

## **SECTION TWO**

### **PROJECTIONS OF POPULATION**

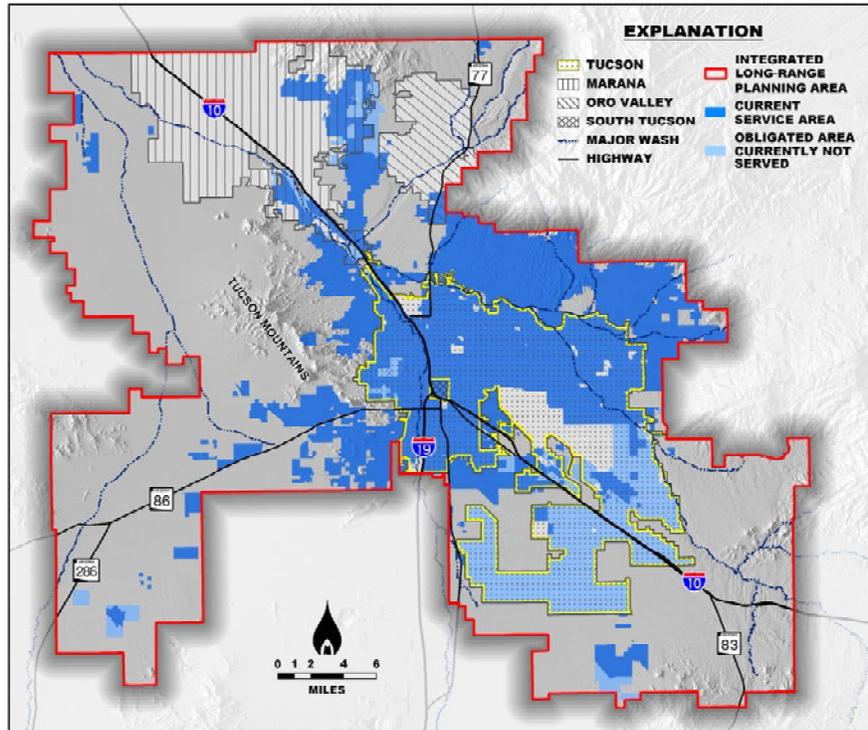
Tucson Water revised its aggregate and spatial population projections based on updated information generated by the Pima Association of Governments (2005a). In addition, an analysis was conducted to assess the sensitivity of population projections to variations in the ultimate size of the Utility's service area.

#### **LONG-RANGE PLANNING AREA REVISITED**

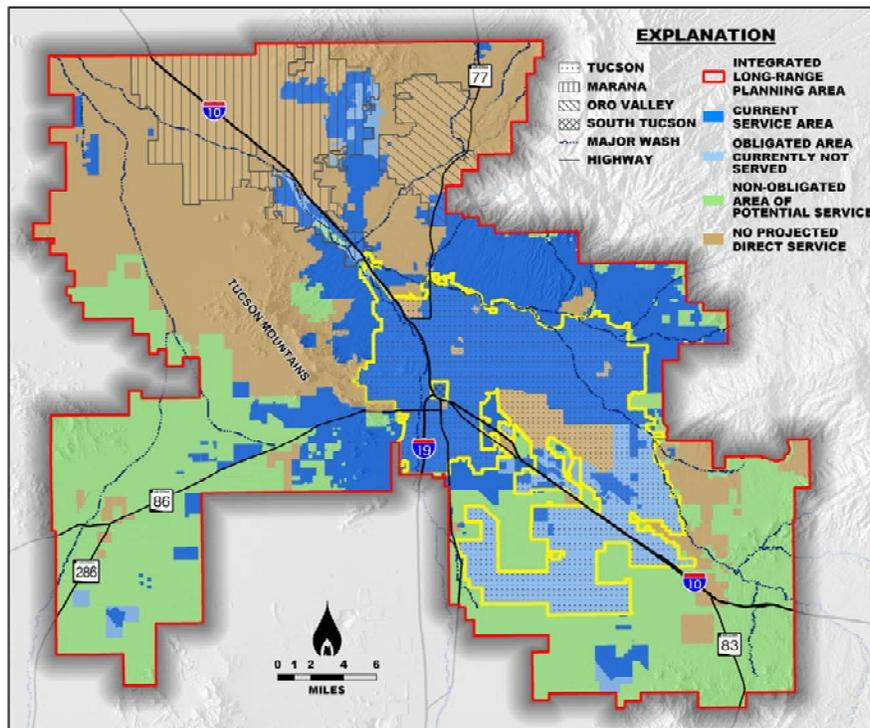
Tucson Water's Long-Range Planning Area is outlined by the red boundary on Figures 2-1 and 2-2. The overall planning boundary has been revised in order to be more spatially contiguous with bounding jurisdictions, preserved lands, and census polygons. The Long-Range Planning Area is generally consistent with the planning areas utilized in *Water Plan: 2000-2050* and in *Tucson Water Resources Plan 1990-2100* (CH2M Hill, 1989).

As shown on Figure 2-1, the Long-Range Planning Area includes areas currently served by Tucson Water (dark blue) and those undeveloped areas that the Utility is obligated to serve (light blue). The Utility's obligation is limited by the terms of legal contracts and by the availability of its assured water supplies. These dark and light blue areas are collectively referred to as the "Obligated Area" which has a combined area of about 410 square miles. The color-coded areas shown on Figure 2-1 are portrayed with limited resolution and should not be construed to be a detailed, parcel-based determination of status. Tucson Water currently provides direct service both within and outside the City limits. The light blue areas include undeveloped lands within the existing City boundaries and a limited number of contracted areas outside the City where Tucson Water is legally required to provide service. The Obligated Area can potentially be expanded through the approval of future water-service contracts, City annexations, or by the direction of the City Manager. The City Manager recently directed Tucson Water not to provide new services outside the Obligated Area unless directed to do so.

The Long-Range Planning Area extends well beyond Tucson Water's Obligated Area. The geographic areas shown in green on Figure 2-2 are non-obligated areas which may be served by Tucson Water and/or other water providers in the future. For the purposes of this Update, the dark blue, light blue, and green areas shown on Figure 2-2 are collectively referred to as Tucson Water's "Potential Service Area" which has a combined area of approximately 780 square miles. The Potential Service Area is almost twice as large as the Obligated Area and therefore contains a significantly larger projected population. As with Figure 2-1, the color-coded areas shown on



**Figure 2-1:** Tucson Water’s Long Range Planning Boundary, Current Service Area, and Obligated Areas Currently Not Served.



**Figure 2-2:** Tucson Water’s Long-Range Planning Boundary and Potential Service Area.

Figure 2-2 are portrayed with limited resolution and therefore should not be considered to be a detailed, parcel-based determination of status. As per the City Manager's direction, Tucson Water will only commit to providing new services in areas shown in green when directed to do so.

Areas where Tucson Water has no plans to provide direct service are shown in brown on Figure 2-2. This area includes the many other local water providers who have chosen to pursue their own water-management objectives. The projected population contained within the brown areas is not included in Tucson Water's resource-planning projections. Nonetheless, the Utility has common interests with these providers and is already providing various forms of indirect service to many of them. Tucson Water also works with local water interests to identify and assess possible resource and water-supply arrangements that would be mutually beneficial. More details regarding more recent regional cooperative discussions and initiatives are in Section Seven.

## **POPULATION COUNTS AND PROJECTIONS**

In *Water Plan: 2000-2050*, data sets provided by federal, state, and local governmental agencies were used to project population in the Potential Service Area through 2050. Such population data sets provide a common basis for conducting regional planning efforts. The U.S. Census Bureau provided a count of the local population in *Census 2000* which continues to serve as the decadal baseline. This baseline will be reset after *Census 2010*.

### **Aggregate Population Counts and Projections**

In 2005, Pima Association of Governments (2005a) updated projections for Pima County and worked with local planning entities such as Tucson Water and the Pima County Regional Wastewater Reclamation Department to provide revised aggregate and spatial population estimates. The updated population projections have since been used to develop annual population estimates for Tucson Water's Obligated Area as well as revised estimates for the larger Potential Service Area. The original 2050 spatial projection provided by PAG did not have the same resolution as that shown for 2030 since the former was developed at the coarser census tract level. PAG plans to provide an updated 2050 projection with finer resolution in 2008.

Annual population projections for Tucson Water's Obligated Area and its Potential Service Area are graphically shown on Figure 2-3. The annual projections for the 30 years between 2000 and 2030 were based on traffic analysis zone assessments at five-year increments; the 20 years between 2030 and 2050 were linearly interpolated and are dashed indicating greater uncertainty. The population for the Obligated Area is estimated to increase from 638,936 in 2000 to approximately 990,000 in 2030 and to just over 1.1 million by 2050. The Potential Service Area population is estimated to be approximately 1.1 million in 2030 and almost 1.3 million in 2050.

From 2000 through 2030, significant population growth is projected to occur on the fringes of urban Tucson. This may entail further service area expansion in undeveloped obligated areas and possibly in unobligated areas if so directed. The population in the Tucson Water service area

