**IOT PHASE 2: SMART WATER MANAGEMENT**

**INNOVATION FOR SMART FAUCETS:**

**Voice-Controlled Faucets:**

Develop smart faucets with voice recognition technology that allows users to control water flow and temperature. Users can also ask for real-time updates on their water consumption, making it easy to manage and conserve water.

**Sustainability Metrics:**

Equip smart faucets with environmental metrics displays. These displays can show real-time water usage and calculate its environmental impact, such as the equivalent number of trees needed to offset the water used.

**Leak Detection and Prevention:**

Smart faucets can use IOT sensors to detect leaks in real time. If a leak is identified, the faucet can automatically shut off and alert the user or maintenance staff to minimize water waste.

**Customizable Water Usage Limits:**

Develop smart faucet apps that allow users to set daily or monthly water usage limits. When the predefined limit is reached, the faucet can send real-time notifications, encouraging users to conserve water.

**Water Quality Monitoring:**

Combine water consumption monitoring with real-time water quality analysis. Smart faucets can alert users to changes in water quality or potential issues, such as contaminants or temperature fluctuations.