

## **DWQ Response to Comments received during Public Notice of the 2019 Small MS4 General Permit Modification**

**Comment (Permit Part 4.2.5.3.2 and 4.2.5.3.4)** The Home Builders of Utah request the LID enforcement date be extended an additional year to March of 2020. The reason for our request is;

- The shift to Low Impact Development is a change that requires training for design professional, installation crews, city planners and enforcement personal. At the moment we do not have a completed manual and worry there will not be sufficient training time.
- The implementation of Low Impact Development is going to have impact on city ordinances and process. There needs to be adequate time for stake holders to meet and develop workable solutions and update ordinances. There needs to be more detail before these meetings begin.
- Low Impact Development strategies are going to impact current building practices and will likely require legislation amending the building code. With out a complete understanding of all options and how MS4's intend on implementing it would be difficult to craft effective language.

**Response:** DWQ published “A Guide to Low Impact Development within Utah” (December 2018), it was posted on the Divisions website on January 4, 2019. Prior, a draft was posted on the Division’s website for a 30 day public review period from September 25-October 25, 2018. Each comment received was considered and changes were implemented if deemed necessary. Additionally, DWQ conducted four free training sessions (3 hours each) throughout the State to familiarize MS4s, developers, consultants and interested parties with the content of the guide and compliance with the upcoming 90<sup>th</sup> percentile storm retention requirement. Trainings included: St. George (January 30, 2019), Provo (February 5, 2019), Salt Lake City (February 7, 2019) and Logan (February 12, 2019). Prior, various presentations and a fact sheet on the 90<sup>th</sup> percentile storm design standard were developed and distributed from 2015-2018. DWQ feels extensive research and educational opportunities were given across the State.

Effective in the August 1, 2010 General Permit for Small MS4s (Permit No. UTR090000), municipalities were required to adopt long-term post-construction ordinances or other regulatory mechanisms requiring these controls on new development and redevelopment sites that discharge to the MS4 and disturb greater than or equal to one acre (Permit Part 4.2.5.1). DWQ believes municipalities have had adequate time to prepare and implement mechanisms accordingly.

It is not DWQ’s intention for legislation to amend building codes to accommodate LID strategies. LID practices have already been successfully implemented across the State. If a practice conflicts with a building code, it will be addressed. At that point, alternatives must be considered. The manual offers a wide range of options to select and execute the appropriate control intended for all projects where the long-term management of storm water is required. LID practices are not limited to long-term post construction controls. Site design practices such as preserving natural areas and reducing the size and connectivity of impervious surfaces are examples of LID practices at the site planning stage that will result in improved water quality. If a LID approach cannot be utilized, the Permittee must document an explanation of the reasons preventing this approach and the rationale for the chosen alternative on a case by case basis.



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**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

Trisha Di Paola  
Stormwater Section  
Utah Division of Water Quality  
PO Box 144870  
Salt Lake City, Utah 84114-4870

Re: Comments on the proposed modification to General Permit for Discharges from Small Municipal Separate Storm Sewer System (MS4s) UTR090000

Dear Ms. Di Paola:

Thank you for the opportunity to review the State of Utah's proposal to modify Utah Pollutant Discharge Elimination System (UPDES) General Permit for Discharges from Small MS4s #UTR090000 ("Permit").

The proposed modification provides a six-month extension to the implementation dates in two permit Parts from September 1, 2019 to March 1, 2020. Part 4.2.5.3.2 requires the evaluation of a Low Impact Development ("LID") approach for new development or redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale. Part 4.2.5.3.4 requires new development or redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, to manage rainfall on-site, and prevent the off-site discharge of the precipitation from all rainfall events less than or equal to the 90th percentile rainfall event ("post-construction retention standard"). The EPA is formally submitting the following comments for your consideration:

UT Department of Environmental Quality does not provide any justification for the six-month extension for Parts 4.2.5.3.2 and 4.2.5.3.4 of the Permit. The public notice only states the date change was requested during the previous public notice period. This proposed six-month extension for the implementation of Utah's post-construction retention standard is the fourth extension since the Permit was issued in 2016. The EPA anticipates by March 1, 2020, Utah's post-construction retention standard requirement will be fully implemented and effective and no additional delays would be necessary. The EPA strongly supports Utah in implementing their post-construction retention standard, which will be accomplished by the use of LID practices that are designed, constructed, and maintained to infiltrate, evapo-transpire and/or harvest and reuse rainwater. Utah's post-construction retention standard is nationally consistent, with over half of the MS4

permits in the United States having a similar standard. In Region 8, four States have numeric post-construction standards and the two remaining States have not renewed their MS4 Permit in over a decade. You can find a summary of every State's post-construction retention standard at: [https://www.epa.gov/sites/production/files/2016-08/documents/swstdsummary\\_7-13-16\\_508.pdf](https://www.epa.gov/sites/production/files/2016-08/documents/swstdsummary_7-13-16_508.pdf).

As you are aware, Section 402(p)(3)(B)(iii) of the Clean Water Act ("CWA") provides that MS4 permits "shall require controls to reduce the discharge of pollutants to the maximum extent practicable ("MEP"), including management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants." Further, the statute authorizes "such other provisions as the Administrator or the State determines appropriate for the control of such pollutants." The retention requirement in the permit has a clear connection with the reduction of pollutant discharge. There is a strong factual and scientific basis for finding that such retention best management practices have beneficial water quality and pollutant reduction impacts.<sup>1</sup> Moreover, the existence and successful implementation of such requirements in many jurisdictions indicates that such measures are generally "practicable" to implement. Indeed, there are regulated MS4s such as Salt Lake City and Spanish Fork City in Utah that are successfully implementing the State's post-construction retention requirement. Therefore, the permit conditions developed by Utah fit squarely within the scope of the MEP standard in CWA § 402(p), and their inclusion in the MS4 permit is a valid exercise of Utah's NPDES permitting authority.

In addition to the statutory requirement that MS4 permits require controls to reduce the discharge of pollutants to the MEP, the NPDES implementing regulations require that such controls include measures to address pollutants discharged from developed and redeveloped sites following construction. For example, regulations applicable to Phase I ("large and medium") MS4s require "controls to reduce the discharge of pollutants from municipal separate storm sewers which receive discharges from areas of new development and significant redevelopment." 40 CFR § 122.26(d)(2)(iv)(A)(2). This regulation further provides that the requirement for a program to control pollution from new development and significant redevelopment must "address controls to reduce pollutants in discharges from municipal separate storm sewers after construction is completed."

Similarly, the regulations applicable to Phase II ("small") MS4s require the development and implementation of "a program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre." 40 CFR § 122.34(b)(5). The stormwater retention requirement for new and redeveloped sites that Utah has included in its MS4 permit is the type of control that is contemplated by these regulations.

Furthermore, implementing Utah's post-construction retention standard without delay is supported by Utah's 2016 Integrated Report, where approximately 47% of Utah's assessed streams and rivers are not meeting water quality standards. Stormwater runoff is one of the contributing factors to these impairments. For example, the final 2013 Jordan River Total Maximum Daily Load ("TMDL")

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<sup>1</sup> The National Research Council issued a 2009 report evaluating EPA's stormwater management program and detailing the water quality benefits of both LID measures and post-construction retention standards. NRC, [Urban Stormwater Management in the United States](https://www3.epa.gov/npdes/pubs/nrc_stormwaterreport.pdf), [https://www3.epa.gov/npdes/pubs/nrc\\_stormwaterreport.pdf](https://www3.epa.gov/npdes/pubs/nrc_stormwaterreport.pdf). Accessed February 28, 2019.

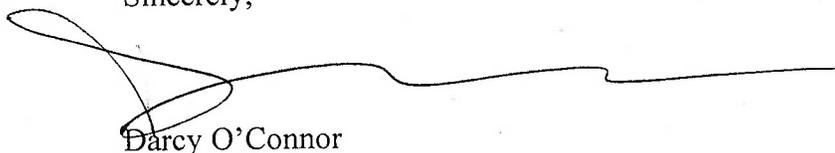
identifies stormwater as one of the seven pollutant sources contributing organic matter ("OM") to Jordan River. The total Fine Particulate OM contribution from stormwater makes up about 55% of the annual load to the lower Jordan River (in comparison, natural flow contributes about 16%, wastewater treatment plants contribute about 8 %, and irrigation return flow contributes about 3%). Future source loads from stormwater are expected to increase about 52% from current loads, due to increased development and expansion of serviced areas within existing catchments.

Incorporating LID into TMDLs points the way toward implementation actions that can reduce stormwater loads and erosive effects and help meet pollutant loadings identified in the TMDL. Among the sources of stormwater in the Jordan River basin are a number of small MS4s that are, or could be, covered under this general permit. The TMDL lists several LID practices for controlling OM from stormwater sources, including many that small MS4s in the Jordan River basin could use to fulfill the State's post-construction retention standard such as constructed wetlands, rain gardens and infiltration systems. These types of LID approaches that infiltrate, evapo-transpire and/or harvest and reuse rainwater are an effective way to achieve pollutant removal. Moreover, research indicates that such techniques provide a higher degree of pollutant removal than other approaches. Given the significant impact that urban stormwater runoff has on instream water quality in Utah, it is important that the State's Permit meets the requirements of Section 402(p) of the CWA, to include controls which reduce the discharge of pollutants to the MEP and provide protection of receiving waters.

Finally, it is worth noting that LID approaches such as those used to meet Utah's post-construction standard are usually more cost effective than conventional approaches. LID can provide for a more desirable community that incorporates additional amenities and open space, and one that reduces impacts to natural systems generally with no additional construction costs. The primary reasons for the reduced cost are that clustering reduces impervious surfaces and the amount of earthwork required for site development, and results in a general decrease in the amount of stormwater infrastructure needed. In nine case studies in the United States and New Zealand, LID approaches were 14% to 63% less costly than conventional development cost.<sup>2</sup>

Thank you for the opportunity for review and comment. If you have any questions regarding these comments, please direct them to Amy Clark or Colleen Rathbone of my staff at (303) 312-7014 and (303) 312-6133.

Sincerely,



Darcy O'Connor  
Assistant Regional Administrator  
Office of Water Protection

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<sup>2</sup> Low Impact Design Versus Conventional Development Literature Review of Developer-related Costs and Profit Margins, December 2009. <http://www.aucklandcity.govt.nz/council/documents/technicalpublications/TR2009-045%20-%20Low%20impact%20design%20vs%20conventional%20development.pdf>

**Response:** DWQ agrees with the justification of your comment; the Division does not anticipate additional extensions for Permit Part 4.2.5.3.2 and 4.2.5.3.4 past March 1, 2020. The reasoning for the six-month delay was to accommodate stakeholders concerns regarding allowing adequate time for training municipal personnel on LID practices. DWQ agrees LID approaches are typically more cost effective than conventional approaches when considered early in the design process.