

## **3.0 PROJECTED WATER DEMANDS**

### **3.1 Projected Water Demands**

Average day demands were developed for the City of Fort Worth for the on-going 2016 Water Master Plan Update. Based on historical usage, a residential and non-residential per capita was developed for each individual pressure plane, resulting in a city 2017 average day demand of 166 mgd, and a City 2027 average day demand of 210 mgd (City demands do not include wholesale demand). An average day to maximum day peaking factor was also developed for each pressure plane, resulting in a City 2017 maximum day demand of 313 mgd, and a City 2027 maximum day demand of 404 mgd.

The wholesale customer demand was provided by the wholesale customers as part of the wholesale customer surveys. The 2017 average day demand for wholesale customers is 68 mgd, and the 2027 average day demand for the wholesale customers is 82 mgd. The 2017 maximum day demand for wholesale customers is 158 mgd, and the 2027 maximum day demand for the wholesale customers is 185 mgd.

The total 2017 average day demand for Fort Worth and its wholesale customers is 234 mgd. The total 2027 average day demand for Fort Worth and its wholesale customers is 292 mgd. The total 2017 maximum day demand for Fort Worth and its wholesale customers is 471 mgd. The total 2027 maximum day demand for Fort Worth and its wholesale customers is 589 mgd.

The 2016 Water Master Plan Update recommended a maximum day to peak hour peaking factor of 1.5, resulting in a total 2017 peak hour demand for Fort Worth and its wholesale customers of 707 mgd, and a total 2027 peak hour demand for Fort Worth and its wholesale customers of 884 mgd.

**Table 3-1** summarizes the projected water demands for Fort Worth.

**Table 3-1 Projected Water Demands**

| Entity  | Planning Year | Average Day Demand (MGD) | Maximum Day Demand (MGD) | Peak Hour Demand (MGD) |
|---|---------------|--------------------------|--------------------------|------------------------|
| City of Fort Worth                                    | 2017          | 166                      | 313                      | 470                    |
|   | 2027          | 210                      | 404                      | 606                    |
| Wholesale Customers<br>(Portion Served by Fort Worth) | 2017          | 68                       | 158                      | 237                    |
|   | 2027          | 82                       | 185                      | 278                    |
| Total Demand  | 2017          | 234                      | 471                      | 707                    |
|   | 2027          | 292                      | 589                      | 884                    |