

Exhibit B: Proposed Compliance Project

Submitted by: Forestville Water District

Submission Date: August 2, 2016



P.O. Box 261
Forestville, California 95436-0261
Phone (707) 887-1551 Fax (707) 887-1552
fwd@sonic.net

August 2, 2016

Connor McIntee
California Regional Water Quality Control Board
North Coast Region
5550 Skylane Boulevard Suite A
Santa Rosa, Ca. 95403

Re: Proposed Compliance Project Description for use of ACL Penalties
Complaint # R1-2016-008
Order # R1-2012-2012
ID # 1B831000SON
NPDES CA 0023043

In response to ACLC # R1-2016-008, the Forestville Water District is submitting a proposed compliance project (attached) for review by your office. The compliance project has been submitted in both hard copy and in electronic form to the NCRWQCB.

Please contact us at 707-887-1551 with any questions, comments or concerns.

Yours truly:



Matthew D. Froneberger

General Manager

Forestville Water District

Cc: David Long, Brelje & Race

MEMORANDUM

TO: Connor McIntee
North Coast Regional Water Quality Control Board

FROM: David Long
Benjamin Bryant

SUBJECT: Forestville Water District
Proposed Compliance Project Description for use of ACL Penalties
B&R File No. 4315.00

DATE: August 1, 2016

PURPOSE

In lieu of assessing the mandatory minimum penalties (MMPs) associated with the effluent limitation violations from July 1, 2008 through December 1, 2015, the Regional Board previously determined that the Forestville Water District (FWD) is eligible to apply an equivalent amount of money towards a compliance project.

This technical memorandum has been prepared on behalf of the FWD, and describes a proposed compliance project intent on identify problems which result in effluent limitation violations.

BACKGROUND

The Administrative Civil Liabilities (ACLs) imposed by the RWQCB resulted in the assessment of 70 MMPs totaling \$210,000 for violation of the following effluent constituents:

1. Biochemical Oxygen Demand (BOD) – 30 Violations
2. Cyanide, Total (as CN) – 15 Violations
3. Total Coliform – 15 Violations
4. Copper – 6 Violations
5. Total Suspended Solids (TSS) – 2 Violations
6. Nitrate, Total (as N) – 1 Violation
7. Dichlorobromomethane – 1 Violation

Pacific EcoRisk recently assisted the FWD in completing a Water-Effects Ratio study in January 2016, and Technical Memorandum in May 2016 that presented a reasonable potential analysis for copper and concluded that copper effluent limits and continued monitoring for copper are no longer necessary. Based on these documents, and the information contained in the recently

submitted Report of Waste Discharge (ROWD) on June 1, 2016, the FWD expects that the RWQCB will find no reasonable potential for copper or dichlorobromomethane to cause exceedances of a water quality standard in the receiving water, and that monitoring of these pollutants will no longer be required.

As discussed in the most recent ROWD, no coliform violations have occurred since replacement of the disinfection system and covering of the chlorine contact chambers.

Also discussed in the most recent ROWD, the FWD believes that the use of NaOH preservative causes falsely elevated and erratic Cyanide concentrations, and is currently requesting that the allowed hold time for unpreserved cyanide samples be extended to two hours.

BOD makes up the vast majority of the remaining effluent violations. Effluent BOD concentrations are described in detail in the recent ROWD, and violations are believed to be caused by peak influent flow events causing a small portion of the BOD to pass through the system untreated (due to a reduction in detention time within the aeration pond).

PROJECT DESCRIPTION

The proposed compliance project would focus on identifying opportunities for reducing collection system inflow and infiltration (I/I) that are the likely the cause of large influent flow events resulting in BOD violations. The project would consist of 4 major components:

1. Historical Data Collection and Analysis
2. Flow Surveys
3. CCTV Sewer Inspections
4. Report of Findings

1) Historical Data Collection and Analysis

Historical data collection would include compiling the most recent 5 years of historical data for plant inflow, lift station flows, rainfall, and Sonoma County Water Agency (SCWA) maintenance records.

Historical treatment plant inflow and rainfall data would be reviewed and correlated to establish average dry weather flow (ADWF) and peak wet weather flow (PWWF) baselines. This data will also be used to establish a goal for I/I reduction that would result in a sufficient decrease in PWWFs to the plant. Detention time within the aeration basin to achieve adequate BOD reduction will also be used in establishing a desired maximum PWWF and resultant goal for I/I reduction.

SCWA records for sewer maintenance, cleaning, and video inspections would be collected and reviewed. Information in these documents would be analyzed in an attempt to determine where I/I may be occurring and to refine where flow surveys should take place within the collection system.

2) Flow Surveys

Sanitary sewer flow monitoring would be conducted by a subconsultant (such as V&A Consulting Engineers) who specialize in providing flow monitoring services with the latest data collection and

metering equipment. By collecting timely, accurate data about sewer flows, we hope to be able to predict peak flows for a given segment (basin) of the system.

Typically, flow surveys targeted with predicting and identifying where peak flows, excessive inflow, and groundwater infiltration are occurring can be accomplished within a 3 month period during the winter months (December 15th thru March 15th).

Eight (8) key manholes locations have been pre-selected based on suspected problem areas and/or the convergence of branch flows within the system. These manhole locations are highlighted on the attached FWD Wastewater Collection System maps. We expect these manhole locations may be modified slightly as a result of reviewing and analyzing the historical data. Real-time rain data will also be obtained from various rain gauges that are installed during the flow monitoring period.

Real-time flows will be plotted against ADWF's and analyses will be made to determine which I/I component (inflow or infiltration) is more prevalent within a particular basin. We will also be able to compare the relative magnitude of the I/I components between drainage basins and between storm events. In the event that rainfall events do not occur during the study period, the flow monitoring time may need to be extended.

3) Closed Circuit Television (CCTV) Sewer Inspections

Since peak flows are of greatest concern, further investigation into the basins with the greatest sources of inflow will be performed using CCTV inspections. Cleaning of the sewer pipes must also be performed prior to CCTV inspection in order get a clear picture of where I/I may be occurring.

The results of the CCTV inspections will be reviewed and targeted repair areas will be identified.

4) Reports of Findings

A report of the findings and recommendations to reduce I/I will prepared. Included in this report will be the identification, costs, and schedule for implementing future capital improvement projects that will reduce I/I.

CLOSING

The FWD would like to beginning this compliance project as soon as possible. We hope you agree that allowing the ACL penalties to be used for this compliance project is a worthy step in reducing or eliminating future effluent violations.

COPY: Matt Froneberger, Forestville Water District Manager

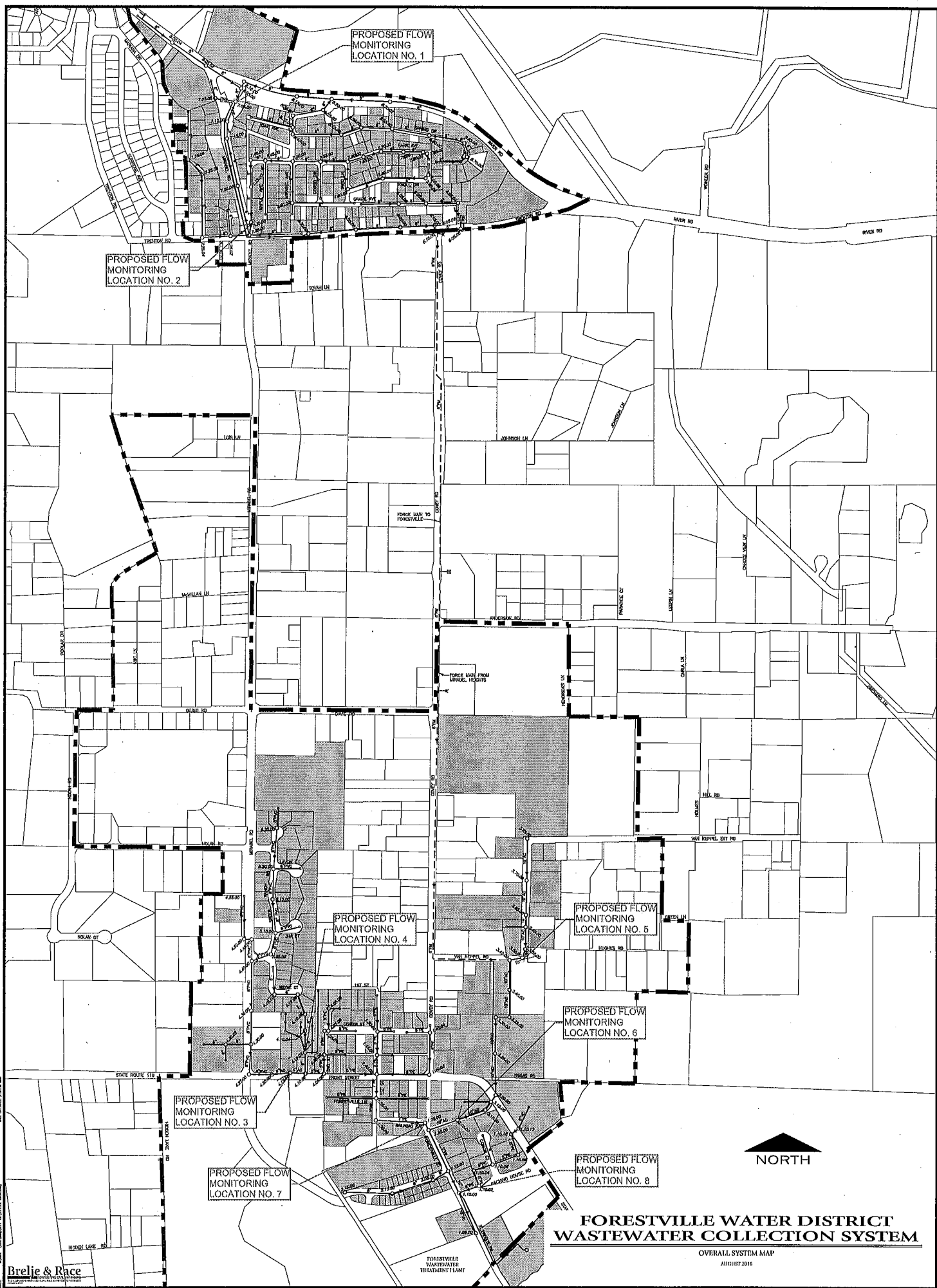
ATT: Compliance Project Estimated Cost
Figure of Flow Monitoring Locations

Forestville Water District Compliance Project Estimated Cost

PROJECT TASK	QTY	UNITS	RATE	TOTAL
Historical Data Collection and Analysis				
Data Collection	24	HRS	\$155	\$3,720
Analysis	40	HRS	\$155	\$6,200
Flow Surveys				
3 Month Flow Monitoring	8	SITES	\$10,000	\$80,000
Flow Monitoring Extension (1)	2	WEEK	\$5,000	\$10,000
Analysis and Reporting	40	HRS	\$155	\$6,200
CCTV Inspection and Cleaning				
CCTV Inspection and Cleaning (2)	10,200	LF	\$8.00	\$81,600
Identify Targeted Repair Areas	40	HRS	\$155	\$6,200
Report of Findings				
Develop List and Cost of Future CIP's	40	HRS	\$155	\$6,200
Report Preparation	60	HRS	\$155	\$9,300
TOTAL				\$209,420

Notes:

- (1) Cost includes extension of flow monitoring for all 8 sites. Extension of flow monitoring is weater depended. These funds will be applied to CCTV Inspection and Cleaning if they are not utilized during the flow survey portion of the work.
- (2) Inspection and Cleaning distance is approximately 1/2 of FWD sanitary sewer collection system.



PROPOSED FLOW MONITORING LOCATION NO. 1

PROPOSED FLOW MONITORING LOCATION NO. 2

PROPOSED FLOW MONITORING LOCATION NO. 4

PROPOSED FLOW MONITORING LOCATION NO. 5

PROPOSED FLOW MONITORING LOCATION NO. 6

PROPOSED FLOW MONITORING LOCATION NO. 3

PROPOSED FLOW MONITORING LOCATION NO. 7

PROPOSED FLOW MONITORING LOCATION NO. 8



**FORESTVILLE WATER DISTRICT
WASTEWATER COLLECTION SYSTEM**

OVERALL SYSTEM MAP
AUGUST 2016