

Appendix A

Crosswalk of MS4 Permit Requirements and Fiscal Year 2022-2023 WQIP Annual Report References

Table A-1
MS4 Permit WQIP Annual Reporting Provisions and Corresponding Annual Report Sections

MS4 Permit Provision ¹		WQIP Annual Report Section
Provision A – Prohibitions and Limitations		
A.4.a(1)	<p>a. If exceedance(s) of water quality standards persist in receiving waters notwithstanding implementation of this Order, the Copermittees must comply with the following procedures:</p> <p>(1) For exceedance(s) of a water quality standard in the process of being addressed by the Water Quality Improvement Plan, the Copermittee(s) must implement the Water Quality Improvement Plan as accepted by the San Diego Water Board, and update the Water Quality Improvement Plan, as necessary, pursuant to Provision F.2.c;</p>	FY 2022-2023 WQIP Annual Report
A.4.a(2)	<p>If exceedance(s) of water quality standards persist in receiving waters notwithstanding implementation of this Order, the Copermittees must comply with the following procedures:</p> <p>(2) Upon a determination by either the Copermittees or the San Diego Water Board that discharges from the MS4 are causing or contributing to a new exceedance of an applicable water quality standard not addressed by the Water Quality Improvement Plan, the Copermittees must submit the following updates to the Water Quality Improvement Plan pursuant to Provision F.2.c or as part of the Water Quality Improvement Plan Annual Report required under Provision F.3.b, unless the San Diego Water Board directs an earlier submittal:</p> <p>(a) The water quality improvement strategies being implemented that are effective and will continue to be implemented,</p> <p>(b) Water quality improvement strategies (i.e., BMPs, retrofitting projects, stream and/or habitat rehabilitation projects, adjustments to jurisdictional runoff management programs, etc.) that will be implemented to reduce or eliminate any pollutants or conditions that are causing or contributing to the exceedance of water quality standards,</p> <p>(c) Updates to the schedule for implementation of the existing and additional water quality improvement strategies, and</p> <p>(d) Updates to the monitoring and assessment program to track progress toward achieving compliance with Provisions A.1.a, A.1.c and A.2.a of this Order;</p>	Responsible Agencies submitted an updated WQIP on September 1, 2021, and it was accepted by the Regional Board in December 2021.
Provision B – Water Quality Improvement Plans		
B.5.a	<p>a. The priority water quality conditions and potential water quality improvement strategies included in the Water Quality Improvement Plan pursuant to Provisions B.2.c and B.2.e may be re-evaluated by the Copermittees as needed during the term of this Order as part of the Water Quality Improvement Plan Annual Report. Re-evaluation and recommendations for modifications to the priority water quality conditions and potential water quality improvement strategies must be provided in the Report of Waste Discharge, and must consider the following: (1) Achieving the outcome of improved water quality in MS4 discharges and receiving waters through implementation of the water quality improvement strategies identified in the Water Quality Improvement Plan; (2) New information developed when the requirements of Provisions B.2.a-c have been re-evaluated; (3) Spatial and temporal accuracy of monitoring data collected to inform prioritization of water quality conditions and implementation strategies to address the highest priority water quality conditions; (4) Availability of new information and data from sources other than the jurisdictional runoff management programs within the Watershed Management Area that informs the effectiveness of the actions implemented by the Copermittees; (5) San Diego Water Board recommendations; and (6) Recommendations for modifications solicited through a public participation process.</p>	Section 4.6

MS4 Permit Provision ¹		WQIP Annual Report Section
B.5.b	b. The water quality improvement goals, strategies and schedules, included in the Water Quality Improvement Plan pursuant to Provisions B.3, must be reevaluated and adapted as new information becomes available to result in more effective and efficient measures to address the highest priority water quality conditions identified pursuant to Provision B.2.c. Re-evaluation of and modifications to the water quality improvement goals, strategies and schedules must be provided in the Water Quality Improvement Plan Annual Report, and must consider the following:	Section 3 Section 4 Section 5 Appendix D
	(1) Modifications to the priority water quality conditions based on Provision B.5.a;	Section 4.6
	(2) Progress toward achieving interim and final numeric goals in receiving waters and MS4 discharges for the highest priority water quality conditions in the Watershed Management Area,	Section 3
	(3) Progress toward achieving outcomes according to established schedules;	Section 3
	(4) New policies or regulations that may affect identified numeric goals;	Section 4.6
	(5) Measurable or demonstrable reductions of non-storm water discharges to and from each Copermittee's MS4;	Section 3 Section 4 Attachment 3
	(6) Measurable or demonstrable reductions of pollutants in storm water discharges from each Copermittee's MS4 to the MEP;	Section 3 Section 4 Attachment 3
	(7) New information developed when the requirements of Provisions B.2.b and B.2.d have been re-evaluated;	Section 3 Section 4 Section 4.6
	(8) Efficiency in implementing the Water Quality Improvement Plan;	Section 3 Section 4.6 Section 5
	(9) San Diego Water Board recommendations; and	Section 4.6
B.5.c	(10) Recommendations for modifications solicited through a public participation process.	Recommendations from the WQIP Update public participation process are addressed in the updated WQIP and posted on the Regional Clearinghouse ¹ .
	c. The water quality improvement monitoring and assessment program, included in the Water Quality Improvement Plan pursuant to Provision B.4, must be reevaluated and adapted when new information becomes available. Re-evaluation and recommendations for modifications to the monitoring and assessment program, pursuant to the requirements of Provision D, may be provided in the Water Quality Improvement Plan Annual Report, but must be provided in the Report of Waste Discharge.	Section 4
Provision D – Monitoring and Assessment Program Requirements		
D.2.b.(iv)	Dry Weather MS4 Outfall Discharge Monitoring (iv) Each Copermittee must document removal or re-prioritization of the highest priority persistent flow MS4 outfall monitoring stations identified under Provision D.2.b.(2)(a) in the Water Quality Improvement Plan Annual Report. Persistent flow MS4 outfall monitoring stations that have been removed must be replaced with the next highest prioritized major MS4 outfall in the Watershed Management Area within its jurisdiction, unless there are no remaining qualifying major MS4 outfalls within the Copermittees' jurisdiction in the Watershed Management Area.	Attachment 3

¹ www.projectcleanwater.org

Appendix A: MS4 Permit Requirements and Fiscal Year 2022-2023 WQIP Annual Report Crosswalk

MS4 Permit Provision ¹		WQIP Annual Report Section
D.4.b.(1)(a)(ii)	<p>Non-Storm Water Dischargers Reduction Assessments</p> <p>(a) Each Copermittee must assess and report the progress of its illicit discharge detection and elimination program, required to be implemented pursuant to Provision E.2, toward effectively prohibiting non-storm water and illicit discharges into the MS4 within its jurisdiction as follows:</p> <p>(ii) Based on the data collected pursuant to Provisions D.2.b, the assessments required under Provision D.4.b.(1)(c) must be included in the Water Quality Improvement Plan Annual Reports required pursuant to Provision F.3.b.(3).</p>	Section 4 Appendix C Attachment 3
D.4.b.(1)(b)	<p>(b) Based on the transitional dry weather MS4 outfall discharge field screening monitoring required pursuant to Provision D.2.a.(2), each Copermittee must assess and report the following:</p> <p>(i) Identify the known and suspected controllable sources (e.g. facilities, areas, land uses, pollutant generating activities) of transient and persistent flows within the Copermittee's jurisdiction in the Watershed Management Area;</p> <p>(ii) Identify sources of transient and persistent flows within the Copermittee's jurisdiction in the Watershed Management Area that have been reduced or eliminated; and</p> <p>(iii) Identify modifications to the field screening monitoring locations and frequencies for the MS4 outfalls in its inventory necessary to identify and eliminate sources of persistent flow non-storm water discharges pursuant to Provision D.2.b.</p>	Section 4 Attachment 3
D.4.b.(1)(c)	<p>(c) Based on the dry weather MS4 outfall discharge field screening monitoring required pursuant to Provision D.2.b.(1), each Copermittee must assess and report the following:</p> <p>(i) The assessments required pursuant to Provision D.4.b.(1)(b);</p> <p>(ii) Based on the data collected and applicable NALs in the Water Quality Improvement Plan, rank the MS4 outfalls in the Copermittee's jurisdiction according to potential threat to receiving water quality, and produce a prioritized list of major MS4 outfalls for follow-up action to update the Water Quality Improvement Plan, with the goal of eliminating persistent flow non-storm water discharges and/or pollutant loads in order of the ranked priority list through targeted programmatic actions and source investigations;</p> <p>(iii) For the highest priority major MS4 outfalls with persistent flows that are in exceedance of NALs, identify the known and suspected sources within the Copermittee's jurisdiction in the Watershed Management Area that may cause or contribute to the NAL exceedances;</p> <p>(iv) Each Copermittee must analyze the data collected pursuant to Provision D.2.b, and utilize a model or other method, to calculate or estimate the non-storm water volumes and pollutant loads collectively discharged from all the major MS4s outfalls in its jurisdiction identified as having persistent dry weather flows during the monitoring year. These calculations or estimates must be updated annually.</p> <p>[a] Each Copermittee must calculate or estimate the annual non-storm water volumes and pollutant loads collectively discharged from the Copermittee's major MS4 outfalls to receiving waters within the Copermittee's jurisdiction, with an estimate of the percent contribution from each known source for each MS4 outfall;</p> <p>[b] Each Copermittee must annually identify and quantify (i.e. volume and pollutant loads) sources of non-storm water not subject to the Copermittee's legal authority that are discharged from the Copermittee's major MS4 outfalls to downstream receiving waters.</p>	Section 4 Attachment 3

Appendix A: MS4 Permit Requirements and Fiscal Year 2022-2023 WQIP Annual Report Crosswalk

MS4 Permit Provision ¹		WQIP Annual Report Section
D.4.b.(2)(a)	<p>Storm Water Pollutant Discharge Reduction Assessments</p> <p>(a) The Copermittees must assess and report the progress of the water quality improvement strategies, required to be implemented pursuant to Provisions B and E, toward reducing pollutants in storm water discharges from the MS4s within the Watershed Management Area as follows:</p> <p>(ii) Based on the data collected pursuant to Provisions D.2.c, the assessments required under Provision D.4.b.(2)(c) must be included in the Water Quality Improvement Plan Annual Reports required pursuant to Provision F.3.b.(3).</p>	Section 4 Attachment 3
D.4.b.(2)(b)	<p>(b) Based on the transitional wet weather MS4 outfall discharge monitoring required pursuant to Provision D.2.a.(3) the Copermittees must assess and report the following: (i) The Copermittees must analyze the monitoring data collected pursuant to Provision D.2.a.(3), and utilize a watershed model or other method, to calculate or estimate the following for each monitoring year:</p> <p>[a] The average storm water runoff coefficient for each land use type within the Watershed Management Area;</p> <p>[b] The volume of storm water and pollutant loads discharged from each of the Copermittee's monitored MS4 outfalls in its jurisdiction to receiving waters within the Watershed Management Area for each storm event with measurable rainfall greater than 0.1 inch;</p> <p>[c] The total flow volume and pollutant loadings discharged from the Copermittee's jurisdiction within the Watershed Management Area over the course of the wet season, extrapolated from the data produced from the monitored MS4 outfalls; and</p> <p>[d] The percent contribution of storm water volumes and pollutant loads discharged from each land use type within each hydrologic subarea with a major MS4 outfall to receiving waters or within each major MS4 outfall to receiving waters in the Copermittee's jurisdiction within the Watershed Management Area for each storm event with measurable rainfall greater than 0.1 inch.(ii) Identify modifications to the wet weather MS4 outfall discharge monitoring locations and frequencies necessary to identify pollutants in storm water discharges from the MS4s in the Watershed Management Area pursuant to Provision D.2.c.(1).</p>	Attachment 3

	MS4 Permit Provision ¹	WQIP Annual Report Section
D.4.b.(2)(c)	<p>(c) Based on the wet weather MS4 outfall discharge monitoring required pursuant to Provision D.2.c the Copermittees must assess and report the following:</p> <p>(i) The assessments required pursuant to Provision D.4.b.(2)(b);</p> <p>(ii) Based on the data collected and applicable SALs in the Water Quality Improvement Plan, analyze and compare the monitoring data to the analyses and assumptions used to develop the Water Quality Improvement Plans, including strategies developed pursuant to Provision B.3, and evaluate whether those analyses and assumptions should be updated as a component of the adaptive management efforts pursuant to Provision B.5 for follow-up action to update the Water Quality Improvement Plan;</p> <p>(iii) The Copermittees must review the data collected pursuant to Provision D.2.c and findings from the assessments required pursuant to Provisions D.4.b.(2)(c)(i)-(ii) at least once during the term of this Order to:</p> <p>[a] Identify reductions or progress in achieving reductions in pollutant concentrations and/or pollutant loads from different land uses and/or drainage areas discharging from the Copermittees' MS4s in the Watershed Management Area; [b] Assess the effectiveness of water quality improvement strategies being implemented by the Copermittees within the Watershed Management Area toward reducing pollutants in storm water discharges from the MS4s to receiving waters within the Watershed Management Area to the MEP, with an estimate, if possible, of the pollutant load reductions attributable to specific water quality strategies implemented by the Copermittees; and [c] Identify modifications necessary to increase the effectiveness of the water quality improvement strategies implemented by the Copermittees in the Watershed Management Area toward reducing pollutants in storm water discharges from the MS4s to receiving waters in the Watershed Management Area to the MEP. (iv) Identify data gaps in the monitoring data necessary to assess Provisions D.4.b.(2)(c)(i)-(iii).</p>	<p>Section 3</p> <p>Section 4</p> <p>Attachment 3</p>
D.4.c	<p>Special Studies Assessments</p> <p>c. The Copermittees must annually evaluate the results and findings from the special studies developed and implemented pursuant to Provision D.3, and assess their relevance to the Copermittees' efforts to characterize receiving water conditions, understand sources of pollutants and/or stressors, and control and reduce the discharges of pollutants from the MS4 outfalls to receiving waters in the Watershed Management Area. The Copermittees must report the results of the special studies assessments applicable to the Watershed Management Area and identify any necessary modifications or updates to the Water Quality Improvement Plan based on the results in the Water Quality Improvement Plan Annual Reports required pursuant to Provision F.3.b.(3).</p>	<p>Section 3</p> <p>Section 4.5</p>
D.4.d	<p>Integrated Assessment of Water Quality Improvement Plan</p> <p>d. As part of the iterative approach and adaptive management process required for the Water Quality Improvement Plan pursuant to Provision B.5, the Copermittees in each Watershed Management Area must integrate the data collected pursuant to Provisions D.1-D.3, the findings from the assessments required pursuant to Provisions D.4.a-c, and information collected during the implementation of the jurisdictional runoff management programs required pursuant to Provision E to assess the effectiveness of, and identify necessary modifications to, the Water Quality Improvement Plan as follows:</p>	<p>Section 1</p> <p>Section 3</p> <p>Section 4</p> <p>Section 5</p>

	MS4 Permit Provision ¹	WQIP Annual Report Section
D.4.d.(1)	<p>(1) The Copermittees must re-evaluate the priority water quality conditions and numeric goals for the Watershed Management Area, as needed, during the term of this Order pursuant to Provision B.5.a. The re-evaluation and recommendations for modifications to the priority water quality conditions, and/or numeric goals and corresponding schedules may be provided in the Water Quality Improvement Plan Annual Reports required pursuant to Provision F.3.b.(3), but must at least be provided in the Report of Waste Discharge pursuant to Provision F.5.b. The priority water quality conditions and numeric goals for the Watershed Management Area must be reevaluated as follows:</p> <p>(a) Re-evaluate the receiving water conditions in the Watershed Management Area in accordance with Provision B.2.a;</p> <p>(b) Re-evaluate the impacts on receiving waters in the Watershed Management Area from MS4 discharges in accordance with Provision B.2.b;</p> <p>(c) Re-evaluate the identification of MS4 sources of pollutants and/or stressors in accordance with Provision B.2.d;</p> <p>(d) Identify beneficial uses of the receiving waters that are protected in accordance with Provision D.4.a;</p> <p>(e) Evaluate the progress toward achieving the interim and final numeric goals for protecting impacted beneficial uses in the receiving waters.</p>	Section 4
D.4.d.(2)	<p>(2) The Copermittees must re-evaluate the water quality improvement strategies for the Watershed Management Area during the term of this Order pursuant to Provision B.5.b. The re-evaluation and recommendations for modifications to the water quality improvement strategies and schedules may be provided in the Water Quality Improvement Plan Annual Reports required pursuant to Provision F.3.b.(3) but must at least be provided in the Report of Waste Discharge pursuant to Provision F.5.b. The water quality improvement strategies for the Watershed Management Area must be re-evaluated as follows:</p> <p>(a) Identify the non-storm water and storm water pollutant loads from the Copermittees' MS4 outfalls in the Watershed Management Area, calculated or estimated pursuant to Provisions D.4.b;</p> <p>(b) Identify the non-storm water and storm water pollutant load reductions, or other improvements to receiving water or water quality conditions, that are necessary to attain the interim and final numeric goals identified in the Water Quality Improvement Plan for protecting beneficial uses in the receiving waters;</p> <p>(c) Identify the non-storm water and storm water pollutant load reductions, or other improvements to the quality of MS4 discharges, that are necessary for the Copermittees to demonstrate that non-storm water and storm water discharges from their MS4s are not causing or contributing to exceedances of receiving water limitations;</p> <p>(d) Evaluate the progress of the water quality improvement strategies toward achieving the interim and final numeric goals identified in the Water Quality Improvement Plan for protecting beneficial uses in the receiving waters.</p>	<p>Section 3</p> <p>Section 4</p> <p>Appendix C</p> <p>Appendix D</p> <p>Attachment 3</p>

Appendix A: MS4 Permit Requirements and Fiscal Year 2022-2023 WQIP Annual Report Crosswalk

MS4 Permit Provision ¹		WQIP Annual Report Section
D.4.d.(3)	(3) The Copermittees must re-evaluate and adapt the water quality monitoring and assessment program for the Watershed Management Area when new information becomes available to improve the monitoring and assessment program pursuant to Provision B.5.c. The re-evaluation and recommendations for modifications to the monitoring and assessment program may be provided in the Water Quality Improvement Plan Annual Reports required pursuant to Provision F.3.b.(3), but must at least be provided in the Report of Waste Discharge pursuant to Provision F.5.b. Modifications to the water quality monitoring and assessment program must be consistent with the requirements of Provision D.1-D.3. The re-evaluation of the water quality monitoring and assessment program for the Watershed Management Area must consider the data gaps identified by the assessments required pursuant to Provisions D.4.a-b, and results of the special studies implemented pursuant to Provision D.4.c	Section 3 Section 4 Section 5 Attachment 3
Provision E – Jurisdictional Runoff Management Programs		
E.2.d.(4)	(4) Each Copermittee must submit a summary of the non-storm water discharges and illicit discharges and connections investigated and eliminated within its jurisdiction with each Water Quality Improvement Plan Annual Report required under Provision F.3.b.(3) of this Order.	Appendix C
E.8.c	c. Each Copermittee must submit a summary of the annual fiscal analysis with each Water Quality Improvement Plan Annual Report required pursuant to Provision F.3.b.(3).	Appendix C
Provision F – Reporting		
F.2.a.(3)	(3) Each Copermittee must submit updates to its jurisdictional runoff management program, with the supporting rationale for the modifications, either in the Water Quality Improvement Plan Annual Report required pursuant to Provision F.3.b.(3), or as part of the Report of Waste Discharge required pursuant to Provision F.5.b	Section 5
F.2.c.(1)(c)	(c) The Copermittees for each Watershed Management Area must submit 1) proposed updates to the Water Quality Improvement Plan and supporting rationale, and 2) recommendations received from the public and the Water Quality Improvement Consultation Panel and the rationale for the requested updates, either in the Water Quality Improvement Plan Annual Reports required pursuant to Provision F.3.b.(3), or as part of the Report of Waste Discharge required pursuant to Provision F.5.b.	Section 4.6 Section 5
F.3.b.(3)(a-f)	(3) Water Quality Improvement Plan Annual Reports - The Copermittees for each Watershed Management Area must submit a Water Quality Improvement Plan Annual Report for each reporting period no later than January 31 of the following year. The annual reporting period consists of two different periods: 1) July 1 to June 30 of the following year for the jurisdictional runoff management programs, 2) October 1 to September 30 of the following year for the monitoring and assessment programs. The Water Quality Improvement Plan Annual Reports must be made available on the Regional Clearinghouse required pursuant to Provision F.4. Each Annual Report must include the following:	FY 2022-2023 Carlsbad WMA WQIP Annual Report
	(a) The receiving water and MS4 outfall discharge monitoring data collected pursuant to Provisions D.1 and D.2, summarized and presented in tabular and graphical form;	Section 4 Attachment 3
	(b) The progress of the special studies required pursuant to Provision D.3, and the findings, interpretations and conclusions of a special study, or each phase of a special study, upon its completion;	Section 4.5
F.3.b.(3)(a-f) continued	(c) The findings, interpretations and conclusions from the assessments required pursuant to Provision D.4;	Section 3 Section 4

Appendix A: MS4 Permit Requirements and Fiscal Year 2022-2023 WQIP Annual Report Crosswalk

MS4 Permit Provision ¹		WQIP Annual Report Section
	<p>(d) The progress of implementing the Water Quality Improvement Plan, including, but not limited to, the following:</p> <p>(i) The progress toward achieving the interim and final numeric goals for the highest water quality priorities for the Watershed Management Area;</p> <p>(ii) The water quality improvement strategies that were implemented and/or no longer implemented by each of the Copermittees during the reporting period and previous reporting periods;</p> <p>(iii) The water quality improvement strategies planned for implementation during the next reporting period;</p> <p>(iv) Proposed modifications to the water quality improvement strategies, the public comments received and the supporting rationale for the proposed modifications;</p> <p>(v) Previous modifications or updates incorporated into the Water Quality Improvement Plan and/or each Copermittee's jurisdictional runoff management program document and implemented by the Copermittees in the Watershed Management Area; and</p> <p>(vi) Proposed modifications or updates to the Water Quality Improvement Plan and/or each Copermittee's jurisdictional runoff management program document;</p>	<p>Section 3</p> <p>Section 5</p> <p>Appendix D</p>
	<p>(e) A completed Jurisdictional Runoff Management Program Annual Report Form (contained in Attachment D to this Order or a revised form accepted by the San Diego Water Board) for each Copermittee in the Watershed Management Area, certified by a Principal Executive Officer, Ranking Elected Official, or Duly Authorized Representative; and</p>	<p>Appendix C</p>
Attachment E – Specific Provisions for Total Maximum Daily Loads Applicable to Order No. R9-2013-0001		
Attachment E	<p>Specific Monitoring and Assessment Requirements for each TMDL. TMDL monitoring and assessment results must be submitted as part of Water Quality Improvement Plan Annual Reports required under Provision F.3.b</p>	<p>Attachment 1</p> <p>Attachment 7</p>

¹ This table is not an exhaustive list of MS4 Permit Requirements and generally identifies permit provisions related to annual reporting.