



Homeowner Interview and Site Assessment (HISA)

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Watershed Stewards Improve Water Quality In Local Streams

Goals of Master Watershed Stewards:

- ▶ Reduce amount of stormwater flowing into local streams and lakes.
 - ▶ “Slow the Flow” “Soak it up”
- ▶ Reduce level of pollutants entering the local streams and lakes.
 - ▶ In Howard County we work to reduce the Nitrogen, Phosphorus and Sediment entering our streams and lakes (our pollutants as identified by EPA).

HISA (Homeowner Interview and Site Inspection) is one tool we use to achieve our WSA goals.

HISA Steps

- ▶ 1. **Pre-Assessment:**
 - ▶ Receive and respond to request
 - ▶ Prepare for Homeowner Interview and Site Assessment
- ▶ 2. **Visit to Homeowner's property: Interview and Site Assessment**
- ▶ 3. **Opportunities for Pollution Source Reduction and Retrofits**
- ▶ 4. **Written report to Homeowner**
- ▶ 5. **Behind the Scenes**

Receive / Respond to Request

- ▶ HISA Request:
 - ▶ In-Person contact / Phone / Outreach events / Email / and Website.
 - ▶ Ask client to submit information via the website.
<https://www.howardwsa.org/>
 - ▶ Usually there is a button on the website to get the online form to request a HISA.
 - ▶ BUT NOW the website says: **“We are not accepting requests for neighborhood and homeowner inspections while we limit personal contact to help minimize the impact of the Corona virus. We will resume when it is advisable; hopefully soon. Stay safe.”**

Receive/Respond to Request, cont.

- ▶ In general, the client requesting the HISA will enter the required information, via the website, but Stewards can help as needed (and so noted in form).
- ▶ Requested information: name, address, email address, phone number, best time to reach client, description of problem
- ▶ A request for a HISA is an invitation from the homeowner to have a Seward assess the site.
- ▶ All requests are entered into an excel spreadsheet for recordkeeping (Behind the Scenes).
- ▶ Stewards will be asked to assist in a HISA by MWS Jim Cimaglio (Behind the Scenes).

Preparations: Desk Work for a Assessment

▶ Residential Site Assessment

Homeowner: _____

Site Address: _____ Date: _____

Phone number: _____ E-mail: _____

Step 1: Pre Assessment - (HoCoWSA GIS application)

Watershed:

Subwatershed:

Distance to nearest stream:

Soil expected on site: A B C D Well/Septic or City Water/Sewer

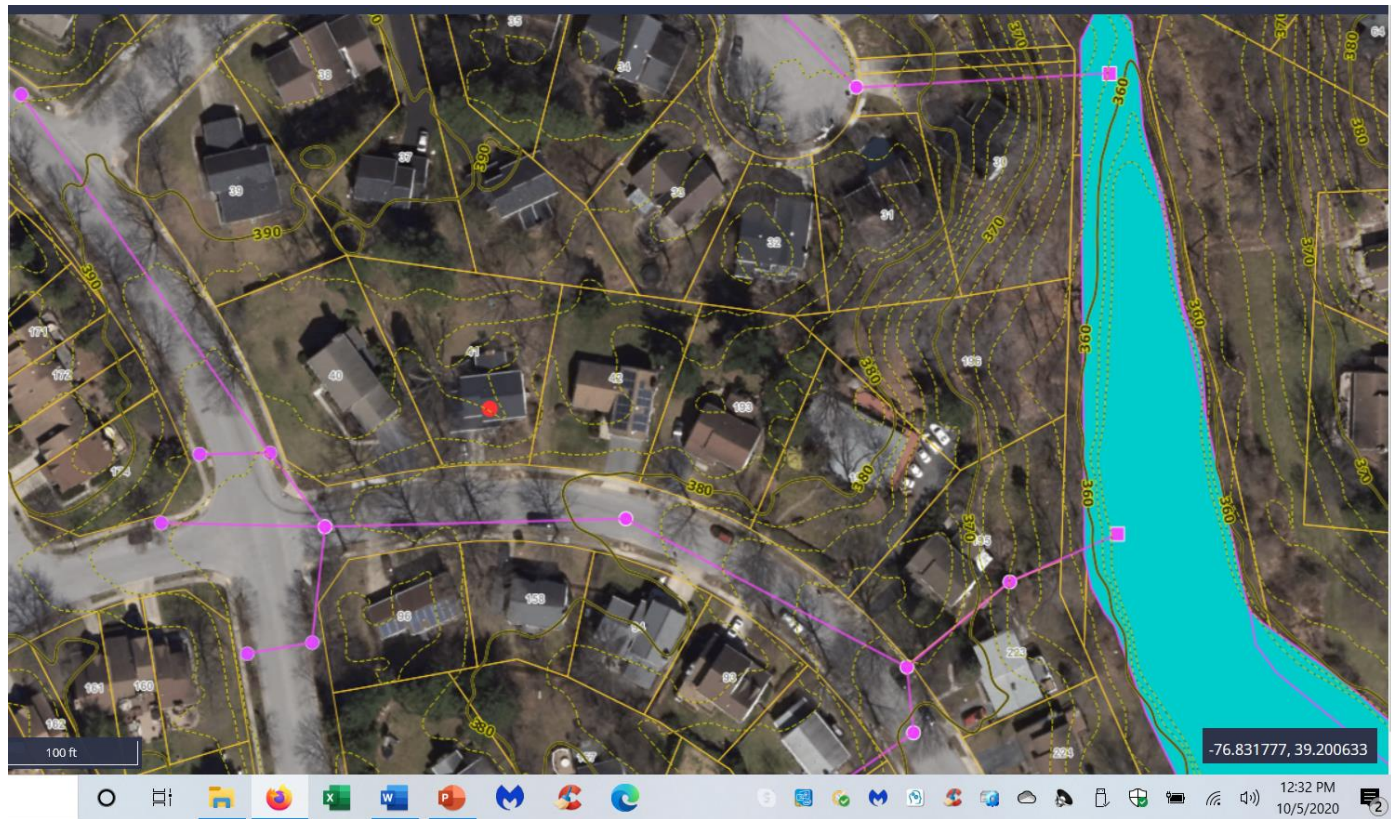
Impervious Surface: House _____ Driveway _____ Outbuildings _____

Optional: Look at terrain, land cover, storm drain infrastructure, utilities, stream assessment

Using HoCoWSA GIS, create 2 attachments:

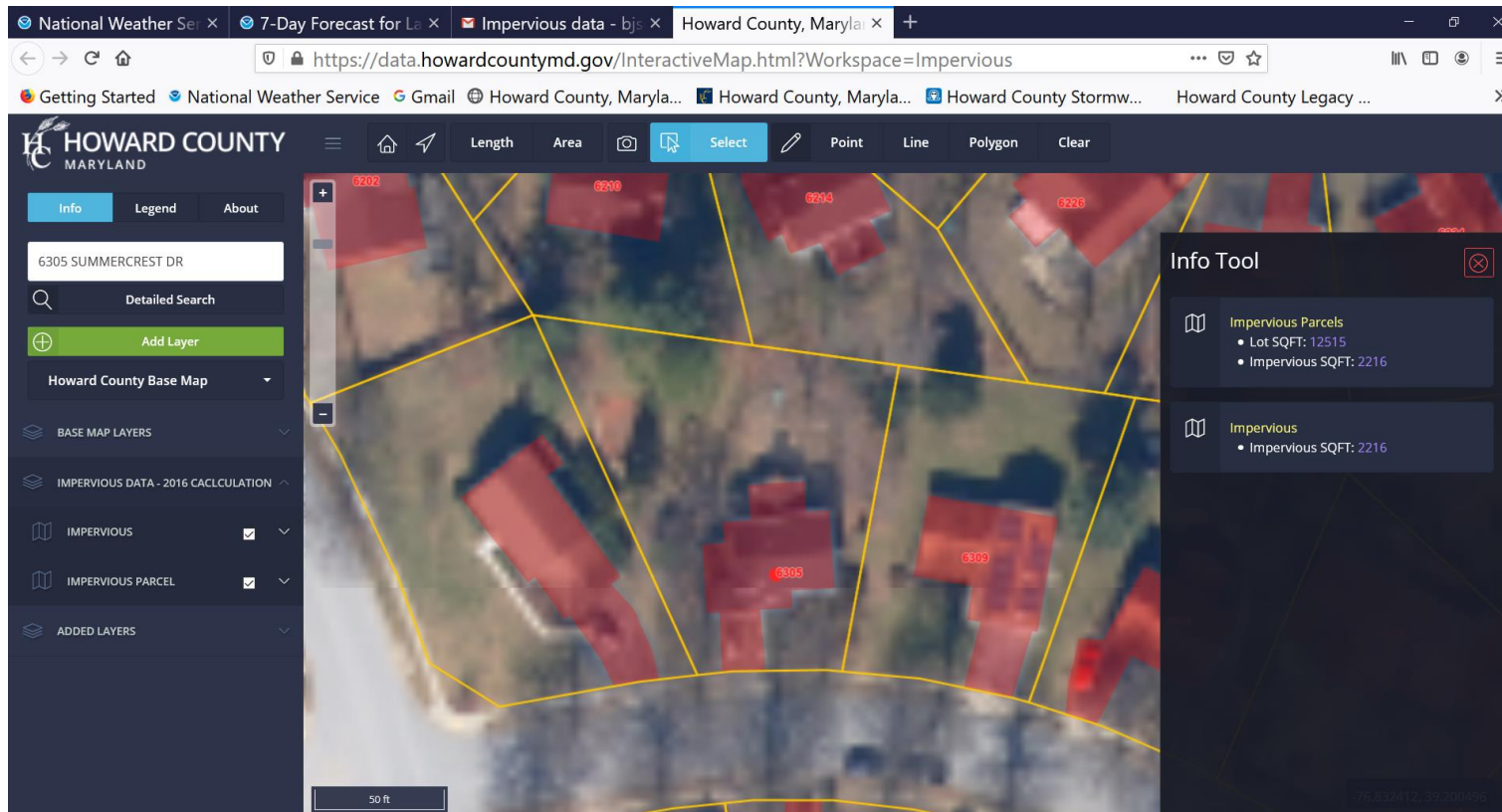
- 1) Aerial image of parcel, *with related storm drain system* (inlets, outfalls, streams)
- 2) a Plan View the parcel and buildings, for sketch

Aerial image of parcel, *with related storm drain system* (inlets, outfalls, streams)



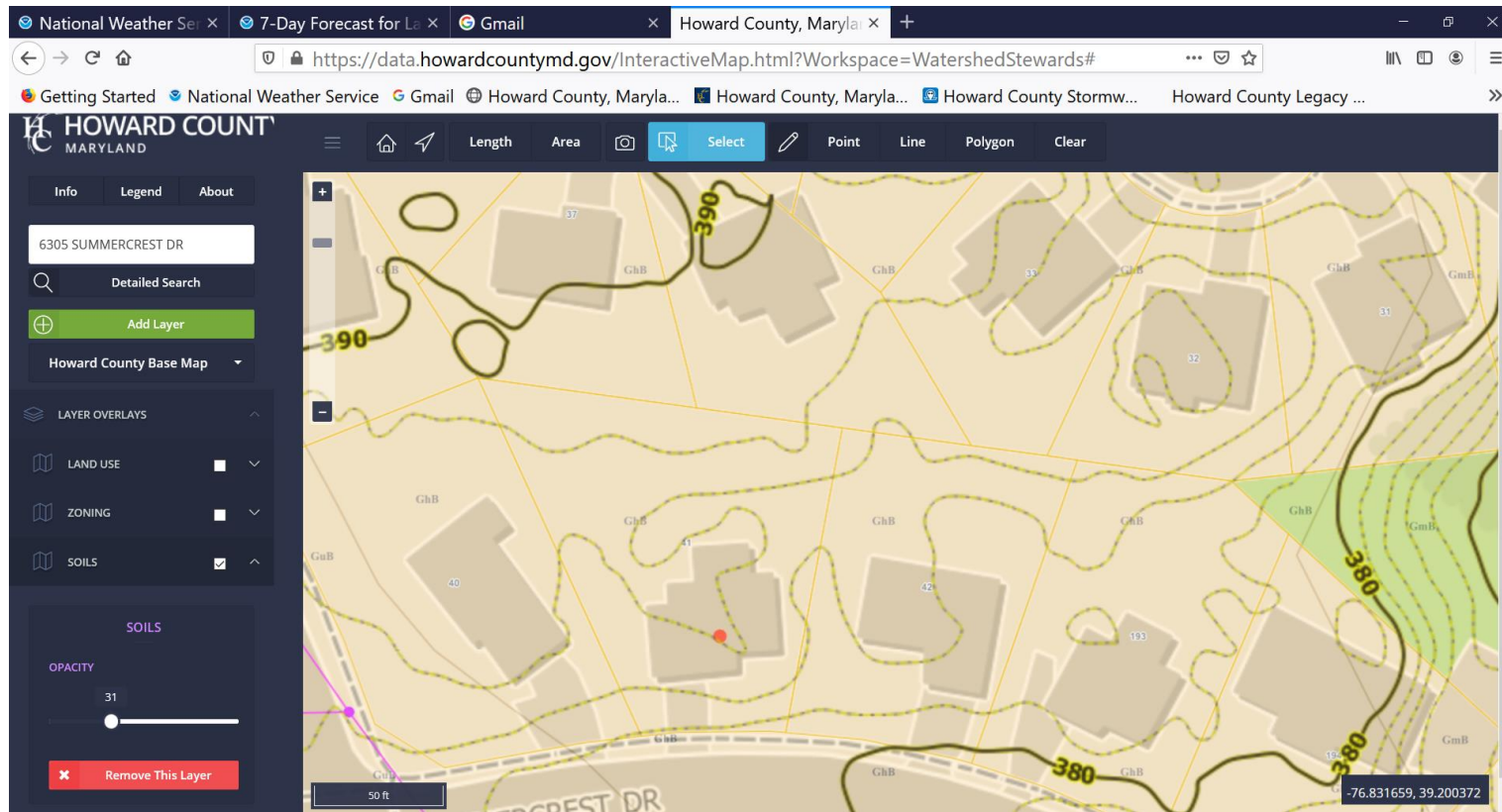
Impervious Surface

<https://data.howardcountymd.gov/InteractiveMap.html?Workspace=Impervious>



- Impervious Parcels
- Lot SQFT: 12515
- Impervious SQFT: 2216
- About 18% impervious

Plan View of parcel and buildings, with soil layer and contours (useful for sketches)



GhB Soil

MapUnit Name: Glenelg-Urban land complex, 0 to 8 percent slopes

Glenelg

- MapUnit Name: Glenelg-Urban land complex, 0 to 8 percent slopes
- **Component Percent: 45**
- Component Name: **Glenelg**
- Physical Percent Sand: 42.1
- Physical Percent Silt: 37.9
- Physical Percent Clay: 20
- **Water Hydrologic Grouping: B**
- Water Runoff Class: Low

Urban land

- MapUnit Name: Glenelg-Urban land complex, 0 to 8 percent slopes
- **Component Percent: 35**
- Component Name: **Urban land**
- Physical Percent Sand: null
- Physical Percent Silt: null
- Physical Percent Clay: null
- **Water Hydrologic Grouping: D**
- Water Runoff Class: Very high

Any Questions About the Pre-
Assessment Process ??

Visit to Homeowner's Property

- ▶ Introduce the WSA Team
- ▶ Ask Homeowner for Signature on document:
- ▶ **Informed Consent, Assumption of Risk, and Release of Liability Agreement for Performance of Homeowner Interview and Site Assessment**
 - ▶ This Document is on the Steward's Page of the HoCo WSA website
 - ▶ <https://www.howardwsa.org/stewards-page/>
 - ▶ Bring two forms, one for Homeowner and one for WSA records
- ▶ Return signed consent form to WSA Coordinator (Terry Matthews).
- ▶ If the homeowner does **not** consent to any of the items, then there will be no further site inspection. To my knowledge, no one has ever refused to sign.

Visit to Homeowner's property

Informed Consent, Assumption of Risk, and Release of Liability Agreement for Performance of Homeowner Interview and Site Assessment

Howard County Watershed Stewards Academy ("HoCoWSA") provides on-site assessment and consulting services (the "Activities") by Certified Watershed Stewards, WSA members, WSA associates and/or WSA volunteers, for the purposes of providing education, suggestions, and demonstrating stormwater runoff reduction methods.

In consideration for HoCoWSA's services and the right to participate in the Activities (including interviews and site assessments), I, on behalf of myself and, if applicable, my spouse, children, parents, guardians, next of kin, heirs, and any legal and personal representatives hereby represent and agree as follows:

Visit to Homeowner's property, cont.

1. I, [insert name] _____,
am the legal property owner and/or manager of the property located at [insert
address]

_____ (“the Property”).

2. I grant permission to HoCoWSA, its members, associates, and/or volunteers, to
engage in planned activities at my property including but not limited to:

*a) Assessing the Property for initial evaluation, follow-up evaluation, and data
collection;*

b) Performing the initial assessment of stormwater concerns;

*c) Performing other data collection and information gathering on the Property,
such as taking photographs, measurements, and samples (e.g., soil samples,
water samples), and performing applicable tests (e.g., infiltration testing).*

Visit to Homeowner's property, cont.

3. I understand and acknowledge that the Activities, like all activities, may involve health, safety, and other risks and hazards, both minor and serious, some of which may not be currently known or readily foreseeable and some of which may not be preventable ("Risks"). Such Risks include, but are not limited to, personal injury and property damage.

4. Knowing the Risks associated with the Activities, I voluntarily assume all responsibility and risk of loss, damage, illness, and/or injury to person or property that I may in any way sustain in connection with the Activities.

Visit to Homeowner's property, cont.

- ▶ 5. To the fullest extent permitted by law, I hereby release and forever discharge, and agree not to sue, and to indemnify and hold harmless HoCoWSA and its officers, agents, employees, and volunteers from and against any and all costs, liabilities, expenses, claims, demands, and causes of action of any kind on account of any loss, damage, illness, or injury to person or property in any way arising out of or relating to the Activities, whether due to negligence, default, or other action or inaction of any person or entity.
- ▶ **I certify that I am 18 years of age or older and that I have read and fully understand this informed consent, assumption of risk and release of liability agreement, and I sign it voluntarily with full knowledge of its legal significance.**
- ▶ Date: _____
- ▶ Signature: _____
- ▶ Printed Name:

- ▶ Site Address: _____
- ▶ (revised 11.6.19)

Any Questions About
**“Informed Consent, Assumption of
Risk, and Release of Liability
Agreement for Performance of
Homeowner Interview and Site
Assessment”**

??

Visit to Homeowner's property

- ▶ Use HISA form, either paper or on-line (<https://www.howardwsa.org/stewards-page/>)
- ▶ Teams of 2-3 Stewards make the HISA assessment easier by dividing up tasks.
- ▶ For example, the “lead steward” may do much of discussion with homeowner and another steward may take photos and another may be recording on the assessment sheet.
- ▶ There is no requirement for a certain number of stewards at the home.

Five Main Points of HISA Form

- 1. Homeowner Identified Issues:** describe and/or sketch on map and/or include photo(s). Information from request form plus interview with owner at site.
- 2. Note positions** of any utilities, such as electric, phone, heat pumps, etc. Photos are especially useful, if recommending a Best Management Practice (BMP) where there is a near-by utility.
- 3. General Site Conditions:** Soil, Sun, Vegetation, Terrain, Water Flow (Observed Flows, Ponding, Downspout Locations)
- 4. Summary of Pollution Sources**
- 5. Opportunities for Retrofit**

HISA FORM

General Information

Date_____ Assessed by_____

Homeowner Name_____

Address_____

Phone _____ Email _____

Homeowner Association: _____

Watershed_____ Subwatershed_____

Observed Weather Conditions_____

Rain in the past 24 hours? Yes / No (circle one)

Home has: City Water_____
Sanitary Sewer Service_____

Well Water_____
Septic System_____

(sketch drainage field, if known)

Homeowner Identified Issues: describe and/or sketch on map and/or include photo(s)

HISA FORM, cont.

Soil Description

Soil Type (non-Urban) (Example: GhB, Glenelg Urban Land complex) and components (list all) from Howard County soil table/GIS. Use the Name and Description of each component.

Name of component

GhB Glenelg

% Sand 42.1

% Silt 37.9

% Clay 20.0

Water Hydrologic Grouping:

% A __; %B 45; %C __; %D __

Name of component

% Sand _____

% Silt _____

% Clay _____

%A __; %B __; %C __; %D __

Name of component

% Sand _____

% Silt _____

% Clay _____

%A __; %B __; %C __; %D __

Urban soil (% of total soil) 35 [Urban Soil is always a type D soil].

High groundwater (e.g., wet spot during dry weather)?

Describe: _____

HISA FORM, cont.

Sun: Describe light conditions on each side of the dwelling.

Use these descriptions:

Full Sun (at least 6 hours of full sunlight)

Partial Sun (3 – 6 hours of sunlight)

Shade (less than 3 hours of sunlight)

Mixture

Examine each side of house identified as East, West, North, South (or Front, Back, and Right, Left, when facing Front).

For example: East, Full Sun morning and afternoon

West, Partial Sun late morning and afternoon

North, Shade most of day

South, Full Sun all day

HISA FORM, cont.

Vegetation

Description (Indicate on map, as needed)

Mature trees (% of Property: _____)

Are trees mulched to drip line? Yes / No % of trees so mulched? _____

Lawn/Turf grass (% of Property: _____)

% of lawn that is healthy turf grass _____

% of lawn that is mixture of grasses, including non-turf grasses _____

% of lawn that is mixture of grasses and broadleaf weeds _____

Other comments _____

Bare Spots (% of Property: _____)

Invasive species (% of Property: _____)

Mulched beds (shrubs, herbaceous plants) (% of Property: _____)

Does homeowner use a lawn service for fertilization, weed control and lawn maintenance? Yes / No

If Yes, how often? _____

Does homeowner use a lawn service for pest control? Yes / No

If Yes, how often? _____

Has homeowner had a recent soil test (within last 3 years)? _____

If property is governed by Columbia Association, explain availability of free soil test.

HISA FORM, cont.

Terrain

Description (show contours on aerial image of property)

_____ Steep Slopes (greater than 8 - 10%)

_____ Moderate Slopes (<8%)

_____ Flat (0-3%)

HISA FORM, cont.

Water Flow: Observed flows (document with sketch or photo)

Description (Indicate on map, with sketch or photos)

Are eroded areas visible on property? Yes / No

Is there evidence of debris deposited on property? Yes / No

Does Homeowner see stormwater creating “streams” on his property? Yes / No

Does Homeowner see concentrated stormwater running into the street? Yes / No

Does Homeowner see concentrated stormwater running into a nearby stream? Yes / No

Does Homeowner see concentrated stormwater entering his site? Yes / No

HISA FORM, cont.

Water Flow: Ponding (document with sketch or photo)

Description (Indicate on map, with sketch or photos)

Does Homeowner see pond(s) on his property caused by stormwater? Yes / No

If yes, where does it form?

If yes, how does homeowner describe size and duration of pond?

Document any evidence of problem(s) (sketch or photo of area).

Is ponding a severe problem (e.g., can mosquito eggs mature to adults before pond disappears)? Yes / No

HISA FORM, cont.

Water Flow: Downspout locations (indicate each downspout on map, in *Site Information* section of report for homeowner)

Description (Indicate on map, with sketch or photos)

Number of downspouts:

discharging to an impervious surface_____

discharging onto grass _____

discharging onto bare soil ____

discharging into garden beds or rain gardens ____

discharging into the ground ____

where the discharge point is unknown_____

HISA FORM, cont.

Opportunities for Pollution Source Reduction and Retrofits

Opportunities for Retrofit

Howard County CleanScapes program (reimbursable and creditable)

<https://www.cleanwaterhoward.com/what-is-your-role/residential-properties/cleanscapes>

1. Rain Garden
2. Conservation Landscaping
3. Rainwater Harvesting
4. Permeable Pavers
5. Tree Canopy Expansion
6. Dry Wells
7. Pavement Removal

Other sources of funds for retrofits include grants and cost-share programs.

HISA FORM, cont.

Opportunities for Pollution Source Reduction and Retrofits

Howard County Septic Savers Program

Septic Savers is a program that aims to promote proper septic maintenance. The county offers a **\$100 reimbursement** to residents who pump their septic tanks every 3-5 years.

<https://www.cleanwaterhoward.com/what-is-your-role/residential-properties/septicsavers>

HISA FORM, cont.

Opportunities for Pollution Source Reduction and Retrofits

Other Practices to aid in reducing water flow and pollutants:

Pick up pet waste on personal property.

Follow MD's Lawn Fertilizer Law:

<https://mda.maryland.gov/Pages/fertilizer.aspx>

Install small Conservation Landscape, e.g., less than 150 sq ft. and, therefore, not eligible for CleanScapes program; use similar techniques in construction.

Downspout-disconnect and/or diversion of water (e.g., directing water from downspout into a garden rather than allowing water to run down the driveway).

Dry Creek Bed or Bioswale (conveyance to a BMP).

Questions on HISA Form??

Written Report for Homeowner

Things to Consider when writing the report

1. Describe stormwater mitigation plan, including pollution source reduction and stormwater infiltration. It may be useful to consider a plan for each downspout.
2. If a rain barrel is a suggested practice, include information in the narrative report about how to obtain, use and maintain a rain barrel. Key point: **empty rain barrel before a storm**, so first flush of stormwater can be collected.
3. If a dry well, conservation landscape or rain garden is recommended, include resources for construction and maintenance.
 - <https://www.cleanwaterhoward.com/>
4. Suggest or perform an infiltration test, if an in-ground BMP is suggested .
5. Use property size to suggest appropriate BMPs and programs for potential Howard County reimbursement and Watershed Protection Fee credit. Other sources of funds are also available, during certain periods.

Written Report for Homeowner

Narrative Report of HISA and Recommendations for SWM BMPs

The narrative report will be the document transmitted to the client.

Please note: Some Stewards include the information collected in the HISA consultation in the final report. Others choose relevant information from the HISA consultation as appropriate for the recommendations.

The HISA form and supporting documents to accompany the narrative review should include the documents generated during the pre-assessment:

Aerial image of parcel, showing contours, property lines, soil information and, if available, storm sewer locations, with sketches and/or photos as needed.

Plan view of parcel and buildings, with sketches and/or photos and notations from site visit.

Additional sketches or photos of specific sites for BMPs, as needed to clarify suggestions. Pay particular attention to each downspout and possible nearby BMPs. Use identification number on maps and diagrams that are consistent with identification in narrative description of assessment and suggestions for BMPs.

Written Report for Homeowner

1. Send electronic copy of all assessment information (HISA form and narrative report for client, if these are separate) to **Terry Matthews**. He will distribute to **HISA Reviewers**, with a deadline for response (generally 5 working days, i.e., one week) for QC and comment.
2. After you respond to any review concerns, you will email the final report to the client.
3. At the time you send the report to the client, you should also send the HISA form (if not included in the finished report) and the finished client narrative report to WSA Coordinator (Terry Matthews).
4. Plan to follow up with client in 6 - 12 months, via email, to find out if any suggestions have been implemented.

Questions on Report to Homeowner??

Behind the Scenes: HISA Process Summary

Rationale

1. The County Office of Community Sustainability often recommends WSA and HISAs as a source of informed help on storm water management issues.
2. Tracking and maintaining HISA reports allows quantitative analysis and the use of the derived data in WSA-sustaining grants.

Process:

1. Assessment Request
2. Assignment of HISA by “HISA Coordinator” (WSA Coordinator or designee)
3. Duties of HISA Team Leader
4. Duties of HISA Supporting Steward
5. Duties after submission of final report to client

Behind the Scenes

Assessment Request

1. As noted at the beginning of this presentation, HISA Requests are added to the database via the web entry form (currently disabled).

Stewards have proxy right, if client is unable to complete web entry form.

2. A request constitutes an invitation from the homeowner to assess property.

3. The information in the request form is added to the HoCoWSA G-drive spreadsheet (Assessments Request Page).

4. *In non-suspended times, the spreadsheet is updated weekly:*

a. client's name, address, contact information

b. records of when the Steward contacts are made, dates of visits and markers of progress in preparing the final report.

Behind the Scenes

Assignment of HISA by “HISA Coordinator

HISA Coordinator: WSA Coordinator (Terry Matthews) or designee (Jim Cimaglio)

If possible, there should be a team of 2 stewards:

- a qualified “**HISA team leader**” to:
 - communicate with client,
 - establish date/time for assessment, and
 - be responsible for monitoring the progress of entire process)
- at least one other “**Support Steward**” to assist the team leader

Behind the Scenes

Assignment of HISA by “HISA Coordinator

- ▶ HISA Coordinator will find
 - ▶ a qualified Team Leader (experienced and willing);
 - ▶ Choice of Team Leader (TL) can be directed by client’s problems, home location (watershed) or personal interest of TL;
 - ▶ HISA Coordinator will inform Webmaster (Mike Calvert) and WSA Coordinator (Terry Matthews) which steward is the Team Leader, when the HISA was assigned, and who the HISA client is;
 - ▶ HISA Coordinator will provide oversight of the process after assignment to the HISA Team Leader, to ensure that the assessment moves along in a suitable timeframe.

Behind the Scenes

Duties of HISA Team Leader

- Communicate with client, establish date/time for assessment, and be responsible for monitoring the progress of entire process.
- Find, if possible, at least one steward (from the pool of stewards train in HISA) to help with the client's HISA.
- Report the client's name and the date of the On-site Assessment to the HISA Coordinator.
- **Promptly return original, signed *Release of Liability for Performance of Homeowner Interview and Site Assessment* document to WSA Coordinator for placement in UME files.**

Behind the Scenes

Duties of HISA Team Leader (cont.)

- Complete the HISA form and client narrative report, with input and assistance from support steward, within 15 working days (3 weeks) after the assessment.
- Submit the client's completed HISA form and narrative report electronically (simultaneously) to members of **WSA Advisory Committee (AC)**, **WSA Coordinator** and the **HISA Coordinator** for a review period (typically 5 working days).
- The Team Leader must ask a stormwater management professional review the reports.
- Others of the Advisory Committee may also comment. The **HISA Coordinator** will record the date of the submission for review.

Behind the Scenes

Duties of HISA Team Leader (cont.)

- Receive comments from reviewers and incorporate, as necessary, into the final narrative report.
- Send the final narrative report to **client** electronically.
- Send the final narrative report and final HISA document to **Webmaster and WSA Coordinator**.
- Plan follow-up with client (6-12 months).

Behind the Scenes

Duties of HISA Supporting Steward

- Assist HISA Team Leader as requested during the on-site assessment, for example:
 - by filling out HISA form,
 - taking photographs and
 - generally adding information to the assessment.
- Assist HISA Team Leader with preparing the final HISA report and final Narrative.

Behind the Scenes

After Submission of the Final Report

After submission of the final report to client:

- The HISA Coordinator, WSA Coordinator and Webmaster will collectively ensure that all data are recorded in the tracking spreadsheet.
- HISA Team Leader reports any follow-up with client to HISA Coordinator.