Ready for rain?

It's October and the rainy season is fast approaching. Are you prepared for another storm season under two Construction General Permits? In this month's edition of **The Monthly Dirt**, we interviewed QSP Dan Baumbach about what kind of preparation is needed, the difference between QPEs under the 2009 and 2022 CGPs, and how to make sure your site, trained delegates, and sampling kit is ready for rain.

To start off we asked Dan to outline the differences between Qualified Precipitation Events (QPEs) under each Permit as this information is very pertinent to how a QSP is to prepare for the rainy season if they are overseeing multiple sites.

2009 – "In the 2009 Permit, QPEs are known by another term, Qualified Rain Events, and they are defined as any event that produces 0.5 inches or more precipitation with a 48-hour or greater period between rain events. This straightforward definition makes it easy to track as you keep your eye on the rain gauge. If a storm produces 0.5 inches of rain, it is a Qualified Rain Event."

2022 – "Things get a little more nuanced under the 2022 CGP. Here is the definition from the CGP, *"A qualifying precipitation event is any weather pattern that is forecast to have a 50 percent or greater Probability of Precipitation (PoP) and a Quantitative Precipitation Forecast (QPF) of 0.5 inches or more within a 24-hour period. The event begins with the 24-hour period when 0.5 inches has been forecast and continues on subsequent 24- hour periods when 0.25 inches of precipitation or more is forecast."*

Let's break this down and see if we can understand this definition.

- A QPE is any weather pattern that: Has a 50% or greater Probability of Precipitation (PoP), and
- A Quantitative Precipitation Forecast (QPF) of 0.5 inches or more in a 24-hour period. Another way of saying "quantitative precipitation forecast" is simply "amount of rain forecast".
- A QPE continues for subsequent 24-hour periods if 0.25 inches or more of precipitation is forecast.

Both the PoP and the QPF can be found on NOAA's website. (https://www.weather.gov/wrh/wxtable). On there you can even create custom thresholds to help identify QPEs, as well as creating permanent links for each location to make it easy to keep an eye on each of your sites."

How do you as a QSP handle the different requirements for QPEs under two permits?

"Navigating the different QPE requirements under the 2009 and 2022 CGP Orders is definitely challenging, but with a strategic approach, you can maintain compliance efficiently across your projects. It is critical that you understand the differences between the two QPEs. Use technology to your advantage with tools like real-time weather apps and automated alerts. Perhaps you might make a list or spreadsheet of your sites with their individual requirements based on their permit, if they have any delegated inspectors, etc. to help you manage your inspections. You might

Date	Fri Oct 11						Sat Oct 12						Sun Oct 13									
High (°F)	78						75						75									
Low (°F)	56						57						59									
Weather							Slight chance drizzle															
Chance of Precip. (%)	0	0	0	0	5	5	15	15	10	10	10	10	5	5	5	5	5	5	0	0	0	0
Rainfall (in)	0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00			
Snowfall (in)	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		--		--			
Time	11am	2pm	5pm	8pm	11pm	2am	5am	8am	11am	2pm	5pm	8pm	11pm	2am	5am	8am	11am	2pm	5pm	8pm	11pm	2am

consider utilizing some storm water compliance software that integrates weather forecasting data to help you track ongoing events, but keep in mind that the CGP only allows NOAA forecasts for tracking QPEs. This storm season will be the last hurrah for the 2009 permit coverage, and ongoing projects will need to obtain coverage under the 2022 permit after August 31, 2025."

Preparing for Storm Season: A QSP's Guide

"As storm season approaches, preparation is key to ensuring compliance and keeping your construction site from potentially polluting storm water. From pre-storm season planning to ensuring your team is ready, let's walk through some of the essential steps a QSP should take.

How does a QSP prepare for storm season?

- Review the Site's SWPPP
  Before the rainy season begins, review your Storm Water Pollution Prevention Plan (SWPPP). Ensure all BMPs are updated and adequate for upcoming rain events. Confirm the SWPPP reflects the latest site conditions, as any changes in site layout, grading, or construction phases can affect storm water flow and BMP effectiveness.
- Conduct Pre-Season Site Inspections
  Perform thorough inspections of BMP installations like silt fences, fiber rolls, and storm drain inlet protections. Look for any wear and tear, erosion, or degradation that may have occurred during the dry season.
- Coordinate with Your Team
  Hold a storm season prep meeting with your team and any delegated inspectors to review roles, responsibilities, and the inspection schedule during QPEs. Everyone should understand their tasks before, during, and after a storm event.

How should a construction site be prepared for the upcoming rainy season?

Preparation starts long before the first rain hits. Here are key steps for preparing your site:

- Stabilize Exposed Areas
  Any bare soil or exposed areas need erosion control measures like hydroseeding, mulching, or temporary stabilization to prevent sediment from being washed away. Cover any stockpiles, and install perimeter controls to contain potential runoff.
- Ensure Drainage Is Clear
  Check all storm drains, ditches, and culverts for blockages. Clearing out debris ensures proper water flow and reduces the risk of localized flooding or erosion.
- Stockpile Materials for BMPs
  Have extra BMP materials like fiber roll, gravel bags, or sandbags on-site and ready to deploy when rain is forecasted. This ensures quick responses if you need to reinforce BMPs as the storm season progresses.
- Secure Hazardous Materials
  Runoff can quickly spread pollutants. Ensure that any hazardous materials or chemicals are stored in weatherproof containers and are located in areas where runoff won't come into contact with them.
- Protect Active Work Areas
  If work continues during the rainy season, protect active construction zones with track-out controls and drainage controls to prevent mud and sediment from leaving the site.

How should delegated inspectors prepare for the storm season?

As a QSP, you may delegate some storm water inspection duties to trained team members. Here's how to ensure they are prepared:

- Provide Site-Specific Training
  Ensure that delegated inspectors receive site-specific training that covers the unique conditions and BMPs of the construction site. Each inspector should know what to look for and how to handle site-specific challenges.
- Review Inspection Protocols
  Delegated inspectors need a clear understanding of the required inspection types: pre-storm, during-storm, and post-storm inspections. Provide them with a checklist or form to ensure consistent documentation.
- Ensure Equipment Readiness
  Make sure your inspectors are equipped with the right tools such as weatherproof cell phone case, rain gauges, and sampling equipment to document site conditions during inspections.
- Plan for Emergency Responses
  If storm damage occurs or BMPs fail, inspectors should know how to escalate issues and who to contact for repairs. This includes understanding the corrective action process and knowing how to log critical issues in compliance reports.

What kind of sampling preparation is needed?

Sampling is an important aspect of storm water monitoring, particularly when water quality standards are in question. Here's how to prepare for sampling during the rainy season:

- Inspect and Calibrate Sampling Equipment
  Before the storm season starts, check that your pH meters, turbidity sensors, and other sampling devices are working properly. Ensure that all equipment is calibrated according to the manufacturer's instructions and properly stored.
- Identify Sampling Locations
  Make sure you've identified all required sampling locations based on your SWPPP. This may include discharge points, receiving waters, or areas prone to runoff.
- Train Sampling Personnel
  Your sampling team must be trained in proper sampling techniques and documentation. They should know how to collect samples following both visual assessments and quantitative analysis (e.g., pH and turbidity measurements) based on storm water discharge criteria under the CGP.
- Have Sampling Kits Ready
  Assemble sampling kits in advance that include sample bottles, gloves, chain-of-custody forms, etc. These should be easily accessible to the team, especially when rain is forecasted, to ensure timely collection and processing."

Don't wait until the rain starts to begin preparing for the storm season, start implementing a plan now to ensure you stay in compliance for each QPE.

Please contact us if you have any questions ...

The Monthly Dirt

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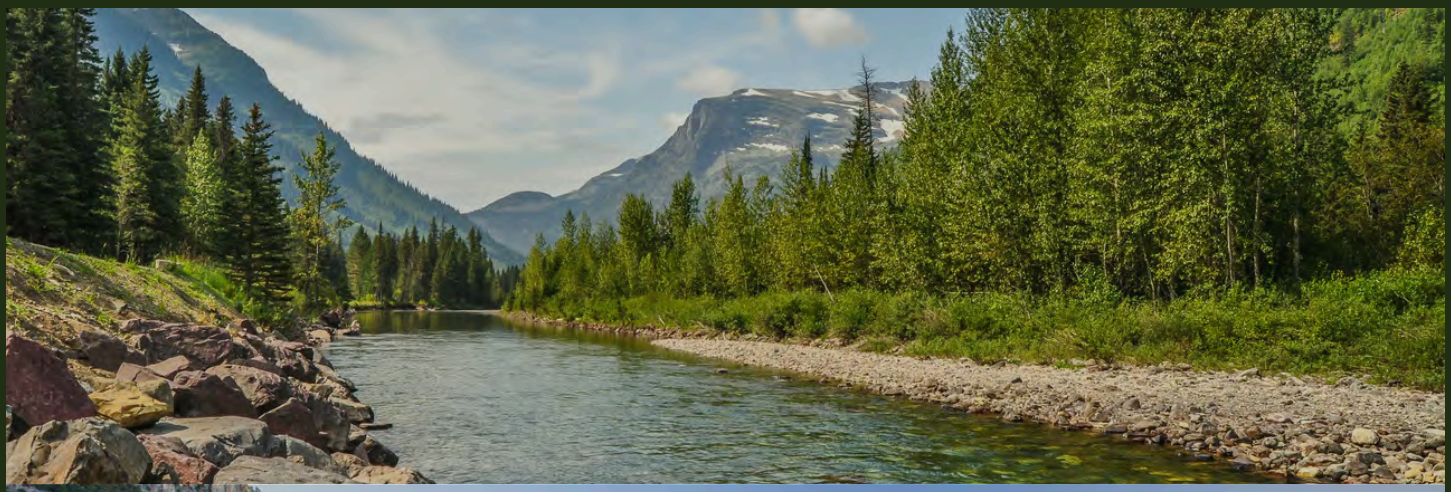
THANK YOU FOR ATTENDING STORM WATER AWARENESS WEEK 2024



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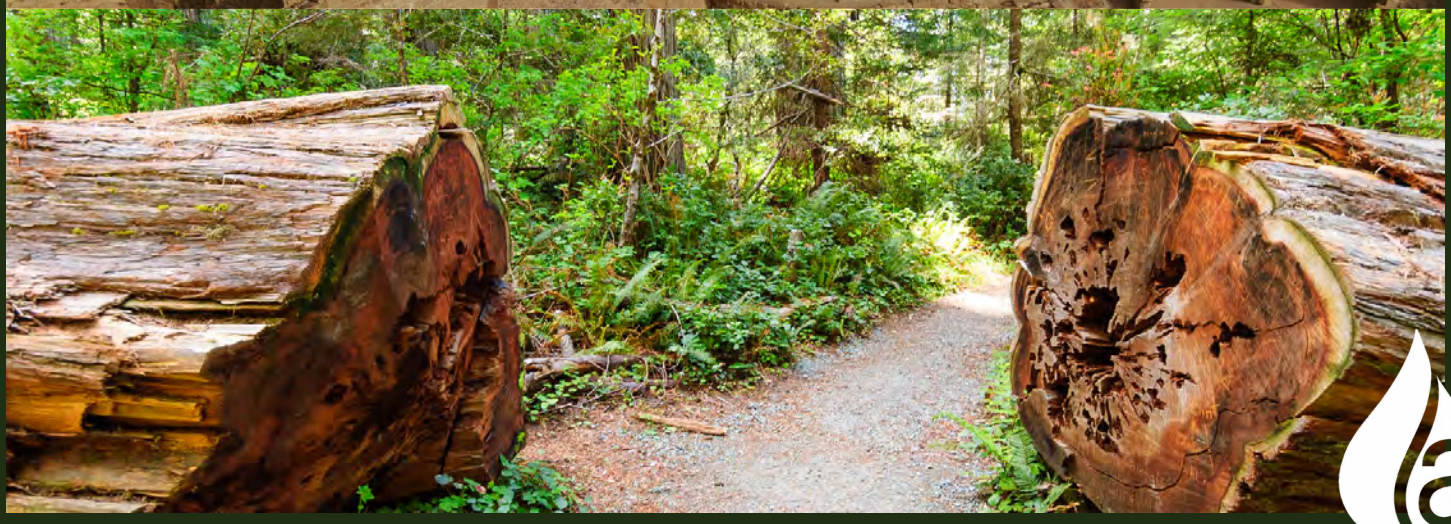
2024 SWAW WORKSHOPS

stormwaterawareness.org/2024recordedworkshops



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