Stormwater Drainage Containing Elevated pH Levels Near El Dorado Trail

County Investigation Timeline

January 12, 2016

Stormwater Drainage Containing Elevated pH Levels Near El Dorado Trail

The County of El Dorado received information via telephone that stormwater testing had been conducted by a county resident in the general vicinity of the El Dorado Trail (near the end of Stage Court). The caller stated that the testing results indicated a pH of 13 to 14.

January 12, 2016

County staff contacted the State Department of Fish and Wildlife (DFW) and conducted stormwater field testing in the presence of a DFW Warden. Stormwater in this area flows in a seasonal drainage channel northwest under the El Dorado Trail where it continues to flow in a northward direction. Field tests for pH were conducted in multiple locations using a Hanna Field Meter with a pH probe (all measurements collected by county staff used this instrument, unless otherwise noted). A single sample location on the north side of the El Dorado Trail (near the end of Stage Court) had a field pH of 12.8. The area is a relatively wide flat depression of ponding water with some inflow from the drainage. Stormwater approximately 50 feet upstream from the above location tested at 8. DFW did not observe any impacts to Weber Creek.

January 13, 2016

County staff conducted additional field testing for pH in multiple locations in the subject area. While conducting the sampling, County staff received 32-pages of “Field Notes” from the resident that had performed stormwater pH testing on January 12, 2016, at 5 locations in the area along or near the El Dorado Trail. The Field Notes included a map of sample locations and test results. The Field Notes indicated a single location of stormwater on the north side of the El Dorado Trail (near the end of Stage Court) measuring a pH greater than 13 using colorimetric paper (colorimetric paper is not as precise in measuring pH as the Hanna Field Meter). Field measurement by County staff confirmed a pH 12.7 at this single location on this date.

January 14, 2016

Conference call with Regional Water Quality Control Board regarding County investigation of elevated pH in stormwater drainage near the El Dorado Trail.

January 15, 2016

County staff collected stormwater samples from three locations: 1) the location with elevated pH (hereafter referred to as Location 1); 2) stormwater outflow approximately 15 feet east of the elevated pH location; and 3) from the south side of the El Dorado Trail. Samples were tested at the El Dorado County Public Health Lab. Lab results indicated pH of 12.0, 8.5 and 8.5, respectively. County staff posted a warning sign at the north edge of the El Dorado Trail warning the public to not drink, fish, swim, or wade in the water at this location. Caution tape was also placed behind the warning sign for approximately 30 feet to warn the public against accessing this area.

January 19, 2016

Field measurements were conducted for pH at multiple locations along the drainage channel. pH ranged from 7.16 to 9.25, except for Location 1 where the pH measured 12.37. Samples of liquid and solids in the area were also collected for laboratory analysis to confirm field measurements and to identify the chemical makeup of the samples. Samples were taken to California Laboratory Services (CLS), a state certified lab in Rancho Cordova.

January 21, 2016

Staff conducted field measurements of pH. Field sample results indicated pH readings of 9.3 to 12.7 in the ponded area and 7.1 to 8.2 where water was flowing. Flowing water downgradient from the ponded area had a pH measurement of 7.1. There were no impacts observed in Weber Creek, which is approximately ½ mile from Location 1.

January 25, 2016

An Office of Emergency Services (OES) report was filed with the State around 3:00 pm by a private citizen. The report stated “A release of a foaming white liquid is being released from an old mine that is currently impacting Weber Creek. The county has placed a sign near the creek stating hazardous water. Their (sic) are water samples taken for pH levels, which are currently posted to facebook. Other samples are being taken by multiple

agencies." Staff responded to this location however upon investigation found that the actual discharge was occurring approximately 1/8 mile east of the original location provided (near the end of Throwita Way). Staff measured pH of a milky white liquid using colormetric paper; results indicated pH of between 11 and 12. Samples of the liquid were collected for lab analysis.

January 26, 2016

Staff returned to Throwita Way and observed a milky liquid in a drainage channel on the southwest corner of Bradley and Throwita Way. The pH was measured using colorimetric paper; results ranged from 10 to 12. Additional samples of liquid were collected for lab analysis.

Temporary fencing was installed at the Location 1 to further deter the public from entering this area.

January 27, 2016

Conference call with the Regional Water Quality Control Board. Samples collected on January 25 and 26th were transported to CLS for analysis. Initial CLS lab results from samples taken on January 19, 2016, indicate the predominant constituent to be calcium hydroxide.

January 28, 2016

Staff conducted field measurements of pH in the areas on both sides of the El Dorado Trail and at Location 1. Results for pH ranged from 8.13 to 12.58 (12.58 at Location 1). Samples were transported to CLS for further analysis.

January 29, 2016

Press release issued warning of high levels of alkaline in stormwater in an area near the El Dorado Trail. Press release and investigation timeline posted on Environmental Management website. CLS Lab results from samples collected on January 25 and 26 reported pH of 8.91 and 12.16.

February 1, 2016

Staff conducted field measurements for pH in multiple locations and collected samples for laboratory analysis. Samples were transported to CLS. CLS Lab results from sample collected on January 28 reported pH of 12.07. All lab sample results will be posted

at:http://edcgov.us/EMD/Stormwater_Drainage_Containing_Elevated_pH_Levels_Near_El_Dorado_Trail.aspx

February 2, 2016

Conference call with the Regional Water Quality Control Board. Summary of investigation presented to public at District Three Supervisor Veerkamp's Town Hall Meeting, Board of Supervisors Chambers, 6:30 - 8:30 PM.

February 3, 2016

Additional warning signs posted on El Dorado Trail at Location 1. Press release also posted at Location 1 to provide additional information to public using the Trail.

February 5, 2016

Investigation sampling map and all field and lab data posted on Environmental Management website at:http://edcgov.us/EMD/Stormwater_Drainage_Containing_Elevated_pH_Levels_Near_El_Dorado_Trail.aspx

February 8, 2016

Received partial laboratory results for samples collected on February 1, 2016.

February 8 through 19, 2016

Review of data, updating maps and lab results for website.

February 9, 2016

Update provided to BOS concerning monitoring of water with elevated pH.

February 16, 2016

Additional sample collection of water for laboratory analysis. Reposting of sign that was removed at El Dorado Trail. Received results for metals for samples collected on February 1, 2016.

February 19, 2016

Updated website information (maps, laboratory reports, tables)

Regional Water Quality Control Board issued, “Order to Submit Technical Reports, Former Lime Kiln Site” (Order R5-2016-805) to the property owner of parcels 051-250-51 and 051-250-54 requiring a response by May 1, 2016.

Order R5-2016-805 and any other Regional Water Quality Control Board action, correspondence, or other information available to the public regarding this issue may be accessed at:

http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000005927

February 24, 2016

Second press release issued warning of high levels of alkaline in stormwater in an area near the El Dorado Trail providing additional information regarding the nature and characteristics of the elevated pH water and advising the public to avoid contact with stormwater.

March 4, 2016

Third press release issued warning of high levels of alkaline in stormwater in an area near the El Dorado Trail and advising the public to avoid contact with stormwater.

June 10, 2016

New signs (welded onto posts) installed on ED Trail across from Stage Court.

Fall 2016

Permanent fencing will be installed on the North side of the ED Trail in the vicinity of Stage Court to prevent access to the area identified to contain elevated pH water.

THIS TIMELINE WILL BE UPDATED AS MORE INFORMATION BECOMES AVAILABLE