

## 5.3 Water Resources

The following mitigation measures are recommended for Alternatives A, B, C, D, and E:

### **Comprehensive Drainage and Flood Management Planning and Implementation:**

**Measure 5.3-1:** Prior to implementation of the selected alternative, the project proponent shall complete a comprehensive design-level Drainage Plan. This plan shall address drainage and flooding in the action area. The Drainage Plan will implement additional measures, including but not limited to additional pervious surfaces, stormwater retention ponds, additional underground stormwater retention capacity, and other measures to retain or infiltrate stormwater flows, such that no net increase in 100-year peak stormwater discharge occurs as a result of implementing the selected alternative.

### **Location of Facilities above the 100-Year Flood Height:**

**Measure 5.3-2a:** The project proponent will ensure that the proposed groundwater well is installed above the FEMA-defined 100-year flood height, plus an additional 1-foot allowance to account for potential increases in flood height that would result from installation of levees surrounding the wastewater treatment plant, water treatment plant, and wastewater storage pond, as relevant. Specifically, the pump house including all electric and mechanical components, shall be installed at a level equivalent to at least 3 feet above the FEMA-delineated 100-year flood height, plus an additional 1 foot to offset flood height increases from installing flood control levees, as relevant.

**Measure 5.3-2b:** In accordance with FEMA floodplain hydraulic modeling requirements, the Tribe shall develop a hydraulic model to quantify the impact of wastewater facilities and other related systems proposed for construction within the 100-year floodplain, and 500-year floodplain if required by FEMA, of the Russian River. Depending on the results of the hydraulic model (e.g., modeling indicates that flood height increases would exceed 1 foot), the Tribe shall complete a Conditional Letter of Map Revision (CLOMR) prior to implementation of a project and must submit a Letter of Map Revision (LOMR) request to FEMA within 6 months of completion of a project.

**Measure 5.3-2c:** Under government to government consultation with FEMA, the Tribe shall seek participation National Flood Insurance Program (NFIP), which requires the Tribe to pass a resolution, adopt the effective Flood Insurance Rate Map that includes their lands, and adopt and enforce a flood damage prevention ordinance that meets or exceeds the minimum requirements of the program.

**Measure 5.3-2d:** The Tribe shall establish a Tribal Mitigation Plan in accordance with 44 CFR 201.7, which addresses flood hazards and mitigation of those hazards. The plan shall include mitigation goals and strategies and other NFIP or floodplain management activities as described in the latest version of FEMA's Tribal Multi-Hazard Mitigation Guidance.

### **Water Quality Mitigation for Proposed Sprayfields:**

**Measure 5.3-3:** The applicant shall take the following measures to ensure no significant reduction in the quality of surface water or groundwater used for potable water supply under the selected alternative:

1. Sprayfield operation shall be managed such that no runoff or other surface discharge of treated effluent occurs from the sprayfield site. Sprayfields shall be monitored on a daily basis for signs of treated effluent pooling or potential runoff. In the event that