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# LEVEL OF SERVICE

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## Guidelines, Categories and Example Goals

### Guidelines

The Level of Service Goals should define what your customers and employees can expect from the water utility. When customers understand what the utility is providing for them in terms of service and they are given a say in what the utility may provide in the future, they are more willing to pay. Customers need to understand that service is related to cost and typically the higher the level of service desired, the higher the costs associated with producing that level of service. Determining what the customer wants and is willing to pay for drives the decision making for the utility.

When defining your level of service goals, remember to write SMART goals – Specific, Measurable, Attainable, Realistic and Time Bound (when appropriate). This will allow the utility to track its performance, show successes and failures and revise for improvement each year. Goals can be changed or adjusted over time. Goals can also be added or removed from the list.

It's important to involve customers and staff in the process of establishing the goals or service levels. The goals can be either internal or external. External goals are those that directly impact the customers. Internal goals are those that are related to operations and that would not be easily understood by customers. Progress towards meeting the goals should be tracked and reported to upper management and the public.

Determining your Level of Service goals should not be overwhelming. Keep it simple; develop 10 – 12 goals around the most important aspects for your utility. The information below can be used as a resource in setting your utility's goals.

### Categories

No matter where the water utility is located, customers desire roughly the same types of things from their utility – water that is safe and reliable, delivered at an adequate pressure, and that their concerns are addressed. Thankfully, this list is relatively small, allowing the utility to develop a targeted list of goals that address the major customer requirements. Level of Service Goals will typically fall into one of the following categories: Public Health and Safety, Customer Service, System Maintenance, Response Time, Water Loss Control, Drought and/or Demand Management, and System Management. There are certainly other categories that can be included and your utility may have unique customer needs that should be taken into account. However, including the above categories will address the level of service requirements typically found in Asset Management Plans.



## Examples

Presented below are some examples of the types of goals a utility may set in each of these categories. The target levels included in the goals below (highlighted in the gray boxes) are examples and can be changed to meet the needs of the customers and to match the resources available to the water utility.

### Public Health and Safety

- Meet Federal Safe Drinking Water Act Primary Drinking Water Standards 100% of the time.
- Meet state and local health based drinking water regulations 100% of the time.
- Maintain high level of confidence in water quality by completing all monitoring and reporting requirements of federal and state regulatory programs and reporting results to customers annually in the consumer confidence report.
- Maintain consistent chlorine residual (minimum of 0.2 mg/L, average of 0.8 mg/L) throughout the distribution system via water line flushing program, as necessary, and proper maintenance of the chlorination system.

### Customer Service

Small Systems	Large Systems
Provide average water pressure of 60 PSI and minimum water pressure of 40 PSI throughout the distribution system 95% of the time by monitoring tank elevations with SCADA.	Customer Service Call Center statistics will be tracked and compared to national standards for 1) Abandoned Call Ratio; 2) Average Wait Time; 3) Average Talk Time; 4) First Call Resolution
Fewer than 2 complaints received regarding color, taste and/or odor per month.	Fewer than 10 Technical Service Complaints per 1,000 accounts per quarter.
Provide water continually to all customers 95% of the time	Fewer than 30 water service disruptions per 1,000 customer accounts per year

- Provide finished water quality with a maximum of 150 mg/L hardness.
- Requests for new connections will be fulfilled within 10 days of payment of connection fees.
- Customers will receive 24 hours notice for planned outages. Planned outages will last no longer than 8 hours per event 98% of the time.

### System Maintenance

- The utility will contract with the fire department to flush fire hydrants to ensure proper operation. If a hydrant is found inoperable it will be reported to the utility within 1 week and replaced within 90 days. (Alternatively, the utility will perform hydrant flushing monthly to ensure operability of hydrants and will replace inoperable hydrants within 90 days.)



Small Systems	Large Systems
Utility staff will receive 20 hours of training each year to ensure efficient and effective maintenance is completed.	A minimum of 20 qualified formal training hours per Full Time Equivalent Employee per year will be required.
The water utility will develop an Operations and Maintenance Plan to minimize the life cycle cost of the assets within 2 years. The O&M Plan will be updated once every 2 years.	The planned maintenance ratio, calculated as percentage of Planned Maintenance Hours / Planned Maintenance + Corrective Maintenance will be greater than 50% by 2020
	The Percent of Water Pipe Network Inspected: Leak Detection (Length WATER pipe inspected/Total WATER pipe network length) will be greater than 25% by 2020.

### Response Time

- Respond to water quality complaints by the next business day 95% of the time
- Main line breaks will be fixed within 8 hours of discovery 90% of the time. Service line breaks will be fixed within 16 hours of discovery 90% of the time.

Small Systems	Large Systems
Provide customer service response within 8 hours during normal business operation (Monday through Friday, 8 AM to 5 PM)	The abandoned call ratio will be reduced below 10 within 6 months.

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### Water Loss Control

- Using AWWA's M36 Manual and Water Audit software, the utility will perform a water loss audit annually; will use the audit to assess overall non-revenue water as well as the categories of non-revenue water; and develop cost-effective (or appropriate) strategies to reduce non-revenue water.

Small Systems	Large Systems
The utility will improve data quality related to water sources by implementing a master meter testing and calibration program within 2 years.	Master meters will be tested and calibrated annually.

### Drought/Demand Management

Small Systems	Large Systems
Reduce Per Capita water use by 20% within 3 years through the implementation of a water conservation program.	The gallons per capita per day (gpcd) water use for single-family residential customers will be reduced to 100 gpcd through the implementation of a toilet rebate program and targeted education efforts within 3 years.

- The utility will develop a drought management plan within 2 years. The plan will take into consideration the results of the annual water loss audit. Water restrictions will be imposed during times of drought based on the drought management plan.
- The utility will plan for future development and growth by updating the 20 year Master Plan every 5 years.



## Utility Management

- The Utility will use the principals of Asset Management to maintain defined levels of service at the lowest life cycle costs. The Asset Management Plan will be reviewed and updated on an annual basis.
- Water distribution integrity, measured as number of leaks/breaks per 100 miles of water pipe will be monitored quarterly. This information will be used to guide planned pipe replacement expenditures.
- Water service affordability, measured as Average monthly bill x 12/real Median Household Income will be tracked annually and goals will be set based on EPA metrics.

## Internal Utility Goals

- Employee safety will be tracked and there will be fewer than 2 lost time events per year.
- The utility will implement an energy management program within 3 years. The utility will reduce energy use by 3% per year for the next 3 years.
- Business Case Evaluations OR Benefit Cost Analysis will be utilized to analyze proposed new projects that cost more than \$10,000.