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New Waluga Reservoir Key Facts

New Waluga reservoir planning started with an initial estimate that the reservoir could need to be built to hold up to 6.0 million gallons (MG) of water. As the project team reviewed system needs, they were able to reduce tank sizing, allowing a smaller reservoir that can be located farther away from neighboring homes, disturb fewer trees, and allow for better vegetative screening.

- 6.0 MG – Initial estimate developed from the 2001 Water System Master Plan projections.
- 5.0 MG – 1.0 MG eliminated due to installation of school sprinkler systems reducing fire flow needs.
- 4.5 MG – Dropped 0.5 MG assuming a 10 percent reduction in average daily demand through water conservation program savings.
- 3.5 MG – 1.0 MG of storage shifted to the existing Southside site.

Water stored at Waluga is for internal Lake Oswego use with the exception of a small amount needed to enable transfer of water between the Lake Oswego and Tigard systems. Storage sizing also assumes that Lake Oswego will build a second 1.0 MG reservoir at the existing Southside site and that the 1925 vintage 10th Street tank will eventually be decommissioned.

Waluga storage needs were determined according to standard engineering formulas, state requirements, and applicable building and fire codes. Storage is comprised of three components:

- Equalizing storage supports peak demands that exceed supply and treatment capacity.
- Emergency storage supports water supply during emergencies, natural disasters, and unexpected system failures.
- Fire flow storage provides water for fighting fires. Fire flow rates and durations are determined by fire codes adopted by the City.

The reservoir will be Prestressed Concrete and will be designed and constructed to the latest structural, building, and seismic codes, and to the highest class of standards (IBC Occupancy Category IV) required for essential public facilities such as hospitals, designated emergency shelters, and structures with critical national defense functions.

The reservoir needs to be at least 40 feet tall to support water pressures consistent with Lake Oswego's 40 pounds per square inch (psi) minimum pressure goal and provide uniform water service throughout the city. The existing 20 ft tall Waluga tank cannot support pressures at or above the 40 psi minimum in some portions of its service area.

At 40 feet tall, the new reservoir would need to be approximately 140 feet in diameter. In addition to supporting appropriate water pressure, a taller, narrower tank can be placed further away from nearby homes and involves removal of fewer trees. Color and landscaping treatments will further camouflage the tank and blend it in to the surroundings.