

Regional Stormwater Management Program Participation Requirements

This document provides an overview of eligibility and required drainage analysis for the Regional Stormwater Management Program (RSMP).

Required RSMP Feasibility Meeting

Every project representative should complete the RSMP Feasibility Meeting Request Form and provide as much information as possible to the RSMP Team before and/or during the project feasibility meeting. Discussion at the feasibility meeting will clarify whether a particular project is a good candidate for participation in the program and the method of participation. The method of participation can be either construction of off-site improvements in lieu of detention or payment in lieu of detention. The following outlines basic, generalized requirements for different project site situations, but participation should be discussed and clarified at a feasibility meeting before applying to the program. Discussions during the feasibility meeting are theoretical and do not guarantee that participation in the program will be approved for a project. If drainage analysis does not justify participation in the program, on-site detention is required. Additionally, discussions about the scope of improvements for participation are theoretical and analysis must show a significant public benefit provided by proposed improvements. Drainage improvements for RSMP participation should not be considered finalized until after a full review has been completed and the design has been accepted by Watershed Protection Department staff.

Basic Requirements for Potential Participant Site

The program is available in watersheds within the Austin city limits and its extraterritorial jurisdictions. Visit <https://austintexas.gov/page.austin-watersheds-list> for a complete status list of participating watersheds. Simply being located in a participating watershed does not guarantee participation of a site is feasible. The following requirements are based on Section 8.2.2 of the City's Drainage Criteria Manual (DCM). Refer to the DCM and Land Development Code for all requirements. A full RSMP submittal package including participation request, application form, and supporting engineering analysis should be submitted at the time of development application submittal. This includes all modeling and supporting documentation for proving justification of RSMP participation for a project.

If applying to participate via construction of off-site drainage improvements as credit for payment:

- The proposed improvements must meet the City's drainage criteria
- Applicant must be able to show a public benefit from the proposed improvements above what would be needed to meet discharge requirements for the proposed site condition (i.e. upsizing of storm drain piping to have capacity for fully-developed condition of entire drainage area that contributes to the system or constructing new drainage systems).
- Plan sheets from site plan application plan set (or exhibits for a subdivision without construction plans) depicting the improvements must be provided
- A sealed engineer's cost estimate of the improvements to count towards participation must be provided.

If interested in participating via payment in lieu of on-site detention:

- Site should be located in lower third of the watershed, or lower third of a main tributary, with adequate intervening drainage systems between the project site and major receiving stream. If the site is located elsewhere, on-site detention is preferable. However, a feasibility meeting can be scheduled to discuss a specific situation.

- Drainage analysis proves no adverse flooding impact to other properties (Refer to DCM 8.2.2.B.2).

The RSMP team uses the best current information available before approving or disapproving participation in the program. As the capacity of the downstream system is exceeded, participation options may be diminished. More recent storms and/or watershed models may also reveal previously unidentified flooding problems. The lack of adequate drainage may not be apparent until storm runoff problems occur and are reported and documented. If a nearby site has been recently developed and that site participated in RSMP, that is no guarantee that your project will be eligible.

Limitations that may affect participation in the program, include:

- Flood-prone areas along streams downstream of the project,
- Receiving storm drainage systems that lack required conveyance capacity, and
- Inadequate street conveyance where flow is not contained within the right-of-way or a drainage easement.

Important factors also include the location of the development relative to existing flood risks and the availability of land or right-of-way for proposed mitigation projects. If the proposed development causes any identifiable adverse impacts or increases in flooding conditions anywhere within a watershed, participation in the program cannot be approved. Clear, comprehensive, and practical program submittals are necessary to fully demonstrate and document the requirement of no identifiable adverse impacts.

There is no need to have an existing regional detention pond facility near the project to participate in the program. Additional types of appropriate solutions to reduce the risk to life and property from floodwaters include: property buyouts, channel modifications, culvert upgrades, and storm drain improvements. The RSMP uses a watershed-wide approach to analyze problem conditions and recommend appropriate mitigation measures.

Drainage Analysis Requirements for RSMP Participation

The RSMP requires that applicants provide analysis to show that, with participation in the program, their proposed project does not cause adverse flooding impacts adjacent to the property or in the downstream drainage system. These requirements are spelled out in the City's Land Development Code and Drainage Criteria Manual. The following is a discussion of the engineering analyses that need to be completed by the applicant and submitted for review depending on where a site is located in a watershed.

Based on the feasibility meeting and subsequent analysis, the applicant will submit their request for participation along with their analysis and plans. The request and analysis should be submitted with the development application for completeness check. Depending on site-specific variables, some combination of the following analysis may be required to provide a clear justification for participation.

Payment in Lieu of Detention

1. If seeking to participate via payment in lieu of detention with **discharge directly to a major stream not in the headwaters of the watershed**, the analysis should include an evaluation of the impact of flows from the site on the receiving stream (for the 2-, 10-, 25, and 100-year events) and should consider 1) the existing site, 2) the proposed site, and 3) the proposed site

with detention. The analysis needs to show that the no-detention option is equivalent to or better than the detention option and that there is no significant increase in the peak flow of the receiving stream. Significant is defined as greater than 1% of the receiving stream's flow. This analysis will need to include:

- a. Fully developed conditions in the watershed with existing conditions on the site.
 - b. Fully developed conditions in the watershed with proposed conditions on the site.
 - c. Fully developed conditions in the watershed with proposed conditions on the site and a conceptual detention pond.
2. If seeking to participate via payment in lieu of detention with **discharge to a street, storm drain system, or small open channel system**, the analysis will need to show that the downstream drainage system has capacity for the fully developed flows from the contributing drainage area with the proposed improvements on the site. The analysis (for the 2-, 10-, 25-, and 100-year events) should extend downstream at a minimum to the point within the drainage area that is 100 times the area of the project site. This analysis may need to extend farther to evaluate the impacts on a receiving stream.
- a. Street – The 100-year flow must be contained within the right-of-way. This evaluation should include gutter spread or channel calculations for the street. Note that Great Streets requirements can significantly impact the capacity of the right-of-way to contain flows.
 - b. Storm Drain – The 25-year hydraulic grade line shall remain a minimum of six (6) inches below the theoretical gutter flow line of inlets, and the 100-year flow must be contained within the right-of-way and/or drainage easements. Analysis of the storm drain capacity is required. The City may have models available that can be used as the starting point for the analysis. Check FloodPro for available models or send a request to FloodPro_Stormdrain@austintexas.gov.
 - c. Open Channel – The 100-year flow should be contained within the channel banks and within drainage easements. In certain cases, containing the flow within the channel banks may be sufficient.
 - d. Increases in flow must not cause overtopping of downstream crossings or additional overtopping of already overtopped crossings.

Off-Site Improvements

3. If seeking to participate via **construction of off-site storm drain, open channel or detention improvements**, the analysis (for the 2-, 10-, 25-, and 100-year events) will need to show that the proposed improvements meet the City's drainage criteria, provide a public benefit (in addition to what is needed to discharge flows from proposed condition project site), and that they do not cause any adverse flooding impacts downstream. The applicant will also need to provide the estimated cost for the improvements based on the design. This amount will be credited against the calculated RSMP payment for the site and documented in the RSMP agreement.

Extra-Territorial Jurisdiction (ETJ) or Other Jurisdiction Review Coordination Requirements

If the site is located in another jurisdiction or in the Austin ETJ, coordination with and approval by the other jurisdiction will be required for approval to participate. In the case of a site located in another jurisdiction, participation in Austin's RSMP would require a site location where the discharge could impact flows and property in Austin's jurisdiction. For watersheds that drain out of Austin's jurisdiction,

applicants need to coordinate with downstream municipalities or counties and will also need their approval.

Sites that drain or connect to TxDOT drainage systems - Review Coordination Requirements

Refer to TxDOT memo for Developer Drainage Requirements. These sites are typically located along IH-35 frontage road or other TxDOT highway but could include any site that drains or connects to a TxDOT system.

Sites that drain across City of Austin parkland (PARL) – Review Coordination Requirements

For sites that drain via overland flow across parkland to discharge into a stream or for sites that propose to install or upgrade stormdrain pipe to discharge flows by connecting to an existing stormdrain system, coordination and acceptance of those flows or the proposed work is needed from PARL.