

The State of Storm Water



Watching regulatory changes & industry trends

In response to an executive order by President Donald Trump, the U.S. EPA and the U.S. Department of the Army formally suspended the Obama-era clarification of the Waters of the U.S. (WOTUS) rule. The WOTUS rule defines which rivers, streams, lakes and marshes fall under the jurisdiction of the U.S. EPA and the U.S. Army Corps of Engineers. WOTUS, in turn, are subject to Clean Water Act programs, including tribal and state certification programs, pollution permits, and the oil spill prevention and planning program. The Obama-era clarification extended federal protections to some headwaters of larger waterways, wetlands and isolated lakes.

In July 2018, EPA and the Army issued a supplemental notice to clarify that they are proposing to permanently repeal the Obama-era rule in its entirety. Until a new WOTUS definition is finalized, EPA and the Army have indicated their intent to re-codify the pre-Obama regulations. The revised WOTUS rule is expected to include looser regulatory requirements, meaning fewer waters will qualify, and therefore, fewer permits will be required.

Flood Protection

Trump rolled back rules regarding environmental reviews and restrictions on government-funded building projects in flood-prone areas. The executive order was issued to speed up approvals of permits for highways, bridges, pipelines and other major building efforts. It revokes an Obama-era executive order aimed at reducing exposure to flooding, sea level rise and other consequences of climate change. The Obama-era rule gave federal agencies three options to flood-proof new infrastructure projects, which included using the best available climate change science; requiring that standard projects, like roads and railways, be built 2 ft above the national 100-year flood elevation standard, and that critical buildings, like hospitals, be built 3 ft higher; and requiring infrastructure to be built to at least the 500-year floodplain. The order did not regulate private development. Shortly after the executive order, Hurricane Harvey hit the coast.

We will no doubt continue to see changes on the federal, state and local regulatory front.

Additional Trends

Removing phosphorus from storm water runoff is a hot topic, with partners exploring alternative opportunities to reduce the introduction of phosphorus in runoff, remove it or manage it in watersheds. According to the National Rivers and Streams Assessment 2008-2009, 46% of river and stream miles are in poor biological condition; phosphorus and nitrogen are the most widespread of the chemical stressors assessed. Some of the management strategies in use or being tested include:

- Monitoring leaf collection/management practices to determine how much alternative management practices can reduce phosphorous in runoff;
- Determining if chemical treatment is viable and cost-effective; and
- Nutrient trading to manage phosphorus in watersheds.

More proprietary filters are being used for pretreatment before underground infiltration for redevelopment sites for total suspended solids (TSS) control and where land is limited. The performance of proprietary devices continues to be studied and improved to meet regulatory requirements. An increasing general attention is being paid to emerging contaminants that are problematic in storm water runoff. Among the emerg-

ing contaminants of concern are pharmaceutical and personal care products, pesticides, hydrocarbons and hormones. Many of them now are included within the Endocrine Disrupting Chemicals group. Natural attenuation and conventional treatment processes are not capable of removing these micro-pollutants detected in wastewater, surface and drinking water.

We will no doubt continue to see changes on the federal, state and local regulatory front. When used together, these advances will help us manage storm water in a smart, cost-effective manner that preserves our water resources. 💧

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