



# 107th Avenue and Union Hills Drive Design Concept Report Drainage Alternatives Analysis

The study area for the 107th Avenue and Union Hills Drive Design Concept Report (DCR) is located in the Lower Agua Fria watershed and is part of the Glendale/Peoria Area Drainage Master Plan Update (ADMPU). The study area extends from Beardsley Road to south of Bell Road between 107th Avenue and the Agua Fria River. The cities of Peoria and Surprise as well as Maricopa County all have jurisdictional responsibility.

## Purpose and Goals

The City of Peoria identified flooding issues at the intersection of 107th Avenue and Union Hills Drive and along Union Hills Drive to the west. The purpose of the DCR is two-fold: 1) Identify and quantify flooding problems and flood hazards; and 2) Develop a concept level plan to reduce the flooding hazard in the area. As such, the DCR is divided into two phases. Phase 1 identified and quantified the flooding hazards. Phase 2 developed a recommended concept plan that will mitigate flooding in the area and convey storm flows to an outfall in the Agua Fria River.

## Identified Flooding Hazard Locations

- Within Lake Pleasant Mobile Home Estates and Paradise RV Resort
- Coyote Lakes community
- Intersections of 107th Avenue and 113th Avenue at Union Hills Drive
- Along 115th Avenue from Beardsley Road to Bell Road

## Recommended Plan

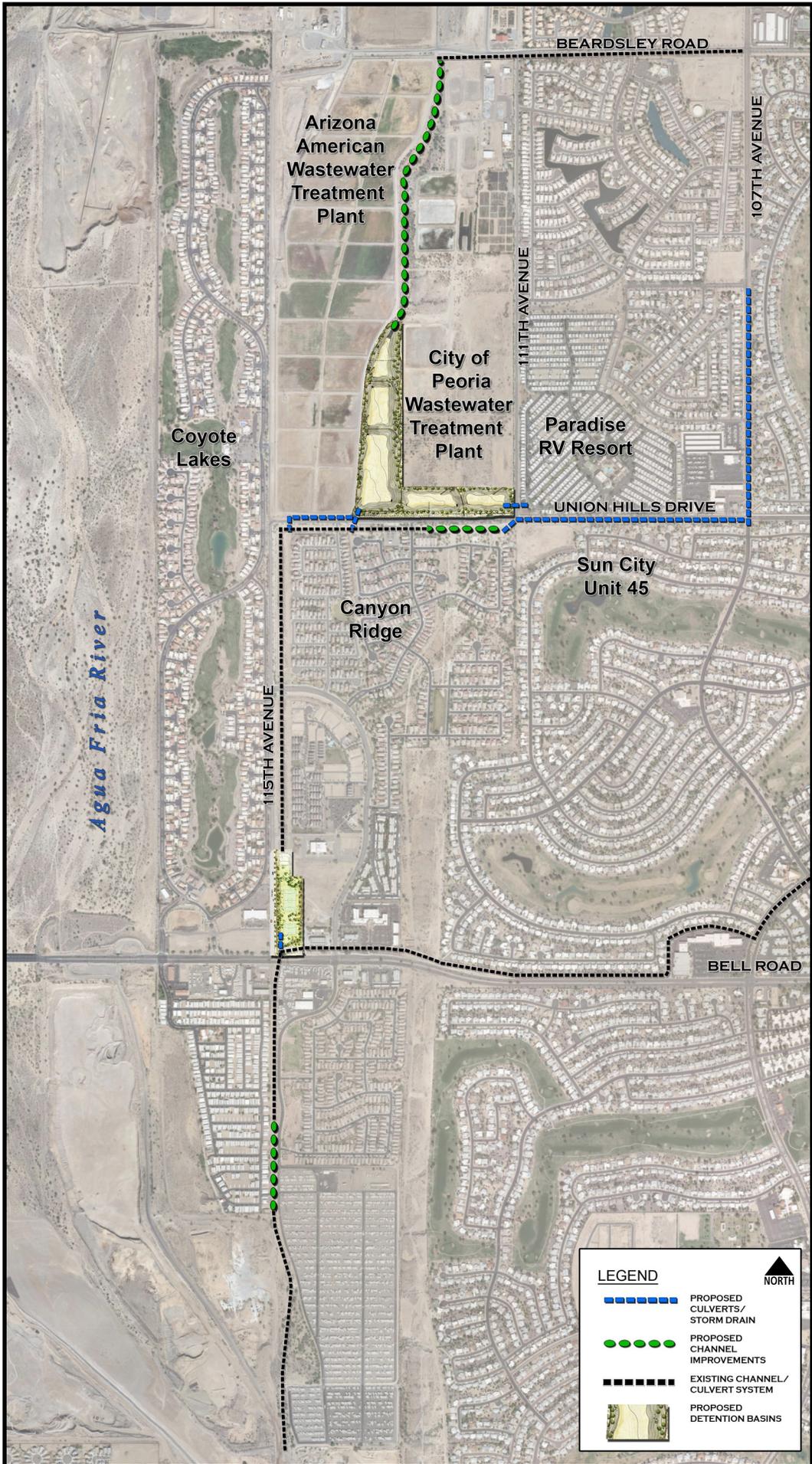
The known flooding hazards result from the lack of a contiguous regional drainage system that can effectively convey stormwater from the area to the Agua Fria River. Existing development relies on overland flow and undersized roadside ditches to convey stormwater through the study area. The proposed project will construct a system of storm drains, channels and detention basins to connect existing facilities such that flooding is contained within the system in order to protect existing residences and public infrastructure, including the Bell Road culverts and the Sun City Drain.

## Schedule

The 107th Avenue and Union Hills Drive DCR kicked off in January 2010 with Phase 1 which was completed in June 2010. Phase 2 began in September 2010 and will be completed by July 29, 2011. The cities of Peoria and Surprise have submitted a revised joint project application to the Flood Control District's Capital Improvement Program (CIP). Next steps for the project include development of an Intergovernmental Agreement (IGA) between Peoria, Surprise, and the District, and preparing a final design for the project. These activities are currently anticipated to take place within 12 to 18 months from the end of Phase 2.

## Contact

Burke Lokey, P.E., PMP, CFM  
Project Manager  
(602) 506-0867  
burkelokey@mail.maricopa.gov



Map not to scale.