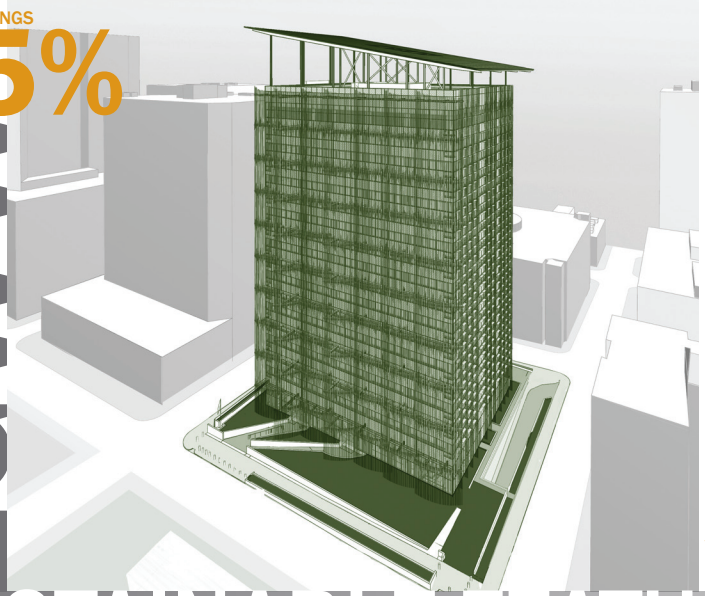
ENERGY SAVINGS

55%

EGWW



SUSTAINABLE FEATURES

P.V. PANELS - The renovation of the EGWW building includes 13,000 sf of solar photovoltaics on a 25,000 sf canopy which also doubles as a water collection surface. The solar array is expected to produce 200,000 kWh of energy annually.

WINDOW TO WALL RATIO - The building skin is optimized for daylighting and thermal efficiency with a glazing to wall ratio of 43%.

LIGHTING - Energy efficient, optically enhanced electric lighting systems with advanced controls will reduce lighting energy usage by 40% compared to Oregon Code.

RADIANT CEILING PANELS - Heating and cooling are delivered separately by an energy efficient hydronic distribution system using radiant ceiling panels.

PLUG LOADS - are proposed to be reduced through incorporation of high efficiency task lighting and use of Energy Star appliances, computers with LCD monitors, and LCD TVs for training and conference rooms.

FRESH AIR - Indoor air quality will be improved through use of a dedicated outside air system (DOAS) that provides 100% fresh air; exhaust air heat recovery ensures energy efficiency

SHADING DEVICES - on the south, west and east façades contribute to minimizing the solar heat gain during summer, with shading designed to be different on each orientation to respond to sun conditions.

LIGHT REFLECTORS - on the south and east façades provide additional reflected daylight into the daylight zone.

EDITH GREEN-WENDELL WYATT
FEDERAL BUILDING MODERNIZATION

RAINWATER COLLECTION
A 25,000 SF canopy above the building collects rainwater that can be reused in other areas of the building

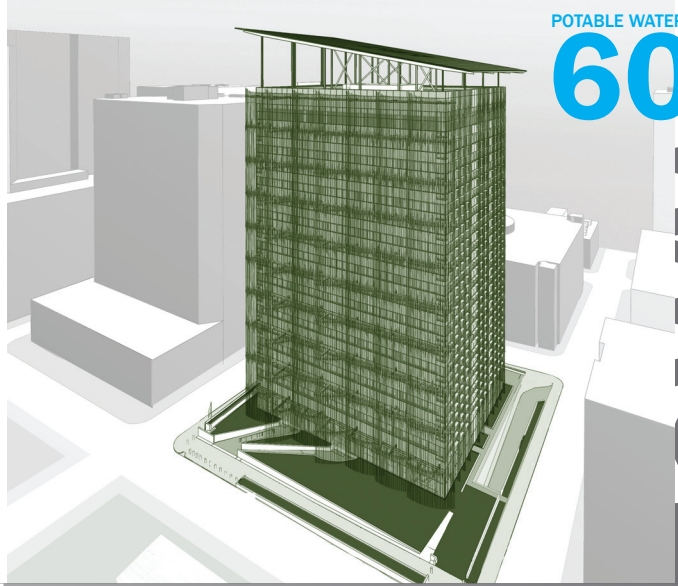
RAINWATER STORAGE
An exisiting rifle range has been converted into a 165,000 gallon tank that will store the rainwater for reuse in toilet flushing, irrigation and mechanical cooling makeup water.

WATER REUSE IN MECHANICAL COOLING TOWER
16% of the building's total water use is used for the building's mechanical systems. This will be reduced to 9% via a non-potable water reuse approach.

WATER CONSERVING PLUMBING FIXTURES
Water conserving fixtures and fittings together with rainwater reuse strategies described above result in a water savings of 60% compared to similarly sized "typical" building's usage.

WATER REUSE IN IRRIGATION
Reuse of non-potable water for irrigation results in a water savings of 55% compared to similarly sized "typical" building's usage.

MANAGING STORM WATER
By storing rainwater in the 165,000 cistern, the project meets EISA's goals of mitigating negative stream flow effects.



POTABLE WATER REDUCTION
60%

EGWW