

Water Metering Program

Are any health concerns associated with the radio-frequency (RF) exposure from the new water meters?

Multiple studies on low-power RF transmissions used by Advanced Meter Reading (AMR) technology find no negative health impacts. The AMR system used by the City of Bellingham meets all applicable Federal Communication Commission (FCC) regulations.

AMR technology improves service and efficiency. Any radio-frequency exposure from AMR equipment occurs with intermittent, very low-duty cycle at levels far below safety standards specified by the FCC. There are no known adverse biological effects from these small fields. The largest RF field in most homes comes from broadcasting services including radio, TV and cell phones. Exposure decreases with distance. Meters are located in the right-of-way at the property line and send signals equivalent to about 1.6 seconds every four hours.

Are any security concerns associated with AMR data transmission?

The technology the City employs allows the meter to transmit any usage data via radio in order to correctly bill the customer. The technology does not allow other data to be transmitted or recorded. The communications system for data transmission is similar to cell phone technology and only transmits for an average of 1.6 seconds once every 4 hours. Data transmission incorporates frequency hopping spread spectrum (FHSS) and Data Encryption Standard (DES) encryption along with other vendor security measures to ensure the secure transmittal of usage data. The meters the City is installing do not have the capability to identify or control appliances within the home nor are they capable of recoding or monitoring household activity other than daily water usage.

