



WVRC recirculates between eight to ten million gallons of water annually in our cooling towers.



The HVAC water circulation pumps.

Willow Valley HVAC Systems

Keep You Cool in Summer and Warm in Winter

by Clyde Wissler, Maintenance Manager, Lakes Campus



Our energy efficient cooling and heating systems are housed in our building Core areas. Summer cooling is achieved by circulating 75-degree water throughout the buildings to individual heat pumps in each apartment and common areas.

As the heat pump compressor generates cooling for each apartment, it injects heat into the circulating water as it passes through the unit. That heat is expelled through evaporation to the outside cooling towers.

During colder months, the process is reversed as heat is drawn out of the water to heat your apartment and the chilled water is reheated by boiler fires using natural gas. This system is ideal during the spring and



The gas-fired boilers for winter heating.

fall months because it utilizes the heat in the water produced while cooling some apartments to heat other apartments for Residents who desire a warmer temperature. Many large centrifugal pumps provide continuous circulation of the water, some in a back-up role to assure continuous flow in the event of pump failure. Regular preventative maintenance of pumps, boilers, cooling towers and other supporting components is performed to ensure dependable operation.