

City of Malibu

23825 Stuart Ranch Road · Malibu, California · 90265-4861 Phone (310) 456-2489 · Fax (310) 456-3356 · <u>www.malibucity.org</u>

December 22, 2016

Mr. Sam Unger, Executive Officer Los Angeles Regional Water Quality Control Board 320 West 4th Street, Suite 200 Los Angeles, California 90013

RE: North Santa Monica Bay Coastal Watersheds Coordinated Integrated

Monitoring Program - Malibu Creek & Lagoon Bacteria and Nutrient Total

Maximum Daily Load Compliance Monitoring

Dear Mr. Unger:

By way of this letter, the City of Malibu on behalf of the North Santa Monica Bay Coastal Watersheds (NSMBCW) Enhanced Watershed Management Program (EWMP) group, which also includes the County of Los Angeles and the Los Angeles County Flood Control District, is hereby requesting approval of revisions to the Coordinated Integrated Monitoring Program (CIMP). These revisions are requested for the purpose of making the CIMP consistent with bacteria and nutrient Total Maximum Daily Load (TMDL) requirements applicable to Malibu Creek and Lagoon.

The current Malibu Creek & Lagoon Bacteria TMDL specifies compliance monitoring for *E. coli*¹ for at freshwater sites and total coliform, fecal coliform, and enterococcus in marine or brackish waters. The associated Malibu Creek Bacteria Compliance Monitoring Program (CMP) is consistent with the TMDLs. The approved NSMBCW Coordinated Integrated Monitoring Program (CIMP) incorporates the CMP, yet two pages in the CIMP erroneously specify *E. coli* sampling at MCW-1 (the brackish compliance monitoring location for Malibu Lagoon). City staff discussed this with Los Angeles Regional Water Quality Control Board (Regional Board) staff. In a letter dated October 17, 2016, the City requested permission to submit the changes for approval. In response, Erum Razzak of Regional Board staff requested that the revised pages be provided in clean and strikeout versions.

The following revisions to the CIMP were discussed with Regional Board staff, who verbally agreed that these changes are appropriate to specify the applicable CMP provisions:

• Section 2.3 Receiving Water Monitoring Parameters on page 27

The text of the approved CIMP (second bullet) indicates that the CMP specified monitoring for *E. coli* at station MCW-1. The proposed revision to the text removes *E. coli* and instead indicates total coliform, fecal coliform, and enterococcus in accordance with the CMP.

¹ Prior to the 2014 reconsideration, freshwater sites were monitored for fecal coliform.

RWQCB Los Angeles Region NSMBCW CIMP Revisions December 22, 2016 Page 2 of 2

Appendix A CIMP Monitoring Site Summary - Table on page A-2

This table in the approved CIMP specifies monitoring for *E. coli* at station MCW-1. The proposed revision to the table removes *E. coli* and instead specifies total coliform, fecal coliform, and enterococcus in accordance with the CMP.

Additionally, upon careful review of the approved CIMP, City staff noticed that the table on page A-2 specified monitoring for nutrients at station MCW-1. At the time the approved CIMP was written, neither of nutrient TMDLs applicable to NSMBCW specified such monitoring.² The CIMP on page 14 states, "[the] Permit requires the permittees to develop a monitoring and reporting plan that demonstrates compliance with the WQBELs for total nitrogen and total phosphorus." Accordingly, the approved CIMP includes provisions for monitoring total nitrogen and total phosphorus at an outfall and in the receiving water of Malibu Creek/Lagoon at sites NSMBCW-RW2 and NSMBCW-O2 respectively. On November 16, 2016, this issue was also discussed with Regional Board staff, who advised that the revisions be documented similarly to the bacteria revisions.

In accordance with guidance provided by Erum Razzak of Regional Board staff, the City is submitting proposed change sheets for the CIMP. The enclosed sheets show the changes with and without strikeout as requested. Upon your approval, the City will provide a full copy of the CIMP with those changes and a new cover page and footer identifying the revision date.

The City appreciates your staff's assistance in this matter. If you have any questions, please don't hesitate to contact Jennifer Voccola Brown, Senior Environmental Programs Coordinator at (310) 456-2489 x 275, or by email at jbrown@malibucity.org.

Sincerely,

Craig George

Environmental Sustainability Director

Enclosures

cc: Reva Feldman, City Manager

Jennifer Voccola Brown, Senior Environmental Programs Coordinator

Angela George, Los Angeles County Flood Control District

Paul Alva, County of Los Angeles

Renee Purdy, Los Angeles Regional Water Quality Control Board Ivar Ridgeway, Los Angeles Regional Water Quality Control Board Erum Razzak, Los Angeles Regional Water Quality Control Board

² On December 8, 2016, the Regional Board adopted an implementation plan for the Malibu Creek Nutrients TMDL and the Malibu Creek and Lagoon TMDL for Sedimentation and Nutrients to address Benthic Community Impairments. The implementation plan requires responsible agencies to develop and implement a TMDL Effectiveness monitoring plan within two years of the effective date of the implementation plan. The NSMBCW EWMP group will address any additional nutrient monitoring requirements through that process.

NSMBCW EWMP Group Coordinated Integrated Monitoring Program

g Hardness will be analyzed in the lab, as there is currently no EPA-approved field testing method, and it is not economically or technically feasible to do testing in the field for hardness.

2.3 RECEIVING WATER MONITORING PARAMETERS

Parameters to be monitored at receiving water monitoring sites will include:

- Flow. For Malibu Creek (NSMBCW-RW2) and Topanga Creek (NSMBCW-RW3), the established County flow gauges on each creek will be used for flow monitoring (Station No. F130-R on Malibu Creek and Station No. F54C-R on Topanga Creek). Flow monitoring methods that will be used for RW1 are described in the Standard Operating Procedures (SOP) included in Appendix C.
- At TMDL compliance sites, monitoring is limited to FIB per the SMB Beaches TMDLs CSMP (total coliforma, fecal coliform, and enterococcus) and the Malibu Creek and Lagoon Bacteria TMDL CMP (e. coli total coliform, fecal coliform, and enterococcus).
- Pollutants for which a receiving water limit exists derived from TMDL WLAs. Aside from FIB, these include total nitrogen, nitrate, nitrite, and phosphorus at NSMBCW-RW2 and PCBs/DDT at NSMBCW-RW1. NSMBCW-RW1 was chosen to monitor PCBs/DDT because it best reflects MS4 discharges from representative land uses in the CIMP area.
- Pollutants identified on the 303(d) list for the receiving water or downstream receiving water. Aside from pollutants addressed by TMDLs, these are limited to selenium, sulfates, and pH at NSMBCW-RW2 (Malibu Creek), and lead at NSMBCW-RW3 (Topanga Creek).
- Total suspended solids (TSS) and suspended-sediment concentration (SSC). Although
 only required at NSMBCW-RW2 due to Malibu Creek's listing on the 303(d) list for
 sedimentation and siltation, the Group has agreed to conduct the TSS analysis at each
 receiving water monitoring location. SSC will only be analyzed at NSMBCW-RW2, as
 required.
- Field measurements including: pH, dissolved oxygen, temperature, and specific
 conductivity. Hardness will be analyzed in the lab, as there is currently no EPA-approved
 field testing method, and it is not economically or technically feasible to do testing in the
 field for hardness.
- Chronic aquatic toxicity. A toxicity test sample is also immediately subject to toxicity
 identification evaluation (TIE) procedures if either the survival or sublethal endpoint
 demonstrates a Percent Effect¹² value equal to or greater than 50% of the instream waste
 concentration (IWC). See Appendix C for further specifications on conducting a TIE.

27

¹² Percent Effect is defined as the effect value—denoted as the difference between the mean control response and the mean IWC response, divided by the mean control response—multiplied by 100.

NSMBCW EWMP Group Coordinated Integrated Monitoring Program

^g Hardness will be analyzed in the lab, as there is currently no EPA-approved field testing method, and it is not economically or technically feasible to do testing in the field for hardness.

2.3 RECEIVING WATER MONITORING PARAMETERS

Parameters to be monitored at receiving water monitoring sites will include:

- Flow. For Malibu Creek (NSMBCW-RW2) and Topanga Creek (NSMBCW-RW3), the established County flow gauges on each creek will be used for flow monitoring (Station No. F130-R on Malibu Creek and Station No. F54C-R on Topanga Creek). Flow monitoring methods that will be used for RW1 are described in the Standard Operating Procedures (SOP) included in Appendix C.
- At TMDL compliance sites, monitoring is limited to FIB per the SMB Beaches TMDLs CSMP (total coliform, fecal coliform, and enterococcus) and the Malibu Creek and Lagoon Bacteria TMDL CMP (total coliform, fecal coliform, and enterococcus).
- Pollutants for which a receiving water limit exists derived from TMDL WLAs. Aside from FIB, these include total nitrogen, nitrate, nitrite, and phosphorus at NSMBCW-RW2 and PCBs/DDT at NSMBCW-RW1. NSMBCW-RW1 was chosen to monitor PCBs/DDT because it best reflects MS4 discharges from representative land uses in the CIMP area.
- Pollutants identified on the 303(d) list for the receiving water or downstream receiving water. Aside from pollutants addressed by TMDLs, these are limited to selenium, sulfates, and pH at NSMBCW-RW2 (Malibu Creek), and lead at NSMBCW-RW3 (Topanga Creek).
- Total suspended solids (TSS) and suspended-sediment concentration (SSC). Although
 only required at NSMBCW-RW2 due to Malibu Creek's listing on the 303(d) list for
 sedimentation and siltation, the Group has agreed to conduct the TSS analysis at each
 receiving water monitoring location. SSC will only be analyzed at NSMBCW-RW2, as
 required.
- Field measurements including: pH, dissolved oxygen, temperature, and specific conductivity. Hardness will be analyzed in the lab, as there is currently no EPA-approved field testing method, and it is not economically or technically feasible to do testing in the field for hardness.
- Chronic aquatic toxicity. A toxicity test sample is also immediately subject to toxicity identification evaluation (TIE) procedures if either the survival or sublethal endpoint demonstrates a Percent Effect¹² value equal to or greater than 50% of the instream waste concentration (IWC). See Appendix C for further specifications on conducting a TIE.

27

¹² Percent Effect is defined as the effect value—denoted as the difference between the mean control response and the mean IWC response, divided by the mean control response—multiplied by 100.

		JG	Туре	Description (including historical site ID, if any)	Approxim	ate Location	Parameters to Sample For												
	Station ID				Latitude	Longitude	Bacteria (TC, FC, Entero) ^a	Bacteria (E. coli) ^b	PCBs/DDT	Nutrients (NO3+ NO2, TN, TP) ^c	Lead (TP and DP) ^d	Seleniume	Sulfates ^e	Flow	TSS	SSCg	Field Measurements ^h	Screening Parameters ⁱ	Aquatic Toxicity ^j
	SMB 1-1	1	Point Zero	Arroyo Sequit Creek at Leo Carrillo Beach (DHS010)	34.04558	-118.93336	X												
CSMP	SMB 1-2	1	Open Beach	El Pescador State Beach	34.03856	-118.88829	X												
	SMB 1-3	1	Open Beach	El Matador State Beach	34.03773	-118.87464	X												
	SMB 1-4	1	Point Zero	Trancas Creek at Broad Beach (DHS008)	34.02899	-118.84250	X												
	SMB 1-5	1	Point Zero	Zuma Creek at Zuma Beach (DHS007)	34.01397	-118.82189	X												
	SMB 1-6	1	Point Zero	"Walnut Creek" in Paradise Cove	34.01375	-118.79100	X												
	SMB 1-7	1	Point Zero	Ramirez Canyon at Paradise Cove Pier (DHS006)	34.02032	-118.78600	X												
s C	SMB 1-8	1	Point Zero	Escondido Creek, just east of Escondido State Beach	34.02551	-118.76500	X												
Ē	SMB 1-9	1	Point Zero	Latigo Canyon, adjacent the Tivoli Bay Villa Treatment Plant (DHS005)	34.02895	-118.75300	X												
Bacterial TMDLs	SMB 1-10	1	Point Zero	Solstice Creek at Dan Blocker County Beach	34.03297	-118.74100	X												
	SMB 1-11	1	Point Zero	Un-named creek at Puerco Beach (DHS004)	34.03328	-118.73300	X												
	SMB 1-12	1	Point Zero	Marie Canyon storm drain at Puerco Beach	34.03072	-118.71000	X												
S B	SMB 1-13	1	Point Zero	Sweetwater Canyon on Carbon Beach	34.03811	-118.67300	X												
Beaches	SMB 1-14	1	Point Zero	Las Flores Creek at Las Flores State Beach	34.03684	-118.63600	Х												
Be	SMB 1-15	1	Open Beach	Big Rock Beach (DHS001)	34.03670	-118.61012	X												
SMB	SMB 1-16	1	Point Zero	Pena Creek at Las Tunas County Beach	34.03933	-118.59600	Х												
S	SMB 1-17	1	Point Zero	Tuna Canyon	34.03936	-118.58900	Х												
	SMB 1-18	1	Point Zero	Topanga Canyon at Topanga State Beach (S2)	34.03814	-118.58200	X												
	SMB 4-1	4	Point Zero	Nicholas Canyon Creek at Nicholas Beach (DHS009)	34.04241	-118.91559	X												
	SMB MC-1	9	Open Beach	Malibu Point on Malibu State Beach (DHS003)	34.03143	-118.68204	X												
	SMB MC-2	9	Point Zero	Breach point of Malibu Lagoon (S1)	34.03244	-118.67900	X												
	SMB MC-3	9	Open Beach	Malibu Pier on Carbon Beach (DH002)	34.03757	-118.67631	X												
Malibu Creek and Lagoon Bacteria TMDL CMP	MCW-1	9	Lagoon	Located within Malibu Lagoon, below bridge on PCH (LVMWD R-11)	34.03440	-118.68280	х	×		¥									
Water	NSMBCW- RW1	1	Creek	Sampling will be conducted near the downstream end up Trancas Canyon, approximately 100 yards above PCH so that tidal influence is minimized.	34.03069	-118.84167		X	X					X	X		X	X	X
MS4 Receiving Water Monitoring Locations	NSMBCW- RW2	1	Creek	Sampling will be conducted in Malibu Creek, approximately 200 yards upstream of PCH, immediately downstream of the only NSMBCW EWMP Agency-owned major outfall in the Malibu Creek HUC-12.	34.03643	-118.68379		X		X		X	X	X	X	X	X	X	X
	NSMBCW- RW3	1	Creek	Site of County stream gauging station on Topanga Creek (F54C-R). This monitoring location accounts for approximately 92% of the entire Topanga Creek subwatershed.	34.06402	-118.58710		X			X			X	X		X	X	X
MS4 Receiving Water Monitoring Locations	NSMBCW-01	1	Outfall	This storm drain outfall is located on the left bank of Trancas Creek, at the point where the creek transitions from concrete-lined to natural.	34.03141	-118.84124		X	X					X	X		X	As Necessary	As Necessary
	NSMBCW-O2		Outfall	This outfall is located on the right bank of Malibu Creek, discharging into the creek approximately 300 yards north of PCH. This is the only major outfall owned by the NSMBCW EWMP Group within the Malibu Creek Watershed. This outfall only discharges during very large storm events due to upstream control measures. As a result, sampling at this site is only required when discharge is observed. West weather, and Reconsideration of Certain Technical Matters of the SMRR Back was the sample of th	34.03701	-118.68396		X		X		X	X	X	X	X	X	As Necessary	As Necessary

^a Per SMB Beaches Bacteria TMDLs for dry and wet weather, and Reconsideration of Certain Technical Matters of the SMBB Bacteria TMDL, Resolution R12-007

November 2016Iuly 2015

^b Per TMDL for Bacteria in the Malibu Creek Watershed and the Update of the Bacteria Objectives for Freshwaters Designated for Water Contact Recreation, Resolution R10-005

^c Per the Malibu Creek Watershed Nutrients TMDL and the Malibu Creek and Algoon TMDL for Sedimentation and Nutrients to Address Benthic Community Impairments

d Topanga Canyon Creek is 303(d)-listed for total lead. We recommend testing for dissolved lead and hardness (measured as part of the "field parameters") so that a site-specific conversion factor can be calculated for conformance with the California Toxics Rule

e Malibu Creek is 303(d)-listed for selenium and sulfates

 $^{^{\}mathrm{f}}$ Where feasible, flow will be measured at the nearest County-operated flow gauges on the respective creeks

g Malibu Creek is 303(d)-listed for sedimentation/siltation

h Field measurements include pH, dissolved oxygen, temperature, and specific conductivity. Hardness will be measured in the lab as part of the Screening Parameter suite, as there is currently no EPA-approved field testing method for hardness

¹Screening parameters are listed in Attachment B (Table E-2 of the Permit MRP)

^j As detailed in the Permit MRP

				Description (including historical site ID, if any)	Approximate Location		Parameters to Sample For												
	Station ID	JG	Туре		Latitude	Longitude	Bacteria (TC, FC, Entero) ^a	Bacteria (E. coli) ^b	PCBs/DDT	Nutrients (NO3+ NO2, TN, TP) ^c	Lead (TP and DP) ^d	Selenium ^e	Sulfatese	Flow ^f	TSS	SSCg	Field Measurements ^h	Screening Parameters ⁱ	Aquatic Toxicity ^j
Beaches Bacterial TMDLs CSMP	SMB 1-1	1	Point Zero	Arroyo Sequit Creek at Leo Carrillo Beach (DHS010)	34.04558	-118.93336	X												
	SMB 1-2	1	Open Beach	El Pescador State Beach	34.03856	-118.88829	X												
	SMB 1-3	1	Open Beach	El Matador State Beach	34.03773	-118.87464	X												
	SMB 1-4	1	Point Zero	Trancas Creek at Broad Beach (DHS008)	34.02899	-118.84250	X												
	SMB 1-5	1	Point Zero	Zuma Creek at Zuma Beach (DHS007)	34.01397	-118.82189	X												
	SMB 1-6	1	Point Zero	"Walnut Creek" in Paradise Cove	34.01375	-118.79100	X												
	SMB 1-7	1	Point Zero	Ramirez Canyon at Paradise Cove Pier (DHS006)	34.02032	-118.78600	X												
	SMB 1-8	1	Point Zero	Escondido Creek, just east of Escondido State Beach	34.02551	-118.76500	X												
	SMB 1-9	1	Point Zero	Latigo Canyon, adjacent the Tivoli Bay Villa Treatment Plant (DHS005)	34.02895	-118.75300	X												
	SMB 1-10	1	Point Zero	Solstice Creek at Dan Blocker County Beach	34.03297	-118.74100	X												
	SMB 1-11	1	Point Zero	Un-named creek at Puerco Beach (DHS004)	34.03328	-118.73300	X												
	SMB 1-12	1	Point Zero	Marie Canyon storm drain at Puerco Beach	34.03072	-118.71000	X												
	SMB 1-13	1	Point Zero	Sweetwater Canyon on Carbon Beach	34.03811	-118.67300	X												
	SMB 1-14	1	Point Zero	Las Flores Creek at Las Flores State Beach	34.03684	-118.63600	X												
	SMB 1-15	1	Open Beach	Big Rock Beach (DHS001)	34.03670	-118.61012	X												
SMB	SMB 1-16	1	Point Zero	Pena Creek at Las Tunas County Beach	34.03933	-118.59600	X												
S	SMB 1-17	1	Point Zero	Tuna Canyon	34.03936	-118.58900	X												
	SMB 1-18	1	Point Zero	Topanga Canyon at Topanga State Beach (S2)	34.03814	-118.58200	X												
	SMB 4-1	4	Point Zero	Nicholas Canyon Creek at Nicholas Beach (DHS009)	34.04241	-118.91559	X												
	SMB MC-1	9	Open Beach	Malibu Point on Malibu State Beach (DHS003)	34.03143	-118.68204	X												
	SMB MC-2	9	Point Zero	Breach point of Malibu Lagoon (S1)	34.03244	-118.67900	X												
	SMB MC-3	9	Open Beach	Malibu Pier on Carbon Beach (DH002)	34.03757	-118.67631	X												
Malibu Creek and Lagoon Bacteria TMDL CMP	MCW-1	9	Lagoon	Located within Malibu Lagoon, below bridge on PCH (LVMWD R-11)	34.03440	-118.68280	X												
MS4 Receiving Water Monitoring Locations Monitoring Locations	NSMBCW- RW1	1	Creek	Sampling will be conducted near the downstream end up Trancas Canyon, approximately 100 yards above PCH so that tidal influence is minimized.	34.03069	-118.84167		X	X					X	X		X	X	X
	NSMBCW- RW2	1	Creek	Sampling will be conducted in Malibu Creek, approximately 200 yards upstream of PCH, immediately downstream of the only NSMBCW EWMP Agency-owned major outfall in the Malibu Creek HUC-12.	34.03643	-118.68379		X		X		X	X	X	X	X	X	X	X
	NSMBCW- RW3	1	Creek	Site of County stream gauging station on Topanga Creek (F54C-R). This monitoring location accounts for approximately 92% of the entire Topanga Creek subwatershed.	34.06402	-118.58710		X			X			X	X		X	X	X
	NSMBCW-01	1	Outfall	This storm drain outfall is located on the left bank of Trancas Creek, at the point where the creek transitions from concrete-lined to natural.	34.03141	-118.84124		X	X					X	X		X	As Necessary	As Necessary
	NSMBCW-O2	1	Outfall	This outfall is located on the right bank of Malibu Creek, discharging into the creek approximately 300 yards north of PCH. This is the only major outfall owned by the NSMBCW EWMP Group within the Malibu Creek Watershed. This outfall only discharges during very large storm events due to upstream control measures. As a result, sampling at this site is only required when discharge is observed.	34.03701	-118.68396		X		X		X	X	X	X	X	Х	As Necessary	As Necessary

^a Per SMB Beaches Bacteria TMDLs for dry and wet weather, and Reconsideration of Certain Technical Matters of the SMBB Bacteria TMDL, Resolution R12-007

A-2 November 2016

^b Per TMDL for Bacteria in the Malibu Creek Watershed and the Update of the Bacteria Objectives for Freshwaters Designated for Water Contact Recreation, Resolution R10-005

^c Per the Malibu Creek Watershed Nutrients TMDL and the Malibu Creek and Algoon TMDL for Sedimentation and Nutrients to Address Benthic Community Impairments

d Topanga Canyon Creek is 303(d)-listed for total lead. We recommend testing for dissolved lead and hardness (measured as part of the "field parameters") so that a site-specific conversion factor can be calculated for conformance with the California Toxics Rule

^e Malibu Creek is 303(d)-listed for selenium and sulfates

^f Where feasible, flow will be measured at the nearest County-operated flow gauges on the respective creeks

g Malibu Creek is 303(d)-listed for sedimentation/siltation

h Field measurements include pH, dissolved oxygen, temperature, and specific conductivity. Hardness will be measured in the lab as part of the Screening Parameter suite, as there is currently no EPA-approved field testing method for hardness

ⁱ Screening parameters are listed in Attachment B (Table E-2 of the Permit MRP)

^j As detailed in the Permit MRP