report. Key features of these maps may include land cover, soils, watershed boundaries, topographic/contour data, and property boundaries.

We will create visual tools that are tailored to sharing on screen and printed on large maps to use in community workshops and stakeholder presentations.

Additionally, we also have considerable experience creating interactive web-based maps and will integrate all maps into the GI plan using hyperlinks. Readers of the electronic version of the final GI plan will be able to click on the links and immediately access web maps, where they can manipulate data layers, change base maps, and explore in a manner not available in a paper or traditional PDF report.

### 6.2.3 Task 3: Develop conceptual green stormwater infrastructure design options

Based on feasibility of incorporating stormwater practices on these sites, Downstream Strategies will develop and evaluate preliminary design concepts that respect the unique character of Shepherdstown, while providing the greatest benefit in flood protection and pollution reduction. These options will be presented to the town to gauge their preferences in visual aesthetics, level of maintenance, functionality, and other factors. We will incorporate Shepherdstown's feedback as we draft the plan.

Once the conceptual options have been integrated on each candidate site, Downstream Strategies will present these options to the Shepherdstown. This will be an opportunity for community officials to provide input and ask questions, prior to engaging the public.

### 6.2.4 Task 4: Hold community and stakeholder workshop

Downstream Strategies, in coordination with Shepherdstown, will develop the agenda, invitation list, and invitation flyer for a workshop to unveil GI concept projects and locations. Additional topics to consider for the workshop include:

- Stormwater Management 101



- GI Basics and Benefits
- Low Impact Development and Green Streets Examples
- The Dig Once Approach – Integrating GI into Capital Improvement Projects
- Green Infrastructure Finance, Grants, and Capacity

Downstream Strategies can also conduct a tour of candidate sites. During this tour, participants can provide input on favorable examples of GI practices that may be applicable at each site. Our goal for this meeting will be to gain community support for the project.

#### **6.2.5 Task 5: Draft green infrastructure report**

We will take the lead in writing and editing the GI report. We have decades of experience writing technical reports that make the complex understandable to readers. We do this by integrating tables, charts, maps, and photos; by using graphic design tools; and by including an executive summary. We also take pride in our editing skills that allow us to produce professional work products that will reflect well on Shepherdstown.

The report will include:

- community background;
- key community issues related to GI, including strengths and challenges;
- a summary of the stakeholder workshop and site tour, including a list of participants;
- opportunities to advance GI in the community, as identified by the stakeholders;
- site prioritization for conceptual designs;
- conceptual designs and associated Chesapeake Bay pollutant load reductions and flood risk reductions; and
- next steps for GI implementation such as financing, permitting, material suppliers, and policy development.

The draft will be available for review by representatives and project stakeholders. Downstream Strategies encourages comments and feedback to create the best plan possible.

#### **6.2.6 Task 6: Finalize the green infrastructure report**

Based upon feedback on the draft report, we will edit the report and produce the final plan in Word and PDF formats. Upon request, supporting data and analyses will be provided in Excel format, and a PowerPoint slide deck will be created for use in future public presentations.

#### **6.2.7 Task 7: Hold project closeout meeting**

During the project closeout meeting, we welcome the opportunity to discuss next steps for successfully implementing the report. We will share case studies on how other communities in West Virginia have leveraged various funding and finance options for GI implementation.

## 7. TIMELINE

Our team can begin work immediately after a contract is signed.

Our team is aware of related funding opportunities available in March 2023 through the National Fish and Wildlife Foundation and other sources that Shepherdstown may wish to pursue based on the findings from this project. For this reason, we propose an expedited timeline for completing the study.

Our team offers a level of agility and responsiveness that is rare to find at a larger firm or those based outside the region. We recognize the need to move expeditiously to meet the timeline and are prepared to meet the task.

## 8. BUDGET

For this project, we anticipate an average charge rate of \$118 per hour on the tasks described in this proposal.

Based on our team's experience on similar projects and the anticipated timeline, we present the following cost estimate for the services detailed in this proposal. Our budget includes \$250 for incidental expenses, including mileage and printing costs for presentation materials.

Task	Proposed cost
<b>Sprint 1 Tasks</b>	
Kickoff meeting	\$650
Develop preliminary St. Agnes green campus concept plan	\$3,600
Present preliminary concepts	\$1,100
Expenses	\$120
<b>Sprint 1 Total</b>	<b>\$5,470</b>
<b>Sprint 2 Tasks</b>	
Perform community watershed survey and data collection	\$ 1,800
Create list of candidate green infrastructure sites	\$ 900
Develop conceptual green stormwater infrastructure design options	\$ 4,600
Hold community and stakeholder workshop	\$ 1,600
Draft green infrastructure report	\$ 5,700
Finalize the green infrastructure report	\$ 4,300
Expenses	\$130
<b>Sprint 2 Total</b>	<b>\$19,030</b>
<b>TOTAL PROJECT COST</b>	<b>\$24,500</b>

## 9. REFERENCES

**Jim Auxer**

*Mayor, Corporation of Shepherdstown*

(304) 876-2605, [jimauxer@yahoo.com](mailto:jimauxer@yahoo.com)

**Ron Davis**

*Town Administrator, Town of Paw Paw*

(304) 947-7476, [rdavis@townofpawpaw.com](mailto:rdavis@townofpawpaw.com)

**Jeff Wilkerson**

*Public Works Director, City of Martinsburg*

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**Scott Merki**

*Mayor, Town of Bath*

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**Bill Clark**

*County Commissioner, Morgan County*

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## **ATTACHMENT A: RESUMES FOR KEY STAFF**

# Matthew Pennington

Senior Planner

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## Profile

Mr. Pennington is an environmental, community, and economic development planner with extensive expertise helping local governments and organizations balance economic and population growth with the preservation of natural resources. He is an award-winning stormwater professional and focuses on comprehensive planning, stakeholder facilitation, green infrastructure implementation, hazard mitigation actions, and securing grants for community projects and programs.

## Skills and Experience

Served for 10 years as Environmental Program Coordinator for the Eastern Panhandle Regional Planning and Development Council in Martinsburg, West Virginia, chaired the Chesapeake Bay Local Leadership Workgroup, served as a liaison to the Bay's Local Government Advisory Committee, and played a leadership role in West Virginia's Chesapeake Bay Restoration Team.

Facilitated and authored comprehensive and strategic planning efforts that engaged diverse stakeholders to better capture and represent the entire community's vision.

Managed regional programs in collaboration with local, state, federal, and nongovernmental organizations to meet Clean Water Act and Clean Air Act responsibilities.

Listened to the priorities of and assisted local governments with the development of on-the-ground actions and policies to mitigate and reduce pollution and other natural hazards, such as flooding, while balancing growth

Nurtured relationships across a variety of sectors, to understand their common goals and promoting environmental best management practices to complement each organization's mission and resolve their shared issues.

Assisted with brownfield redevelopment, community revitalization, and market analysis projects.

Oversaw the design and development of green infrastructure plans.

Managed field installations, including tree plantings, rain gardens, and streambank stabilizations.

Innovate co-beneficial programs that repurpose abandoned mine lands for apple orchards in Appalachia while restoring the Chesapeake Bay watershed.

Designed and managed regional workforce development initiatives with educational institutions, community organizations, and employers.

Coordinated and facilitated community focused educational workshops.

Developed proposals and secured grants for community- and regional-scale projects throughout the mid-Atlantic region.

Researched, developed, and presented findings on state legislative policies.

## Provided economic impact analysis for multiple development projects across Appalachia. Education

B.S., Urban and Regional Planning, Frostburg State University, Maryland. 2004.

## Representative Publications

Pennington M. 2022. Comprehensive Economic Development Strategy, 2022-2026. Prepared for the Region VI Planning and Development Council

Pennington M. 2019. Comprehensive Economic Development Strategy, 2019-2023. Prepared for the Eastern Panhandle Planning and Development Council (Region 9).

Pennington M. 2017. Town of Bath Comprehensive Plan. Prepared for the Town of Bath, West Virginia.

Pennington M et al. 2019 Chesapeake Bay Watershed Implementation Plan, Phase III. Prepared for the W. Va. Department of Environmental Protection and U.S. Environmental Protection Agency Chesapeake Bay Program.



# Evan Hansen

President

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## Profile

Mr. Hansen founded Downstream Strategies in 1997. He explores resource and environmental problems and solutions related to energy and water science and policy. Mr. Hansen manages interdisciplinary research teams, performs quantitative and qualitative analyses, provides training, and provides litigation support and expert testimony. He has completed numerous local planning projects across West Virginia,

## Skills and Experience

Overseeing the development of a Source Water Protection Plan and ongoing source water protection activities.

Considerable experience working with watershed organizations and agencies on Clean Water Act and Surface Mining Control and Reclamation Act issues such as permits, TMDLs, antidegradation, and watershed-based plans.

Organized and conducted training workshops for watershed organizations and permittees to promote informed public participation and permit compliance.

Provided expert testimony before appeals boards on NPDES and coal mining permits, before the West Virginia Public Service Commission on water quality issues, and in federal court.

Managed projects related to local economic benefits of acid mine drainage remediation and wind power development.

Researched opportunities for landfill gas-to-energy projects and the generation of carbon credits.

Developed and applied computer models to help clarify solutions to environmental problems.

Served on several committees that help set water-related policies at the state and local levels.

Interfaced effectively with government agencies.

Provided consulting services in Zimbabwe, South Africa, Zambia, Tanzania, Namibia, China, and Egypt.

## Education

M.S., Energy and Resources, University of California, Berkeley, 1997. This interdisciplinary program combines environmental science, public policy, economics, and engineering.

B.S., Computer Science and Engineering, Massachusetts Institute of Technology, 1988.

## Representative Publications

Betcher M, Hansen E. 2015. Conservation Easements as a Strategy for Drinking Water Protection, Lewisburg, West Virginia. Downstream Strategies and W. Va. Land Trust. July 13.

Boettner F, Hansen E, Ashby B, Clingerman J, Lamont S, Askins N, Knight L. 2013. Pocahontas County Water Resources Management Plan: State planning requirements for inclusion into the West Virginia Water Resource Management Plan. Submitted to the West Virginia Department of Environmental Protection. Submitted by the Pocahontas County Water Resources Task Force. Oct 31.

Hansen E, Zegre S, Hereford A. 2011. Elk headwaters watershed protection plan. Submitted to West Virginia Department of Environmental Protection. Downstream Strategies.

Hansen E, Hereford A, Boettner F, Zegre S. 2010. Plants not pipes: promoting green infrastructure and its side benefits in Region VI. Prepared for Region VI Planning and Development Council. Downstream Strategies.

Boettner F, Hereford A, Hansen E, Merritt A, Burns D. 2009. Watershed-based plan: Muddy Creek of the Greenbrier River, West Virginia. Downstream Strategies.

## Kasey Osborne

Staff Scientist

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## Profile

Ms. Osborne has broad experience in natural resources, ecology, wildlife biology, scientific and public communication, outreach, and geospatial information science. She has worked in various capacities with university research affiliates, state agencies, and private entities. She aims to cultivate a sustainable and interconnected environment and economy through promoting scientific literacy and joining research with place-based development and policy.

## Skills and Experience

Authored and designed a National Geographic-sponsored report that examined the use of a novel geospatial algorithm to assess reforestation on former Appalachian mine sites.

Served as lead author and conducted outreach of a report discussing energy building codes in West Virginia as part of an Office of Energy energy efficiency initiative.

Help catalog and analyze various outdoor recreation, tourism, and arts assets and opportunities for Appalachian localities and organizations.

Support ongoing activities for source water protection, including geospatial database, water quality data, map, and documentation updates.

Assist with market and economic impact analyses and feasibility studies for a range of project concepts and entities.

Contribute to an annual report of innovative abandoned mine land reuse projects.

Used bioacoustics tools and software for wildlife and ecological analyses.

Developed and taught material for several college-level courses, including introductory biology, general composition, rhetoric and research, and technical writing.

Educated the public and science professionals in wildlife biology, management techniques, ecology, and environmental science topics through workshops and other outreach events.

Experienced in various field work practices, including wildlife trapping and tracking and environmental monitoring and assessment.

Organized and managed an integration project to consolidate and geocode commercial, oil and gas, and industrial construction projects from multiple databases for a private company.

Assisted in data collection and project management for a spatially explicit phenology database for a West Virginia-based climate history study.

Assisted in a variety of wildlife management and habitat restoration projects with state agencies and NGOs.

Helped write, prepare, and copy books, grant extensions and narratives, academic articles, and technical documentation.

## Education

M.A., Professional Writing and Editing, West Virginia University, Morgantown, 2019. Focus in scientific and technical writing.

M.S., Biological Sciences, Marshall University, Huntington, 2017. Focus in conservation, soundscape ecology, energy development, and geographic analysis.

Certificate, Geospatial Information Science, Marshall University, Huntington, 2017.

B.S., Wildlife and Fisheries Resources, Minor in Conservation Ecology, West Virginia University, Morgantown, 2015.

## Representative Publications

Cottingham S, Osborne K. 2021. River Cities Redevelopment Roadmap. Prepared for the Upper Kanawha Valley Strategic Initiatives Council.

Osborne K, James J, Hansen E. 2021. West Virginia Energy Code Primer. Prepared for the West Virginia Office of Energy.



**AN ORDINANCE RE-ENACTING  
SECTION 11-405 OF CHAPTER 4 OF TITLE 11 OF THE  
CODE OF SHEPHERDSTOWN, WEST VIRGINIA,  
TO PROHIBIT DRIVEWAYS THAT CROSS PUBLIC SIDEWALKS**

THE SHEPHERDSTOWN TOWN COUNCIL ORDAINS:

Chapter 4 of Title 11 of the Town Code is hereby amended by amending and re-enacting Section 11-405, now entitled "Prohibition of driveways across sidewalks", to prohibit driveways that cross public sidewalks. Accordingly, there is amended and re-enacted Section 11-405 of Chapter 4 of Title 11 to read as follows:

Section 11-405 Prohibition of driveways across sidewalks.

Driveways across sidewalks are prohibited.

First Reading: \_\_\_\_\_

Second Reading: \_\_\_\_\_

Adopted: \_\_\_\_\_

#### Section 11-405 Driveways across sidewalks

Any person desiring a driveway across the sidewalk of his premises shall cause the sidewalk to be paved with cement or other material designated by the street commissioner and shall, when required by the street commissioner, replace the curbstone that may be injured or destroyed by the use of such driveway.

#### Section.11-406 Animals and vehicles prohibited on sidewalks

(a) It shall be unlawful for any person to drive any vehicle or to ride, drive, or to lead any horse or other beast of burden along or across any sidewalk in the town, except upon such part of any sidewalk as may be made for crossing thereof.

(b) It shall be unlawful for any person owning or having charge of a horse, cow, or mule to hitch such animal on, or to suffer any such animal to lie on, feed on, or befoul any sidewalk in the town.

#### Section 11-407 Prohibited accumulation of snow, ice and debris on sidewalks and removal thereof by town at expense of property owners

(a) No person shall permit the accumulation of snow or ice upon the sidewalk adjacent to any property owned or occupied by him within the town, but shall remove the same within a reasonable time not later than 9:00 a.m., and 4:00 p.m., each day that snow or ice accumulates thereon.

(b) No person shall permit the accumulation of trash, debris or anything unsanitary upon the sidewalk adjacent to any property owned or occupied by him within the town, or within five feet of any such sidewalk.

(c) Upon the accumulation of any snow, ice or debris upon any sidewalk or within five feet of any sidewalk in violation of this section the town, if the owner or occupant of the adjacent property fails to do so upon notice, may remove such snow, ice or debris and the expense of such removal shall be charged to the owner of such adjacent property and shall constitute a lien upon such property.

### CHAPTER 5 - Streets and Public Places

#### Section 11-501 Person to be designated as street commissioner

The mayor shall, with the advice and consent of council, designate someone as street commissioner.

#### Section 11-502 Work on streets to be under supervision of street commissioner

All work done on streets of the town shall be under the supervision and direction of the street commissioner.





**CORPORATION OF SHEPHERDSTOWN  
FALL CLEAN-UP WEEK  
NOVEMBER 7-11, 2022**

**\*\*\*\*\*Pick-up applies to Town residents only! \*\*\*\*\***

One pickup truck load per residence. All items are to be placed at the regular pick-up site. Please separate metal materials.

- Items with Freon, such as refrigerators, air conditioners and dehumidifiers will be collected at a cost of \$50.00 per item.
- Passenger tires (under 15") will be collected at a cost of \$5.00 per tire. Tires (over 15") will be collected at a cost of \$10.00 per tire.
- Televisions will be collected at a cost of \$40.00.

Notice: the above-mentioned items must be reported and paid to the Billing Clerk at Town Hall at 104 N. King Street prior to pick-up.

- Prohibited materials: Building materials, concrete, dirt/rock/sod, paint, batteries, hazardous or dangerous materials, propane/oil/gas tanks, medical/commercial waste, and computers.

If you have any questions, please contact Town Hall at 876-2574 from 8:00 a.m. to 4:00 p.m.