

Background

The vision of a restored Gila River serving as a catalyst for economic development in the Southwest Valley was born in 1999.

Since then, that vision has flourished through the cooperative efforts of Maricopa County and the Cities of Avondale, Buckeye and Goodyear. This partnership gave birth to the El Rio Watercourse Master Plan which serves as a blueprint for regional flood control, economic development, recreation and preservation along the Gila River.

El Rio, A Plan to Heal the River, 2013



Avondale





1.1 Introduction

The Gila River is one of the more important river corridors in Arizona. With its headwaters in the mountains of western New Mexico and its mouth at the Colorado River in Yuma, the Gila spans the entire width of central Arizona, covering nearly 650 miles, 570 of which are in Arizona. In total, the Gila River accepts drainage from an area of nearly 60,000 square miles, which is slightly more than half the land area of the state. (Source: University of Arizona Water Resources Research Center).



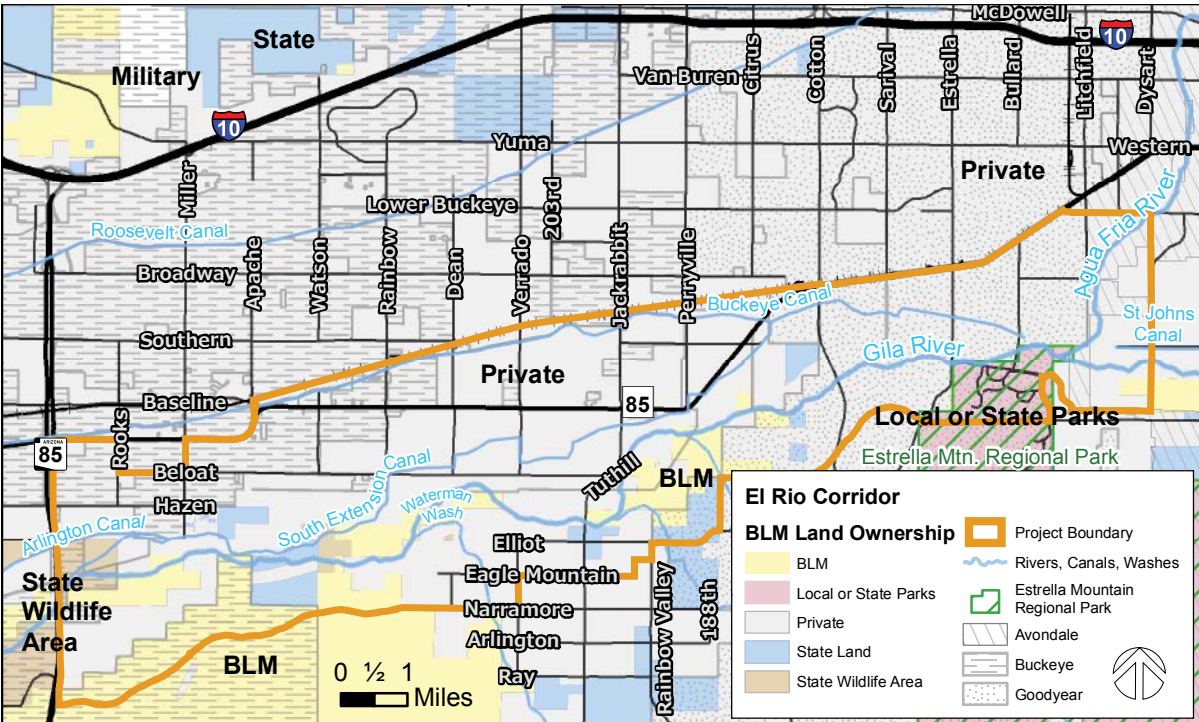
Source: K.Musser <http://www.eoearth.org/view/article/176074/bmg>

1.2 El Rio Corridor Area of Study

Located in the west Phoenix metropolitan area, the project area spans roughly 17.5 miles from the Gila River's junction with the Agua Fria River on the east end to the State Route 85 bridge on the west end, and incorporates nearly 53 square miles as it crosses through the communities of Avondale, Buckeye and Goodyear, along with unincorporated areas of Maricopa County.

This area is one of the fastest growing regions in the country and will continue to experience significant growth pressures in the future. As such, the corridor has been the focus of several previous planning efforts. In 1999, the *El Rio Vision* document was developed and in 2002, the Flood Control District of Maricopa County (FCDMC) began work on the *El Rio Watercourse Master Plan (WCMP)*. Building on these previous planning efforts, the *El Rio Design Guidelines and Planning Standards* are intended to protect the corridor while integrating multi-use activities.

Understanding the challenges, these communities have looked to other positive examples where these potentially competing goals have been managed successfully. These examples include Scottsdale's Indian Bend Wash, East Maricopa Floodway, Tres Rios 91st Avenue Demonstration Wetlands Reclamation Project, Rio Salado Environmental Restoration Project, and Tempe Town Lake. Like the examples above, the public interface with the Gila River will address both structural and non-structural flood control alternatives for future development, recognizing the importance of flood



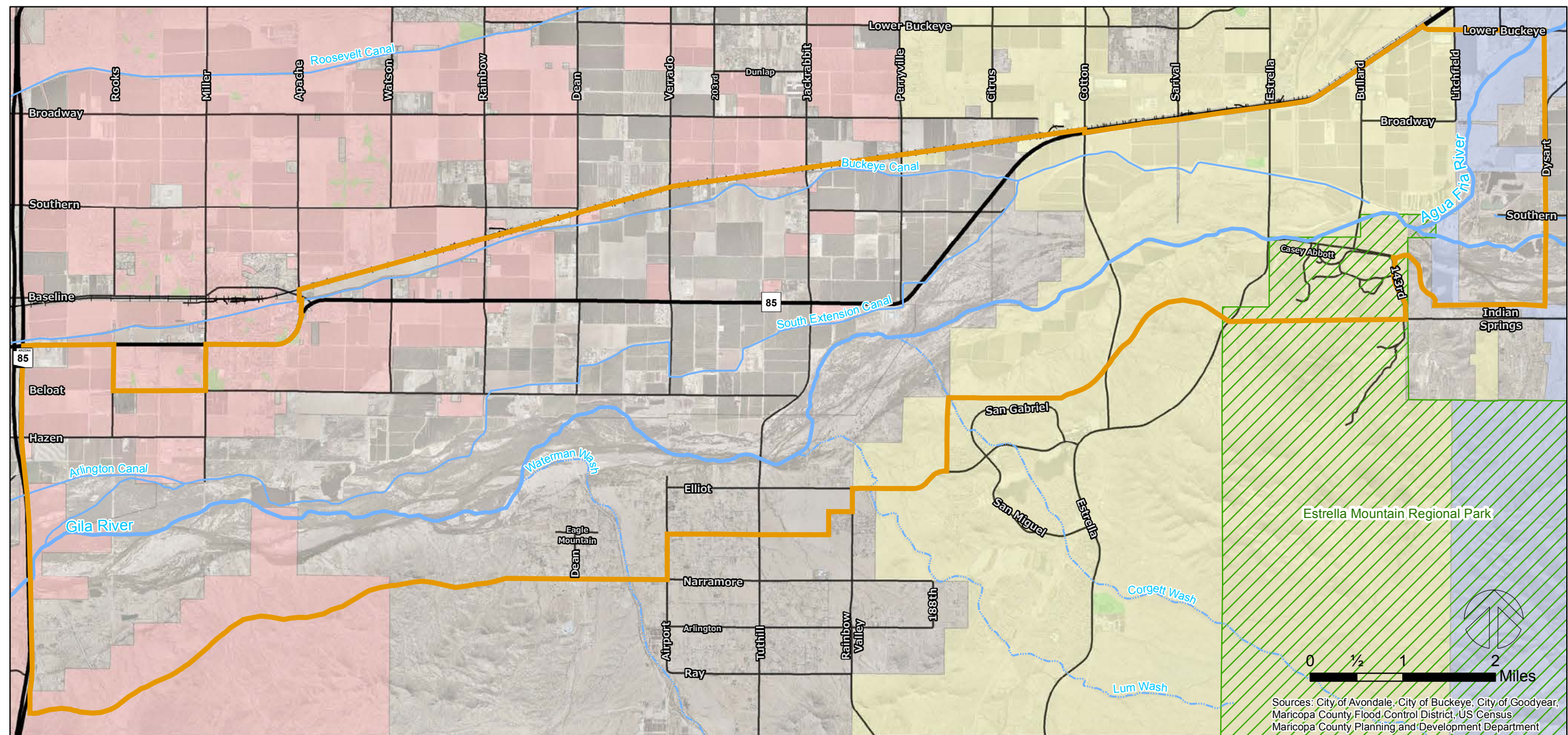
mitigation, the riparian habitat and the potential for economic growth and recreation. Accordingly, this document provides guidance on the following:

1. Land use design
2. Character area development
3. Edge treatments along the Gila River
4. Plant habitat and transitional planting guidelines
5. Signage and wayfinding features
6. Overview of the economic development potential to the surrounding communities
7. Conceptual designs for three pilot projects to provide access to the river

8. Pilot projects - one in each city

The identified project area (see map above) includes a wide diversity of existing and planned land uses of the three municipalities and areas of unincorporated Maricopa County that border the project. This study supports that future development potential with an additional focus on how these developments, and the public, will interface with the Gila River.

One of the primary objectives is the incorporation of these guidelines into the review process of any proposed development by the cities of Avondale, Goodyear, Buckeye and unincorporated Maricopa County, particularly with regard to requests for increased zoning entitlements.



Sources: City of Avondale, City of Buckeye, City of Goodyear, Maricopa County, Flood Control District, US Census, Maricopa County Planning and Development Department

Date: 9/27/2015

Legend

Project Boundary	Canal	Estrella Mountain Regional Park	Railroad	Interstate Highway	Avondale
Washes	Parks	Arterial Streets	State Highway	Buckeye	
Rivers		Interchange	County Highway	Goodyear	
		Ramp			

El Rio Design Guidelines and Planning Standards – Area Map



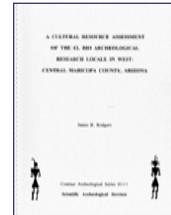
1.3 El Rio Corridor Recent Studies and History

In 1987, The Flood Control District of Maricopa County (FCDMC) recognized a convergence of past, present, and future demands coming together for this reach of the Gila River. Since then, the FCDMC has developed a vision, master plan and guidelines for future development in the El Rio corridor.

1987 Creation of a 97-Mile Watercourse Master Plan. FCDMC, in conjunction with more than 20 different municipalities, agencies, Native American communities, jurisdictions and other user groups initiated a Watercourse Master Plan for a 97-mile stretch of both the Salt and Gila River corridors from Granite Reef Dam to approximately Painted Rock Dam. The result of this effort was the development of a more focused and refined area of study along the Gila River.



1999 El Rio Watercourse Master Plan Vision Multi-Agency Review and Response to Planning and Policy Opportunities on the Gila River. FCDMC, in conjunction with the City of Avondale, the Town of Buckeye and the City of Goodyear, along with the backing of other local municipalities, agencies, Native American communities, developers and environmental groups initiated the development of the El Rio Watercourse Master Plan Vision for the 17.5 mile stretch of the Gila River from the confluence of the Agua Fria River to the crossing of State Route 85. This effort resulted in the creation of the document "El Rio Vision Multi-Agency Review and Response to Planning and Policy Opportunities on the Gila River"



2001 On-Call Archeological Investigation of El Rio Corridor. FCDMC initiated an archeological assessment of a 17.5-mile stretch of the El Rio project corridor. This assessment was completed

in 2002 by Scientific Archeological Services of Phoenix resulting in the publication "A Cultural Resource Assessment of the El Rio Archeological Research Locale in West Central Maricopa County, Arizona".

2005/2006 The El Rio Watercourse Master Plan Landscape Management Guidelines.



FCDMC initiated a more detailed study of the 17.5-mile stretch of the El Rio project corridor through the commission of "Landscape Management Guidelines for the Watercourse Master Plan". This master planning effort was completed in 2006 by EDAW of Phoenix resulting in the publication *The El Rio Watercourse Master Plan Landscape Management Guidelines*.

2006 The El Rio Watercourse Master Plan.



FCDMC refined its understanding of the corridor through a more detailed study of the El Rio project corridor. This study was completed in 2006 by Stantec of Phoenix resulting

in the publication *El Rio Watercourse Master Plan* and provides the foundation for this document, the *El Rio Design Guidelines and Planning Standards*.

The primary goal of the *El Rio Watercourse Master Plan (WCMP)* was to provide flood protection while allowing for the long-term, multi-use function of the river corridor. The WCMP serves the public in the following ways:

1. Presents structural and non-structural alternatives to minimize potential flooding
2. Manages environmental restoration of salt cedar trees and the reintroduction of native species to the area, such as cottonwood and willow trees
3. Enhances water quality with the inclusion of wetlands and open flow channels
4. Integrates recreational facilities and trails along the Gila River through a multi-use facility
5. Incorporates educational opportunities with interpretive hiking trails and riparian educational centers
6. Highlights this economic asset that could become a regional and national destination

The plan was adopted formally by the City of Avondale, the City of Buckeye, the City of Goodyear and the Flood Control District of Maricopa County.



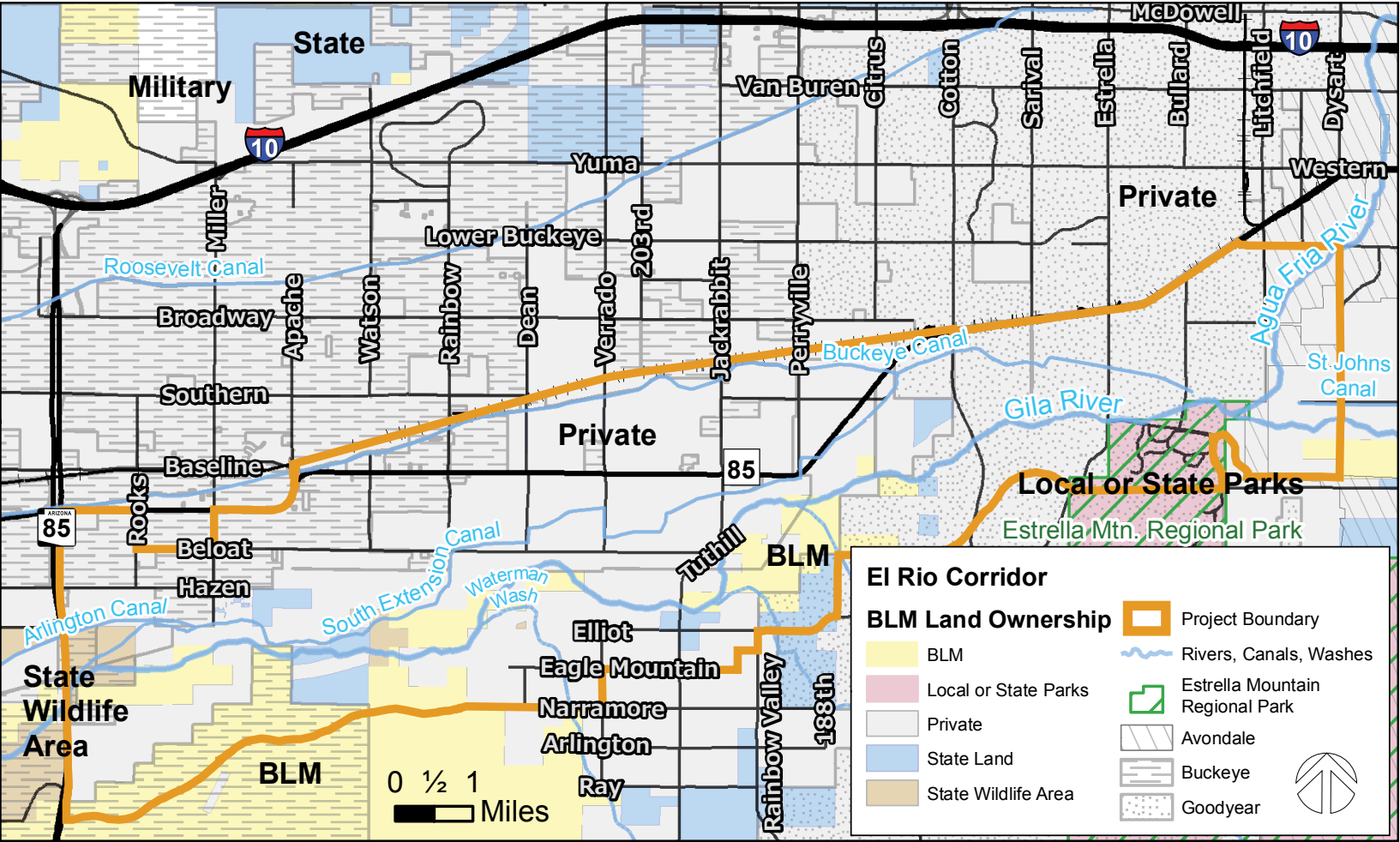
2007 Execution of the Memorandum of Understanding. A Memorandum of Understanding (MOU) to implement the *El Rio Watercourse Master Plan*

was adopted formally by the City of Avondale, the Town of Buckeye, the City of Goodyear and the Flood Control District of Maricopa County.

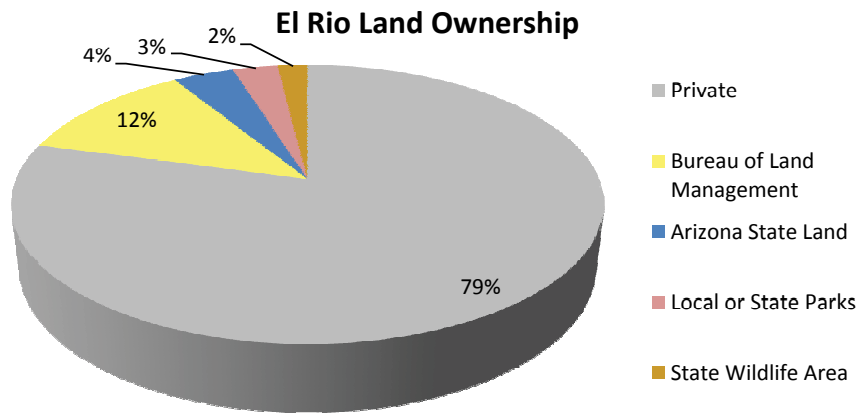
2013 Adoption of the Intergovernmental Agreement. An Intergovernmental Agreement (IGA) for the creation of consistent design guidelines and planning standards was formally adopted by the City of Avondale, the Town of Buckeye, the City of Goodyear and the Flood Control District of Maricopa County.

1.4 Land Ownership

Land ownership within the corridor is predominately privately held. The biggest government land owner in the corridor is the Bureau of Land Management (BLM), with 4,046 acres. The BLM land is concentrated in the western half of the corridor, roughly split between land in the riverbed and land along the south bank of the river in the Buckeye Hills. The Arizona State Land Department owns some land in the western half of the corridor as well as scattered land around the middle of the corridor, both in and along the edge of the river bed. The next largest governmental land ownership category falls into local or state parks, specifically, the Estrella Mountain Regional Park, found near the eastern end of the corridor. Finally, there are two smaller state wildlife areas on the western end of the corridor in the riverbed. The government held land in the floodway is given over to conservation uses and is undevelopable.

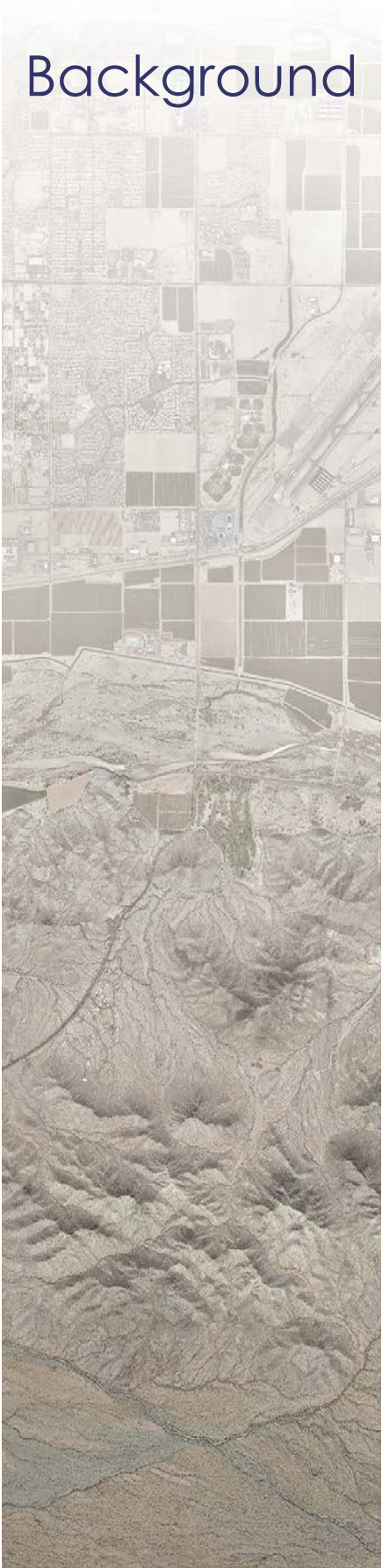


El Rio Land Ownership



Ownership Type	Acreage
Private	26,866
Bureau of Land Management	4,046
Arizona State Land	1,338
Local or State Parks	996
State Wildlife Area	641
Total	33,886

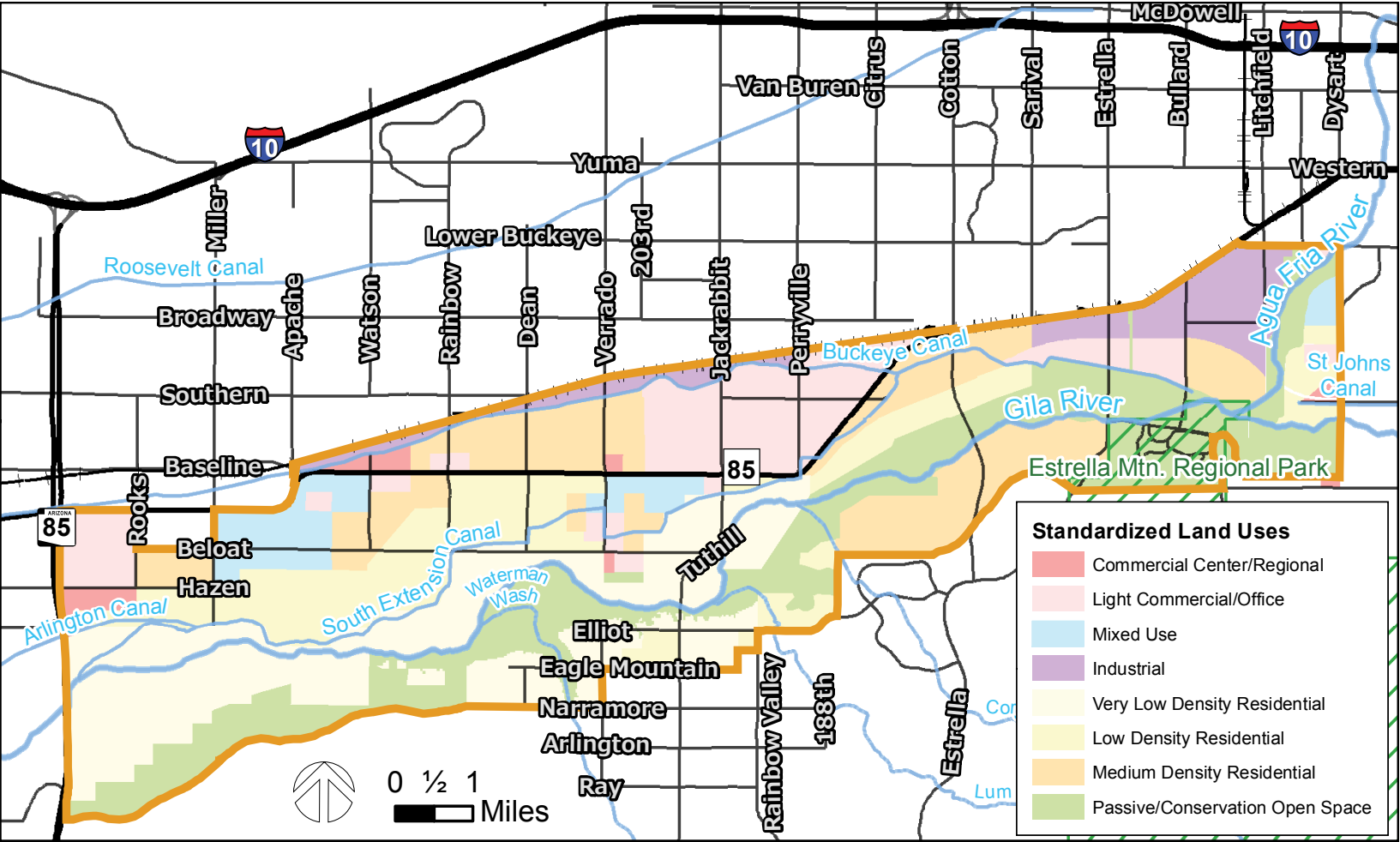
Background



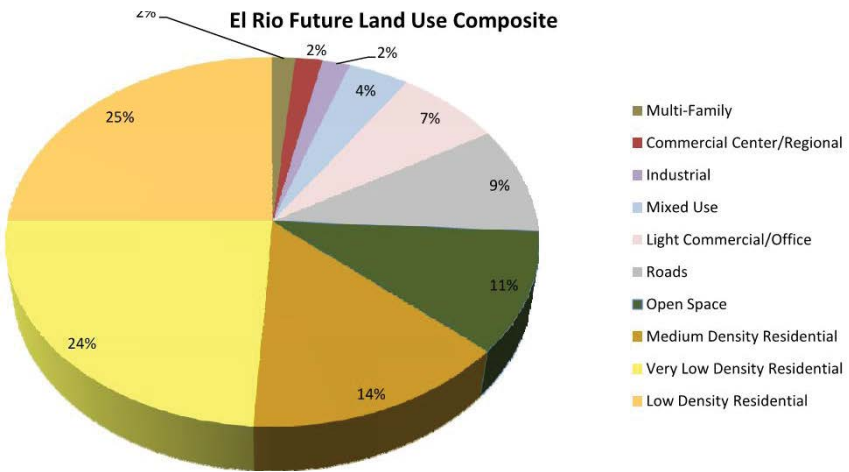


1.5 Composite Future Land Use Designations

The El Rio Design Guidelines and Planning Standards document does not propose future land use designations. Future land use designations are specifically approved and governed by each respective municipal jurisdiction. However, in order to gain an understanding of the communities' collective vision for future land use within the corridor, the project team developed a composite land use map in order to gain an understanding of planned future land uses. Referring to the table below, nearly one-half of the corridor is planned as low or very low density residential while 15% of the corridor is planned as non-residential or mixed use. The composite land use map is shown to the right.



El Rio Future Land Use Composite



Future Land Use	Percent of Total
Multi-Family	2%
Commercial Center/Regional	2%
Industrial	2%
Mixed Use	4%
Light Commercial/Office	7%
Roads	9%
Open Space	11%
Medium Density Residential	14%
Very Low Density Residential	24%
Low Density Residential	25%