CONSERVATION ACTION: AUDIT OF CITY WATER SYSTEM & DEVELOPMENT OF A WATER LOSS CONTROL PROGRAM

Policy: The City should conduct water usage audits of City facilities and the distribution system to determine more efficient water delivery options and develop a Water Loss Control Program. A Water Loss Control Program can help water systems meet challenges faced by aging infrastructure, water quantity and water quality concerns, and inadequate water resources. While it requires an investment in time and financial resources, management of water loss can be cost-effective if properly implemented. The time to recover the costs of water loss control is typically measured in days, weeks, and months rather than years. A water loss control program will also help protect public health through reduction in potential entry points for disease-causing pathogens.

A water loss control program helps to identify real losses of water from the water system and apparent losses, the water that is consumed but not accounted for. Real losses represent costs to a water system through the additional energy and chemical usage required to treat the lost water. Apparent losses represent a loss of revenue because the water is consumed but not accounted for and thus not billed. Once a water system identifies these real and apparent losses through a water loss control program, it can implement controls to reduce them. This can reduce the need for costly upgrades and expansions due to population growth and increased demand. By reducing the amount of water lost, the recovered water can be sold to consumers, generate revenue, and meet water demands. In some cases, this can reduce the need to find additional sources. Water loss control programs are often the most economical solution to increasing demand, especially in the short term.

Water Savings to be Achieved: Average water loss in systems is 16 percent, and up to 75 percent of that is recoverable.

Action Items to Implement: A Water Loss Control Program consists of three major steps:

- Water audit: A water audit identifies and quantifies the water uses and losses from a water system. It accounts for all of the water in a water system resulting in a quantified understanding of the integrity of the water system and its operation. It is the first step in formulating an economically sound plan to address water losses.
- Intervention: The intervention process addresses the findings of the water audit through implementation of controls to reduce or eliminate water losses.
- Evaluation: The evaluation step uses performance indicators to determine the success of the chosen intervention actions.

CONSERVATION ACTION: DEVELOPING A WATER SHORTAGE CONTINGENCY PLAN

A Water Shortage Contingency Plan is a document describing how a water agency will respond to the various stages of a drought or a prolonged shortage caused by some other event. This Water Shortage Contingency Plan (WSCP) provides guidelines for Seattle Public Utilities (SPU) to manage water supply and demand in the event of a water shortage. The plan enables SPU to maintain essential public health and safety and minimize adverse impacts on economic activity, environmental resources and the region's water use preferences.

Policy:

Water Savings to be Achieved: Water savings will depend on which stages are implemented in response to the water shortage.

Action Items to Implement:

- Adoption of ordinance authorizing City Manager to develop a Water Shortage Contingency Plan.
- Public engagement for plan development.
• Staff develops plan for Water Conservation and Drought Advisory Committee review and City Council approval.