

**FREQUENTLY ASKED QUESTIONS:
COASTAL GEORGIA STORMWATER SUPPLEMENT WORKSHEET**

What does “Impervious Cover” mean?

Impervious cover refers to land cover that is impermeable to runoff, and includes all paved surfaces. In addition, any surface that supports vehicle traffic, such as a gravel road or parking lot, is considered impervious.

Are Green Roofs and Permeable Pavement pervious or impervious?

Green roofs and permeable pavement are *impervious*. However, these practices also act as a runoff reduction and stormwater treatment practice, so that the ultimate runoff from these surfaces is reduced.

How should I use the “Flood Protection” sheet?

The “Flood Protection” sheet generates revised curve numbers that account for the benefits of runoff reduction practices. Detention is typically not needed if the revised curve number is lower than the pre-developed curve number and the sheet allows the user to enter a time of concentration to estimate peak runoff from the pre- and post-developed conditions. However, if detention is needed, a hydrologic and hydraulic analysis will be needed to properly size and route flow through the practice.

As a reviewer, what are some key cells I should look at to ensure that the submitted worksheet is accurate?

Some checks that can help to act as a “first screen” to ensure that the spreadsheet has been used correctly include the following:

- 1) Thoroughly check the areas of conservation areas and restoration areas described on the Site Data sheet and ensure that these areas are categorized appropriately, since each category receives different runoff reduction credit.
- 2) Check the “Disturbed Pervious Cover” and “Impervious Cover” in **rows 69 and 70** of the *Site Data* tab to ensure that it is greater than or equal to the total impervious and pervious area captured by all practices.
- 3) Check drainage areas to each practice to ensure that practices capture a reasonable design volume.
- 4) For permeable pavement and bioretention, ensure that the designer has selected “underdrained” if an underdrain is needed and that the appropriate soil type has been selected for grass channels and disconnection.
- 5) Review the site plan to ensure that the pathway of practices in series from the “downstream practice to be employed” corresponds to the actual conditions.
- 6) On the *Flood Control* tab, review the categories of the “Pre-Developed Land Cover” to ensure that they reflect actual conditions on the site.
- 7) Make sure that the same practice name has not been accidentally repeated from the dropdown menus in a single Drainage Area.

Why don't I need to enter a storage volume for some practices?

Some practices, such as bioretention, are credited based on their storage volume, and can be *oversized* or *undersized* and receive corresponding runoff reduction and treatment volume credit. Other practices, such as rooftop disconnection, receive credit based on meeting a minimum design standard. These practices cannot be oversized or undersized.

What if I try using a storage volume-based practice (see question above), and then want to change it to a practice that doesn't have a storage volume?

If a storage volume-based practice (such as bioretention) is selected, the spreadsheet will ask for a storage volume to be input in column L. If bioretention is then replaced by one that doesn't have a storage volume (such as downspout disconnection), the Adjustment to Runoff Reduction Volume (column M) may not calculate correctly because the storage volume from the bioretention area is still indicated in column L, rather than the gray "N/A". To fix this issue, copy a gray "N/A" cell from a different row in column L, and paste it into the downspout disconnection row.

Why are the benefits of Undisturbed Pervious Areas calculated on both the "Site Data" tab, and the "Drainage Area..." Tabs?

The "Site Data" tab calculates the benefits of conserving land, while the "Drainage Area..." tabs account for undisturbed pervious areas that receive runoff from impervious or disturbed pervious areas.

How should I credit underground storage?

If underground storage is designed to provide infiltration, it can act as an infiltration practice, but if it does not provide infiltration it will not provide treatment or runoff reduction, and will act as a detention practice only.

How do I account for Manufactured Treatment Devices?

These practices can be accounted for on the "Drainage Area..." tabs as a "Treatment Only" practice. Ensure that the practice is appropriately sized and has been approved for use.

Does the worksheet allow me to do anything that is inconsistent with the guidance in the Coastal Supplement?

Yes. The worksheet is only intended as a tool to quantify the runoff reduction and treatment volume provided on site, and does not have limits on design parameters. For example, drainage areas are not limited, and practices that may require an underdrain on C or D soils can be applied on sites that have only C and D soils.

When practices are in series, the second or third practice seems to receive a different amount of Treatment Volume than Runoff Reduction Volume. Is this a mistake in the worksheet?

No, this is intentional. Since many practices provide more treatment volume than runoff reduction volume, the next practice will receive runoff that has already been treated. Consequently, while the practice receives the remaining *runoff reduction volume*, it can only provide treatment for runoff that has not been treated by upstream practices.

I have a pond that captures drainage from several upstream practices. For the drainage area to the pond, should I enter the *entire* drainage area, or only the land that has not been captured by other practices?

Only enter the remaining drainage area. The overflow from upstream practices will be accounted for as the “Volume Received by Upstream Practices.”

Can I direct additional impervious drainage to permeable pavement?

While the worksheet allows the user to enter a drainage area greater than the pavement area, the Coastal Stormwater Supplement does not recommend this practice and it is discouraged.

If the site has a very long filter strip, can I count it twice as a practice in series?

Alternatively, can I count a long stretch of grass as a disconnection that drains to a filter strip?

This practice is discouraged, since flow will concentrate along the length of the grass strip. If a filter strip is truly a separate practice that incorporates a level spreader, the practice may be used as a second practice in series.