

City of Hillsboro

2024 Water Rate Study

September 24, 2024

Utilities Commission Public Hearing

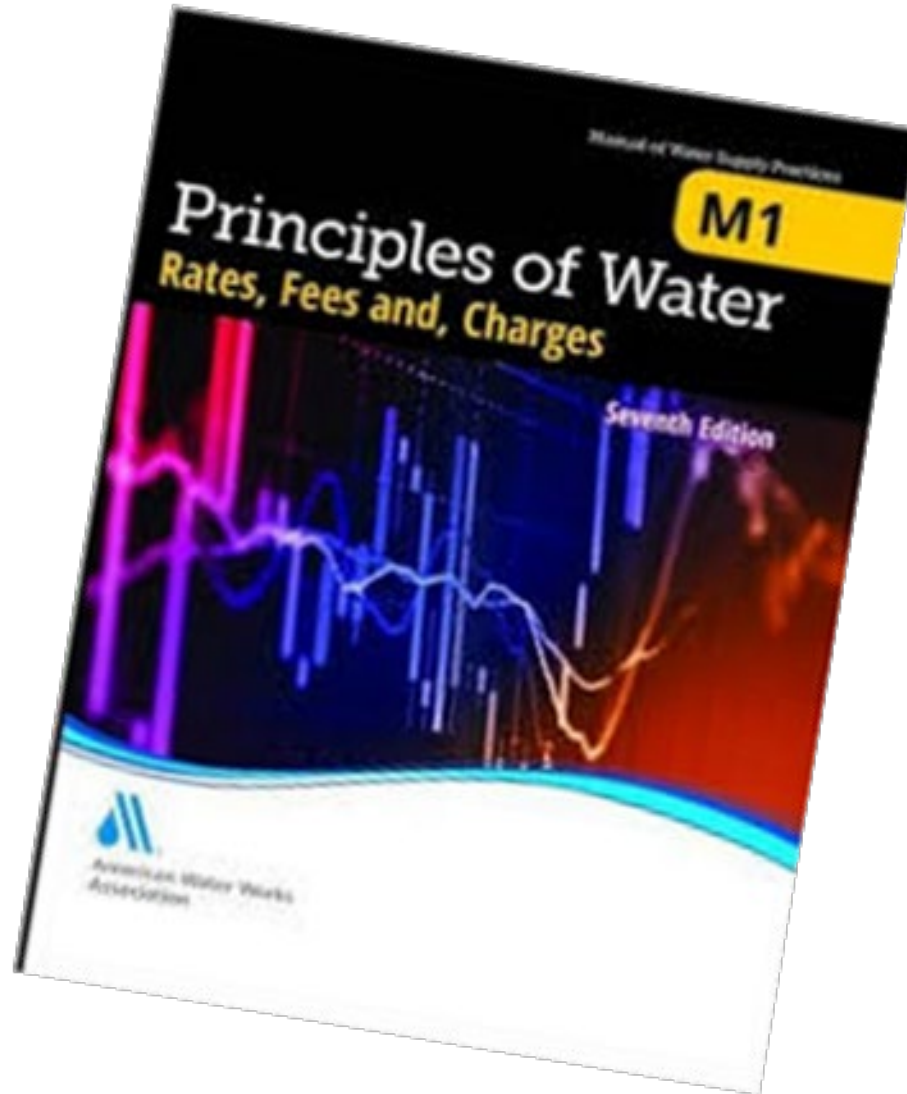


Presentation Overview

- Purpose of the Study
 - Utilize industry Generally Accepted rate making principles and the City's system and customer characteristics
 - Set rates at a level that will generate revenue sufficient to fund the utilities' operating and capital needs
 - Develop proposed rates that are proportional between the different customer classes of service (rate schedules)
- Purpose of the Presentation
 - Present the results of the rate study
 - Provide summary information that supports the proposed rates

What are Generally Accepted Rate Making Principles?

- American Water Works Association M1 Manual



Establishing Cost-Based Water Rates

Revenue Requirement

Compares the revenue of the utility to the expenses to evaluate the level of overall rate revenues



Cost of Service

Proportionally distributed the revenue requirement between the various customer classes of service



Rate Design

Design rates for each class of service to meet the revenue needs of the utility, along with the cost of service proportional distribution of costs

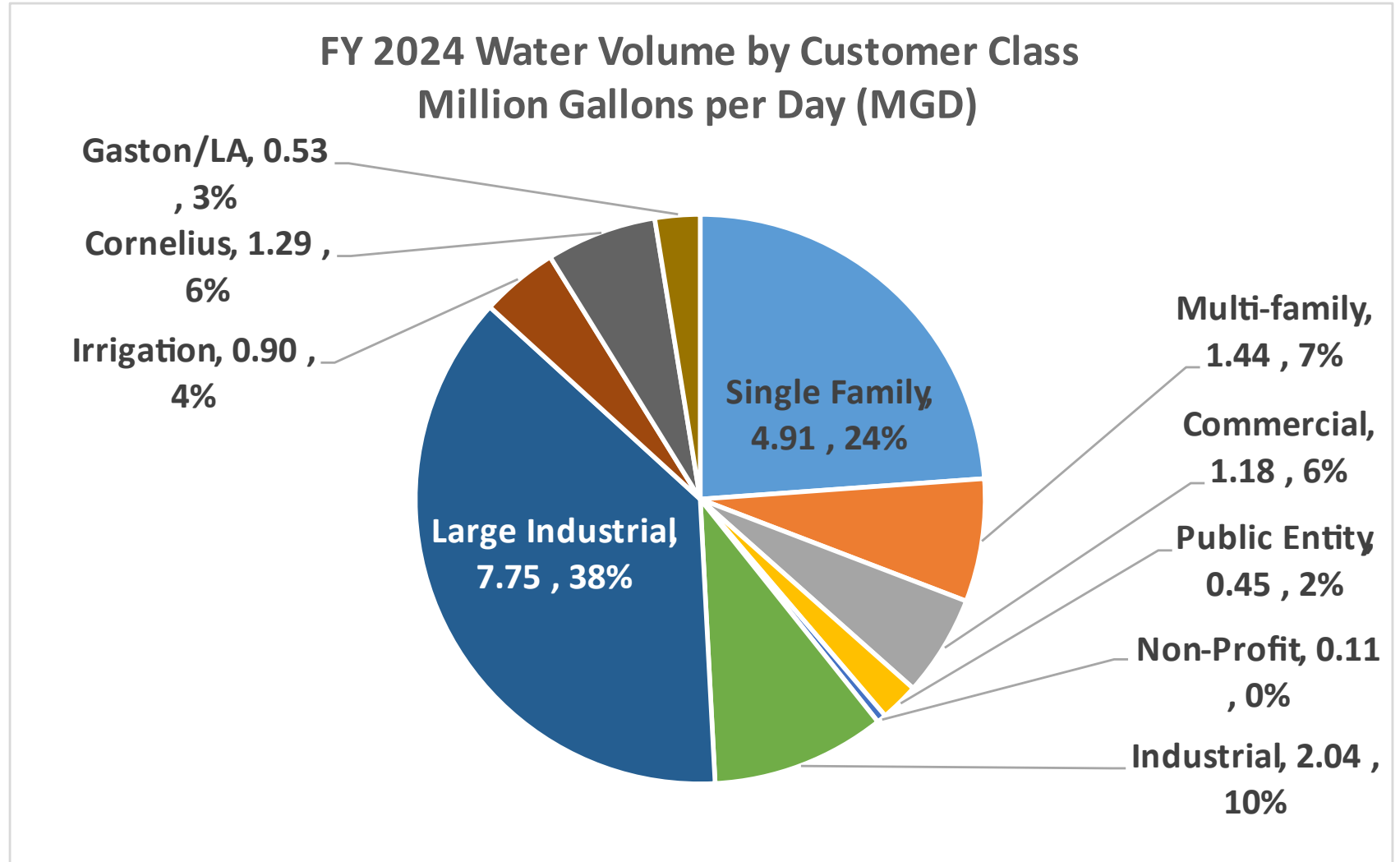
Why is Peak Demand (Extra Capacity) Important for Residential Customers?

- If all residences used water at a constant rate 120 households would be able to be served by a $\frac{3}{4}$ " Water Line
- 120 residences at max output based on predominant meter size would need a 6" Water Line
- Adding fire flow requirements, the water line would need to be 8"



Average Daily Demand

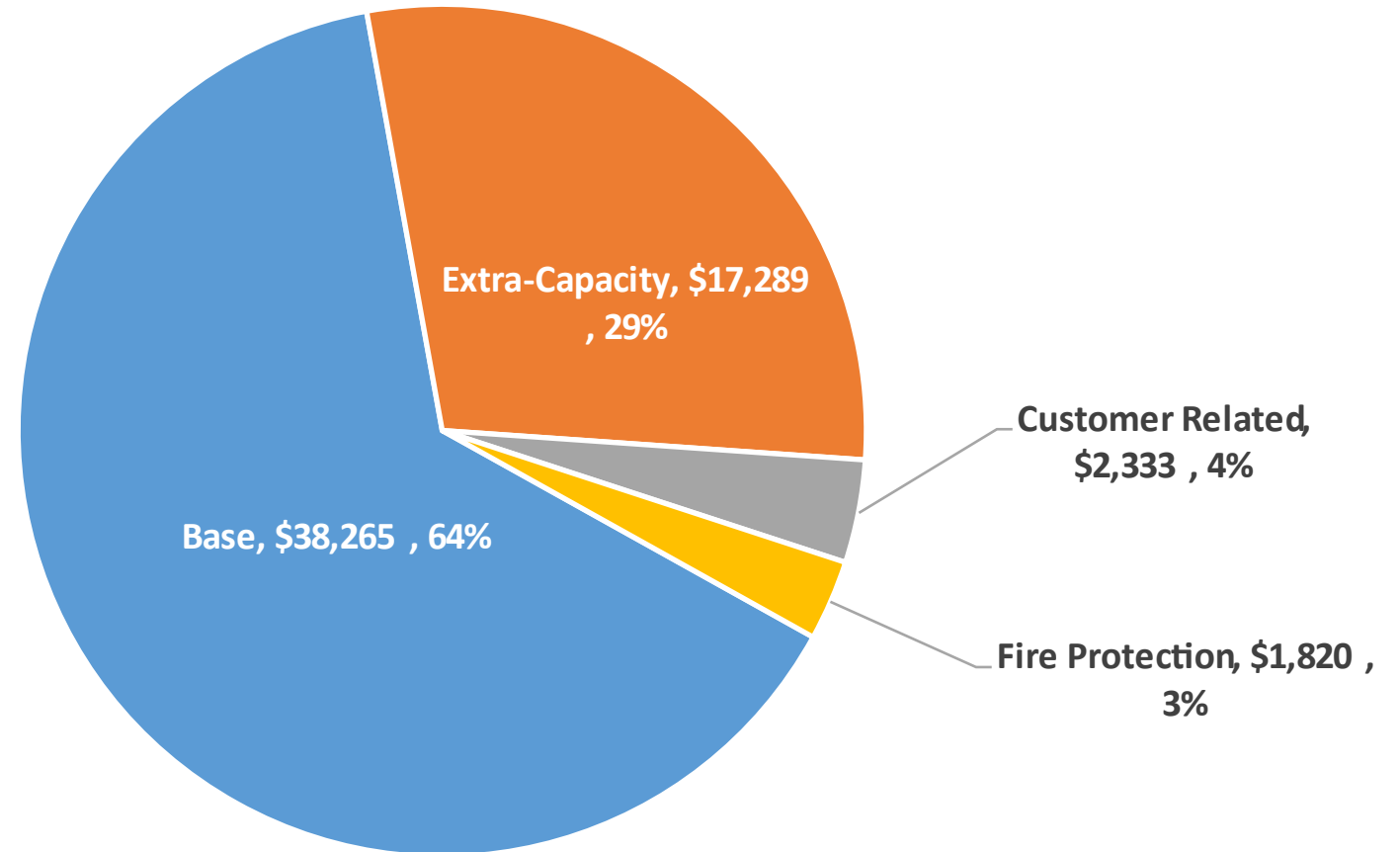
- Common method of viewing daily demand is in Million Gallons per Day
- As a distribution factor, does not account for the cost of building the system to account for Peak demand or fire protection needs.



Functional Costs

- Using the generally accepted methods costs were allocated between the functional components
- Extra Capacity is cost to provide extra water during summer. This method recognizes the additional cost to provide water during peak demand and fire events

Breakdown of Water System Costs \$1,000s

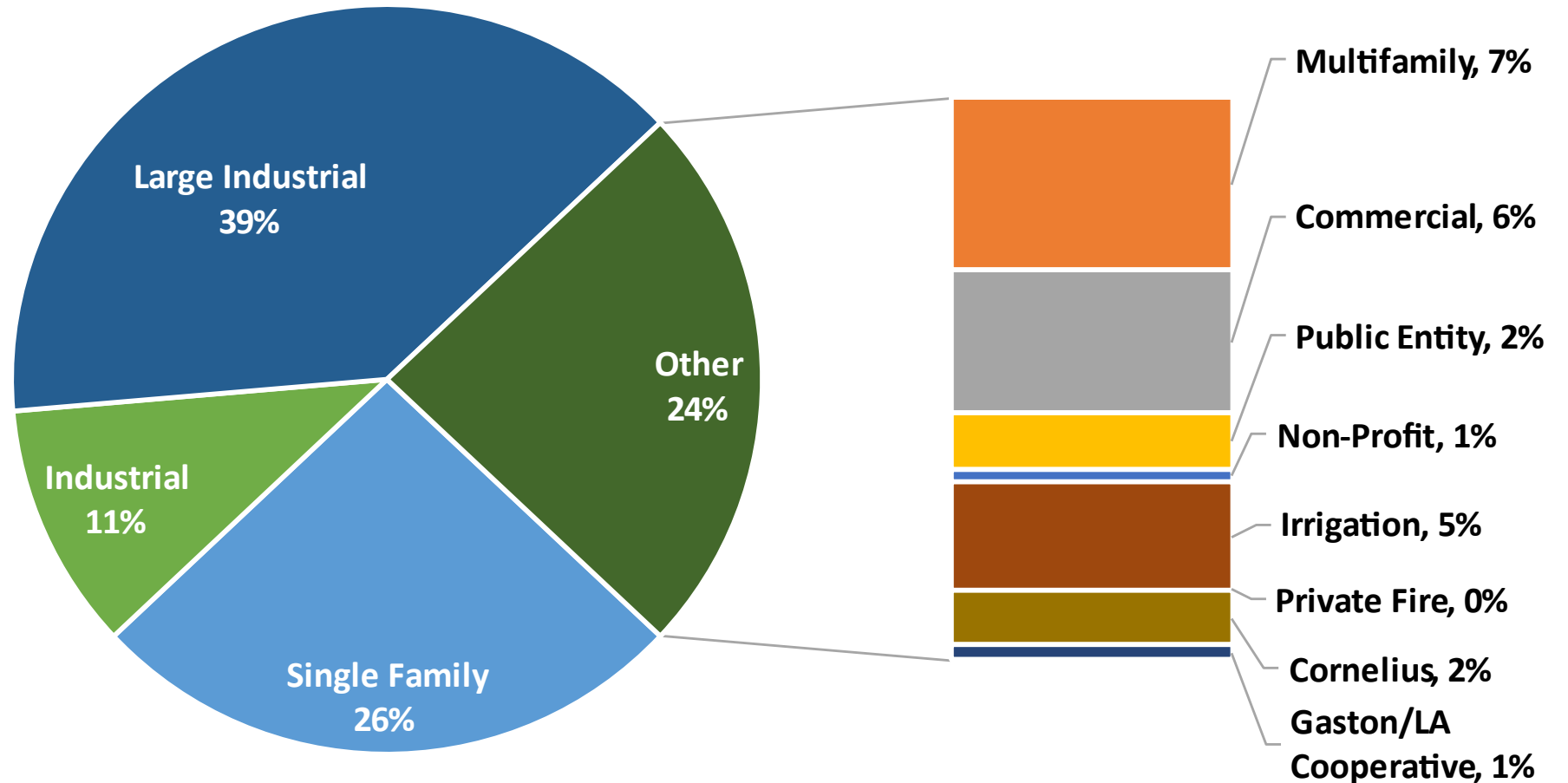


Distribution of Base Costs

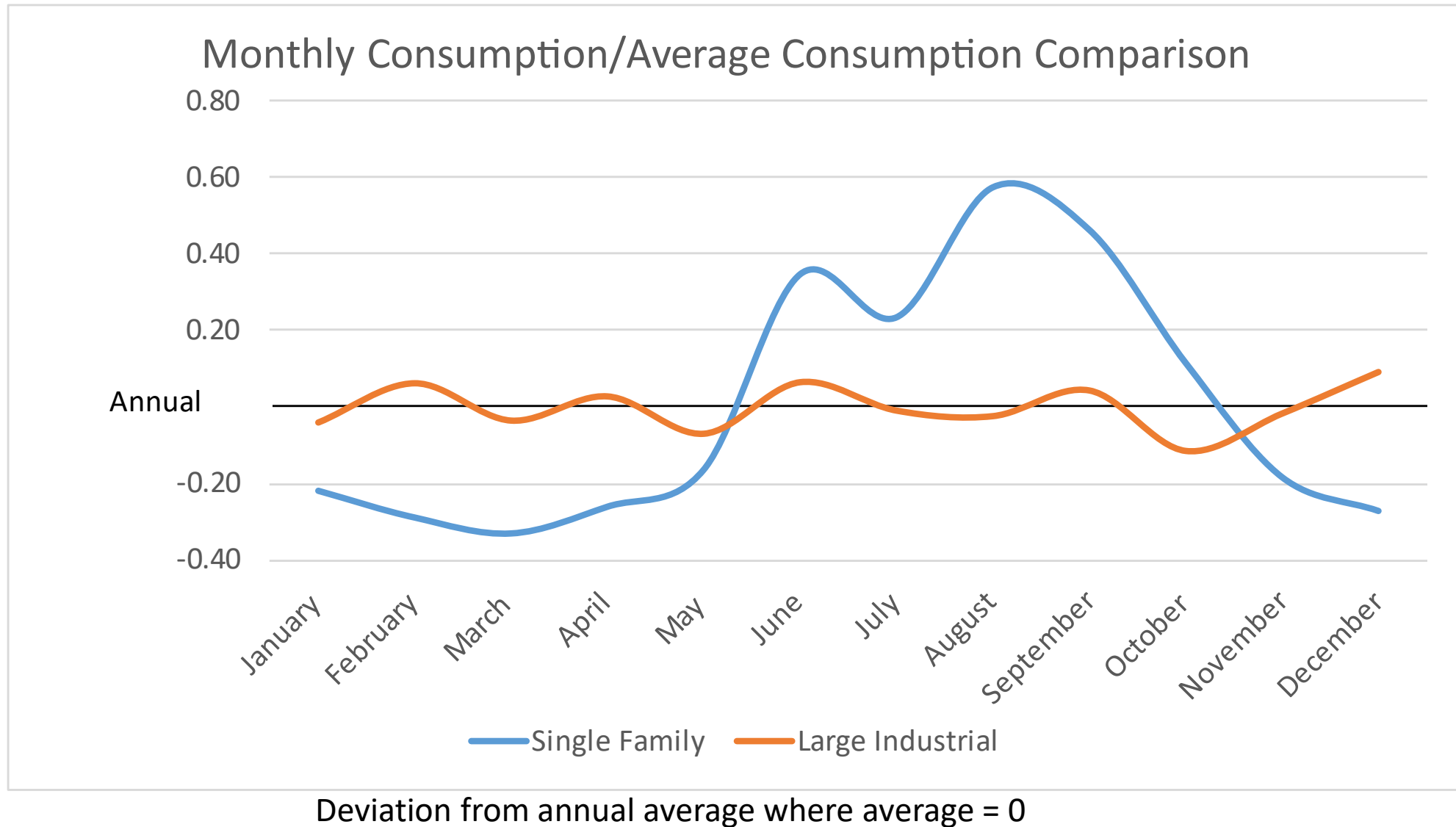
These are the costs to provide “year-round water volumes”

About 50% of Base costs are allocated to Industrial and Large Industrial

Base Costs 64% of Total Costs



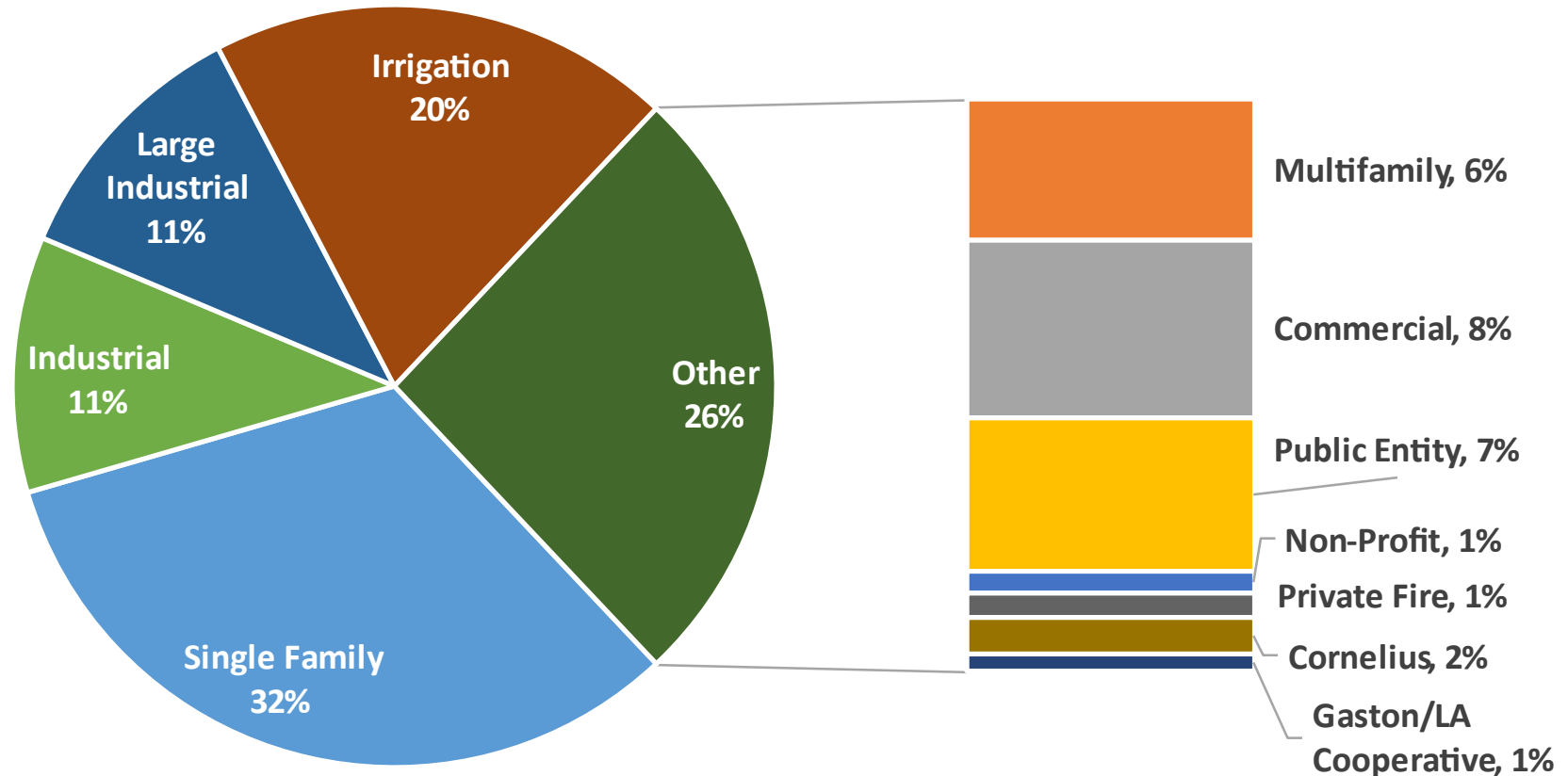
Extra-Capacity Cost Distribution (Peak Usage)



Distribution of Extra-Capacity Cost

- Peak day is often in the hottest days of the summer for outdoor water use like lawn watering
- 22% of Extra Capacity costs allocated to Industrial and Large Industrial
- Single Family went from Base of 27% to Extra-Capacity of 33% and Irrigation went from 4% Base to 19% Extra-Capacity

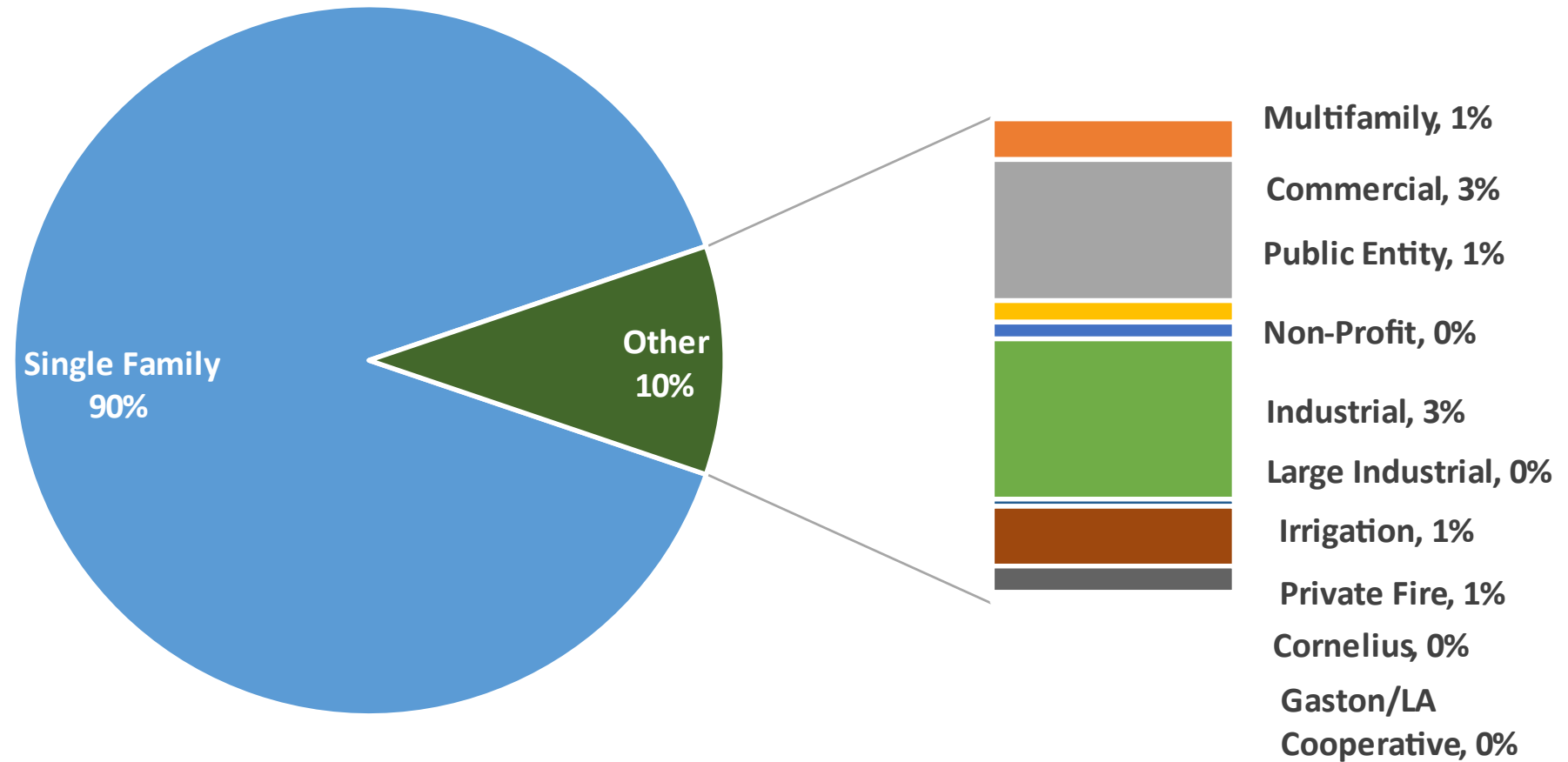
Extra-Capacity Costs 29% of Total Costs



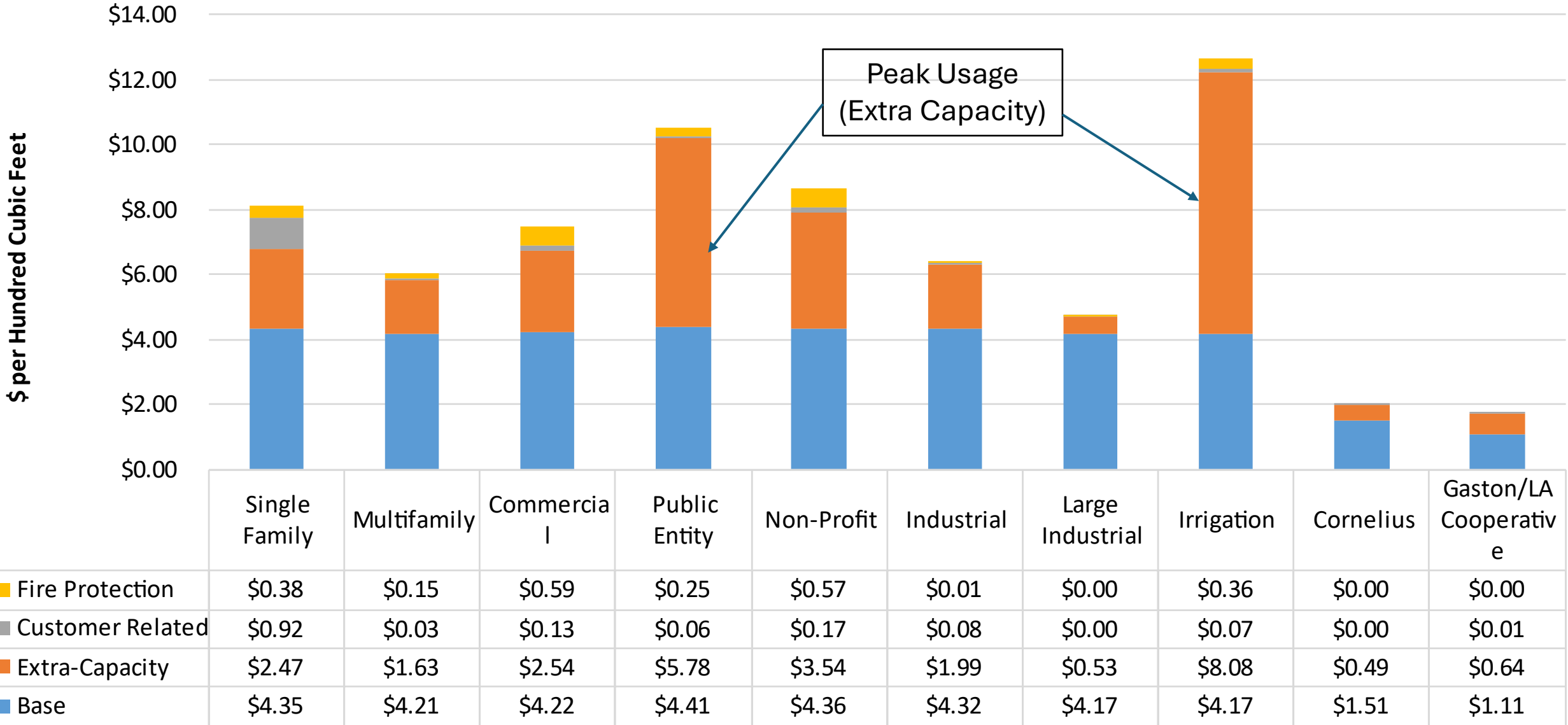
Distribution of Customer Costs

Customer related costs, are costs that are proportional to the number of customers within the customer class.

Customer Cost Distribution, 3.9% of Costs



Cost of Service Cost Breakdown by CCF



Rate Design Analysis

Cost of Service and Rate Design Considerations

- Single Family customers who are using less than 5 CCF rates are increasing less than \$0.35 per month
- When Large Industrial usage increases, new SDCs paid to reflect the capacity impacts on the system
- Large Industrial pays \$29,000 base fee per meter per month for 4 meters
- Economies of Scale: Industrial and Large Industrial only 185 accounts versus Single Family with 25,000 accounts
- Large Industrial has implemented business practices to reduce its water use