

**Green Stormwater Infrastructure**

Target	1	2 (all of 1 plus)	3 (all of 2 plus)	4 (all of 3 plus)
<b>LE 5.7 Preparedness</b>	Does not complete formative or summative in an effortful and timely manner, is not engaged, does not arrive on time with class materials ready to learn, does not communicate when issues arise	Completes formative or summative in an effortful or timely manner, is sometimes engaged, sometimes arrives on time with class materials ready to learn, sometimes communicates when issues arise	Completes formative or summative in an effortful and timely manner, remains engaged, arrives on time with materials ready to learn, communicates when issues arise	Completes formative or summative in an effortful and timely manner, remains engaged, arrives on time with materials ready to learn, communicates when issues arise, and is reflective on strengths and challenges within your preparedness skill
<b>LE 7.4 Connections</b>	Recognizes that multiple ideas may be connected	Recognizes that connecting multiple ideas may provide deeper meaning	Recognizes connection between multiple ideas, systems or solutions to construct meaning	Connects multiple ideas, systems or solutions that provoke meaning in novel ways (i.e. demonstrating empathy by synthesizing complexity, metaphoric thinking, applying patterns)
<b>Hydro 11/12 Project</b>	I can <b>identify</b> ways human activities amplify negative aspects of runoff	(all of 1 plus) I can <b>identify</b> broad solutions to mitigate runoff	(all of 2 plus) I can <b>evaluate/assess</b> issues specific to our region that pertain to humans' contribution to runoff and I can propose specific solutions to mitigate the associated negative effects	(all of 3 plus) Nailed it! <i>Depth and/or breadth</i>

**Part I:** What do you know already? Discuss with your group and record ideas

- What is stormwater runoff?
  
- What pollutants can be transported in stormwater?
  
- What strategies have you seen that are used to move or collect stormwater runoff?
  
- Why are people concerned about pollution from stormwater runoff?

**Part II:** Important Background Information

Point Source Pollution	Non-Point Source Pollution

**Think about the water cycle...what aspects of the water cycle can we slow down or speed up to reduce non-point source pollution?**

Gray Stormwater Infrastructure	Green Stormwater Infrastructure
Effects:	Effects:

**Part III: Analyze Green Stormwater Infrastructure**

At your station (or using the handout) read the Green Stormwater Infrastructure Fact Sheet ([https://anrweb.vt.gov/PubDocs/DEC/WSMD/stormwater/docs/sw\\_gi\\_2.0\\_GSI\\_series.pdf](https://anrweb.vt.gov/PubDocs/DEC/WSMD/stormwater/docs/sw_gi_2.0_GSI_series.pdf)) and summarize the information in the spaces below

**1. Green Stormwater Infrastructure Concept:** \_\_\_\_\_

**What is it?**

**How can it assist in the management of stormwater?**

**How can we put the concept to work? (*list and describe*)**

**2. Green Stormwater Infrastructure Concept:** \_\_\_\_\_

**What is it?**

**How can it assist in the management of stormwater?**

**How can we put the concept to work?**

**3. Green Stormwater Infrastructure Concept:** \_\_\_\_\_

**What is it?**

**How can it assist in the management of stormwater?**

**How can we put the concept to work?**

**Part IV:** Visit some Stormwater Infrastructures on the MHS Campus and identify them as Gray or Green. If they are Green, identify them as addressing Infiltration, Evapotranspiration or Storage & Reuse

1. Rainbarrels

**Gray or Green**

**If Green:** Infiltration, Evapotranspiration or Storage & Reuse (*circle*)

- If *green*, can you identify and grey infrastructure that the school uses to solve the same problem. If so what is it. \_\_\_\_\_
- If *grey*, what would be a green alternative?

2. Greenhouse Rainwater Collection System

**Gray or Green**

**If Green:** Infiltration, Evapotranspiration or Storage & Reuse (*circle*)

- If *green*, can you identify and grey infrastructure that the school uses to solve the same problem. If so what is it. \_\_\_\_\_
- If *grey*, what would be a green alternative?

3. MHS Rain Garden

**Gray or Green**

**If Green:** Infiltration, Evapotranspiration or Storage & Reuse (*circle*)

- If *green*, can you identify and grey infrastructure that the school uses to solve the same problem. If so what is it. \_\_\_\_\_
- If *grey*, what would be a green alternative?

4. Storm Drain

**Gray or Green**

**If Green:** Infiltration, Evapotranspiration or Storage & Reuse (*circle*)

- If *green*, can you identify and grey infrastructure that the school uses to solve the same problem. If so what is it. \_\_\_\_\_
- If *grey*, what would be a green alternative?