

## **1.0 INTRODUCTION**

### **1.1 The 2009 Stormwater Master Plan**

The 2009 El Paso Stormwater Master Plan (2009 SMP) was the product of a process that began with the major storms in August 2006 and included technical evaluations, infrastructure and operational assessments, and a great deal of soul searching by the community as a whole as it struggled with the impact and future management of such storms.

The main purpose of the 2009 SMP was to outline a long-term program to better understand and appropriately improve the drainage infrastructure of El Paso to reduce the flood risk to the public and property. More specifically, the 2009 SMP was developed to:

- Estimate the stormwater runoff quantities;
- Evaluate major features of the existing stormwater drainage system;
- Identify components of the existing stormwater drainage system that are undersized;
- Identify areas of potential sediment and debris flow;
- Identify risks associated with the existing dams;
- Recommend major stormwater drainage system improvements; and
- Develop a general prioritization of recommended improvements for use in developing a Capital Improvement Program (CIP) based on the available funding from the stormwater fee.

Per the above tasks, the 2009 SMP considered all parts of the City for evaluation, but then focused its attention on areas where flood risk was particularly high. This process allowed the evaluation and planning efforts to focus on major threats and produced a more cost-effective and useful plan than a broader and more costly effort might have produced. The 2009 SMP provided 99 recommended major system improvements costing an estimated \$570 million (M). EPWater staff separately identified another \$80M in localized drainage issues. That brought the total stormwater needs up to \$650M. Numerous 2009 SMP projects have been completed, spending about 18% of the original \$650M budget.

The SMP Community Advisory Committee (CAC), established by EPWater in conjunction with the 2009 planning effort, was an integral part of this process. The CAC was formed with representatives from the public, the City Open Space Committee, and various business and community interest groups representing all aspects of the community.

## 1.2 2021 Stormwater Master Plan Update

This 2021 El Paso Stormwater Master Plan Update (SMP Update) provides an update to the 2009 SMP and: 1) provides the current status on projects originally developed to meet the needs identified in the 2009 SMP; and 2) includes new projects identified through additional stormwater planning in areas not addressed in the 2009 SMP.

Update to 2009 Projects. As the projects developed in concept in the 2009 SMP were reviewed and refined for design, the projects have undergone changes. These changes may include:

- The project was fully or partially completed;
- A determination that all or part of an original project was not needed;
- Development of an alternative project configuration that was more effective in addressing the identified need; or
- Determination that the project would be located outside of EPWater's jurisdiction. These projects would be kept active but not prioritized as part of the CIP potentially fully funded by EPWater.

In this SMP Update, projects as currently configured are presented. Portions of original 2009 projects completed or superseded by other projects are not described.

This SMP Update, for clarity and continuity, retains the same project designations (e.g., CE1, NE8) as the 2009 SMP. For this reason, since projects have been completed, there are gaps in the listing of projects. For example, Project NE7 is followed by NE9, because NE8 has been completed.

This SMP Update does not repeat early planning steps documented in 2009, notably descriptions of existing drainage and identification of problem areas. Improvements in drainage since 2009 in each region are briefly described.

New Projects. Substantial new stormwater planning has been performed since 2009, particularly in the area (not studied in 2009) between Patriot Highway and Manny Martinez Drive/Ascarate Park, north of the Rio Grande. A series of new projects has been developed for this region (Mid-Valley Region). This SMP Update includes information for this region not included in the 2009 SMP: a description of existing drainage, identification of stormwater problems, and description of the recommended improvements.

SMP Focus Group. This group, analogous to the CAC that participated in the 2009 SMP, is described in this update.

Specifically, this SMP Update includes:

- Overview of Existing Stormwater Drainage System. This overview is focused on the new area addressed by this update, the Mid-Valley Region.
- Master Plan Methodology. This overview provides a brief description of activities between 2009 and 2021 that have led to the SMP Update.
- Evaluation of Areas of Potential Sediment and Debris Flow. This section provides a brief recap of the significant conclusions of the 2009 SMP as it relates to this issue.
- Dam Risk Inventory. This section provides an update to the 2009 discussion of this issue.
- Identified Problem Areas. This discussion is focused on the new area addressed by this update, the Mid-Valley Region.
- SMP Focus Group. This discussion describes the role of this group in the formulation of the SMP update.
- Recommended Improvements. This section includes a description of projects in the SMP Update.
- Prioritization. This section describes the process by which SMP projects were prioritized for funding and execution and provides the current prioritized list of projects.