

County of San Diego BMP Design Manual  
Response to Public Comments

Item No.	Commenter	Manual Section	Question/ Comment	Response
1	workshop	N/A	Clarify the timeline and effective date for the WPO.	The first reading of the WPO by the Board of Supervisors was on January 6, 2016. The Second reading was on January 27. The effective date of the approved WPO will be 30 days after the second reading on February 26, 2016.
2	workshop	N/A	Does the February 26 effective date apply to the other copermitttees?	No, the February effective date is based on the effective date of the WPO and the County's legal authority to require performance standards in the County BMP Design Manual. Other jurisdictions will have to complete their own processes.
3	workshop	1.4	Do the new MS4 permit requirements apply for developments that replace 5,000 ft <sup>2</sup> ?	Yes, redevelopment projects that create and/or replace 5,000 square feet or more of impervious surface (collectively over the entire project site on an existing site of 10,000 square feet or more of impervious surfaces) are considered PDPs. This includes commercial, industrial, residential, mixed-use, and public development projects on public or private land. Refer to BMPDM Section 1.4 for a complete delineation of PDP categories. Please note that per the definition of New Development (Appendix M), any development project that creates and/or replaces 10,000 square feet or more of impervious surface (collectively over the entire project site) is considered a new development project.
4	workshop	6.2	How are the critical coarse sediment requirements applied to a development project?	The flow chart (Figure 6-1) in Section 6.2 provides an overview of the process that can be used to comply with the critical coarse sediment requirements. Additional information is provided in Appendix H.
5	workshop	Appendix H	Is the critical coarse sediment flow chart the only pathway to compliance?	No, the County BMP Design Manual provides guidance for the applicant with a methodology to comply with the 2013 MS4 permit. Other methods are outlined in Appendix H.
6	workshop	Appendix K	Are PDP exempt green streets required to comply with critical coarse sediment requirements?	No, critical coarse sediment requirements only apply to PDPs.
7	workshop	Section 1.4.3	Does the green streets exemption apply to all development projects or just roadway projects?	Projects may be exempt from PDP requirements only if they are comprised solely of one of the project types listed within the exempted project category. For example, even though sidewalks, trails, or frontage roads might exist within a larger PDP footprint, this would not qualify the PDP to utilize the exemption. Refer to Section 1.4.3 in the Manual.
8	workshop	N/A	For current projects, what templates should be used and will the draft SWQMP templates be revised?	Projects completed under the 2007 MS4 Permit requirements may continue to use the current SWMPs. Projects that are completed under the 2013 MS4 Permit requirements may use the Draft SQWMPs provided for public review. New forms (SQWMPs) are available on the County Watershed Protection Program's website.
9	workshop	Appendix K	Are there any details posted online about green streets?	Appendix K in the Second Draft of the County BMP Design Manual outlines additional guidance about Green Streets, now referred to as Green Infrastructure.

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10	workshop	Appendix G	How do the revisions in the County Manual pertaining to SWMM modeling relate to hydromodification requirements exemptions?	The revisions in the County's Manual provide additional guidance about the SWMM modeling parameters and do not relate to potential hydromodification requirement exemptions. The determination of whether a project is exempt from hydromodification requirements would be completed prior to any SWMM modeling.
11	BIA/Tory Walker	Appendix C (page C-2 and worksheet C.4-1)	There are instances where infiltration testing would not be necessary, such as known geotechnical issues, steep slopes with homes/infrastructure down gradient; this section needs to be strengthened to better inform design professionals and plan checkers that actual infiltration testing is not necessary.	Additional text has been added to clarify this point. Worksheet C.4-1 states: "Note that it is not necessary to investigate each and every criterion in the worksheet if infiltration is precluded. Instead a letter of justification from a geotechnical professional familiar with the local conditions substantiating any geotechnical issues will be required."
12	P. Smith County CIP	3.5	Refer to Section 3.5 of the Manual. Temporary improvements that generate pollutants and excess runoff must, like permanent improvements, be addressed with storm water management features, including structural. Does this apply to temporary roads that are required when work is done on a road?	No, this would generally not apply to roads. This section has been updated to clarify that only construction BMPs are required. Temporary diversion roads are not considered temporary improvements that require Structural BMPs.
13	workshop	Appendix K	Would a green streets exemption apply to a larger project or just the road itself?	The exemption can be applied only to the road, and only to a project that is comprised solely of the road. See also response to comment #7 above.

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14	Robert Stone, Pierian Water Systems	See Section 5.5.5 Appendix B.6.2.2 and Appendix E.18 and F.1	<p>On preliminary designs for stormwater requirements, there is a way to upgrade existing BMP structures to meet compliance rather than tearing down existing structures and rebuilding. This could save both time and cost in meeting deadlines for compliance. I have invented and patented a proprietary technology that has been proven in the field for nearly ten years. The system I am speaking of uses patented ozone/oxygen allotrope technology that bubbles gases into water to reduce/remove contaminants such as bacteria, metals, and nutrients through a disinfectant process (as opposed to a sterilization process). Existing sites that this system can be retrofitted into are most MS4 systems, including underground vaults, biofiltration systems, catch basins, CDS systems, flood tunnels, and diversion systems. The size of my device is a 36" X 36" X 20" metal box that operates on 110 volt circuit. Because this is a new concept (retro-fitting existing BMPs), I am unsure of how/where it can fit into your BMP manual, but I know that it can be very beneficial, both environmentally and economically. Please consider the option of a retrofittable system as a BMP. The system of this size can treat 1-2500 gallons of water per minute, and the system is scalable.</p>	<p>The County does not advocate for the use of specific proprietary BMPs. Any BMP selected in accordance with the guidelines provided in BMPDM section 5.5 may be approved for use in meeting a PDP's structural treatment requirements.</p>
15	Torrent	5.5.1.2	Include Dry Wells as an infiltration BMP	<p>Dry wells have been added as a type of infiltration BMP in Draft 2 of the County BMP Design Manual.</p>
16	BIA, L Parra	G.1.4.3	<p>Landscaped area fill should be 25% reduction infiltration for that soil type instead of automatic type D soil infiltration rate.</p>	<p>The County BMPDM is consistent with the Regional Model BMPDM in using a hydrolic soil group Type D default for HSPF, SDHM, and SWMM modeling. Modification of this default value may be considered regionally as part of future updates to the REgional Model BMPDM. Applicants may also provide an actual expected infiltration rate for the fill soil based on testing, if approved by the County. Mulched and Amended Soils per the Water Conservation in Landscaping Ordinance (Section 86.709) and the Fact Sheet SD-F in Appendix E can use a reduced runoff factor as shown in Table B.1-1 of Appendix B.</p>
17	BIA, L Parra	Appendix G. (table G.1.7)1.4.3	Calculation of C value should not be divided by porosity?	<p>The method for calculating C values is consistent with the Regional Model BMPDM. A consensus on this point does not currently exist amongst specialists. Additional review is needed at the regional level before this change can be further considered.</p>

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18	Hal Schillinger	5.5.1.2 Alternative infiltration (Dry Wells).	Confirm that dry wells are equivalent to infiltration and requesting a dry well fact sheet be included in the appendices.	Dry wells have been included in the Manual.
19	Ken Kozlik	Appendix H.6	We're having a bit of confusion on this because the footnote in the screenshot below refers to Appendix H.6, which covers all of the WMAA Potential CCSYA mapping. Perhaps it would be more clear if the footnote referred only to Table H.6.2-1 for the soils information.	Footnote has been revised to specifically reference the geologic grouping tables of the WMAA mapping section. Several section references were also corrected throughout the guidance document.
20	Hal Schillinger/ Torrent	Worksheets in Appendix B	Add worksheet for dry wells	Staff recognizes that additional worksheets would be useful (particularly for Cistern + Biofiltration and dry wells). Due to time constraints, such worksheets will not be added at this time. The County will consider adding more worksheets in the future.
21	Tory Walker & L. Parra	Table G.1-4	Recommends revising the N-Perv default value to 0.1 instead of 0.15 to better model pre-development conditions within the unincorporated portions of the County.	The County will modify the N-Perv default value to 0.1 instead of 0.15. The Table G.1-4 has been revised.
22	L. Parra	Appendix H, H.3.1	Slope Table in section H.3.1 is not very technical, and has issues with the underlying assumptions. Remove that table and replace it by a Slope vs Q equation.	Table is intended to simply the detailed analysis presented in Appendix H.7. An applicant may look up the appropriate flow rate and ensure they meet the minimum slope requirements associated with that flow rate. If they elect to perform more detailed analysis, they may refer to Appendix H.7.
23	L. Parra	Section 5.2.2	De minimis upstream: it has an error on C, so the de minimis area must increase from 0.25 acres to 0.30 acres.	An error to the C value has been corrected and the subsequent de minimis critical coarse sediment area increased to 0.31 acres.
24	L. Parra	Appendix H.7.2	Stream power method, H.7.2: convoluted and inaccurate, I am proposing to replace the 2 figures and the 3 equations suggested (with mixed international and American units that will lead to errors). Based on the research presented there, I am proposing to use only 2 equations (which include adjustments to the figures shown) to determine if the stream power criteria is met.	This guidance presents the stream power method in the same manner as the recently developed Water Quality Equivalency Guidance which was vetted through a separate technical advisory committee process. While we recognize that the analysis may be refined in the future, we do not propose revisions at this time.
25	L. Parra	Appendix H	Coarse Sediment Source Area Verification: I have expanded the 50% sieve 200 criteria, to also exclude areas that even if not met such criteria, are not coarse sediment yield areas by virtue of a high percentage of fine sand in the granulometric analysis.	This element was not discussed as part of the technical advisory committee process and will not be incorporated into the final guidance document.

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26	Ken Kozlik	Appendix H	<p>1) Clarification on whether the RPO method should be applied on a project level basis or on a lot-by-lot basis.  2) Clarification on the Point of Compliance (POC) - discharge point to natural stream or project boundary?  3) Clarification of the analysis area for the encroachment calculations. For example, if a project spans more than one drainage basin or watershed, would the encroachment allowance need to be examined for each drainage basin/watershed or for the project as a whole?  4) Under the RPO Method, can impacts to steep slopes that qualify under RPO Section 86.604(e)(2)(bb) be excluded from the encroachment area?</p>	<p>1) RPO Method should be analyzed at the project-level.  2) POC for the RPO Method is the downstream Project Boundary. If additional analyses such as mapping refinement or demonstration of no net impact are used, the POC may also include the point of discharge to a natural system.  3) RPO Method is a regional-level approach. If this method is used there is no need to analyze individual project drainage areas. However, if demonstration of not net impact is to be used, then drainage areas associated with each point of discharge to each natural system must be analyzed.  4) Yes, under the RPO Method impacts associated with the referenced section may be excluded from the permitted encroachment area.</p>
27	Luis Parra	H-9.2 Stream Rehab	<p>In regards to Section H.9.2 (Stream Rehabilitation) I believe this is a section that could use a more exhaustive approach in a future version of the manual. It is too generic as written, and I think does not provide any incentive for developers and/or copermitees to use Stream Rehabilitation as a mean to help the Coarse Sediment Yield issue. Also, it does not provide any path of approval and/or review, so it is an impractical option (I doubt a single project in the County will use this option to mitigate for Critical Coarse Sediment Areas). However, at this point, it would be irresponsible for me to provide suggestions on how to improve this section without the participation of the TAC or with no time and resources to do so.</p>	<p>We agree that this might be useful and will consider this for the future.</p>
28	Chelisa Pack	Section 6.3	<p>Addendum Section 6.3 – Redline revisions do not yet show corrected hydromodification flow duration requirements to match permit language (10% over the length of the flow duration curve versus 10% of 10% of the length of the flow duration curve). Please clarify/revise.</p>	<p>The revisions have been completed for the final version.</p>

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29	Chelisa Pack	Appendix B	Appendix B – Automated Sizing Spreadsheets – Can we be provided an un-protected version of the spreadsheet to verify it is coded correctly? I noticed a few mistakes and warning messages that don't make sense and it is nearly impossible to verify if it is an error with the protected version of the spreadsheet.	Several updates were made to Version 1.1 of the workbook to improve usability. To retain consistency, the workbook will not be released in an unlocked format. If errors are found, please notify the point of contact listed on the "Introduction" tab of the workbook.
30	Chelisa Pack	Appendix C-25 foot separation for septic and infiltration BMPs	Appendix C – page C-10 – Clarify if 25' separation from septic is for infiltration-only BMPs or whether that condition would relate to partial retention BMPs as well.	Wherever there is infiltration the 25' separation will be required.
31	Chelisa Pack	E.6 SD-A Tree Wells	E.6 SD-A Tree Wells, Page E-24. I was under the impression that the street tree credit was only a site design measure to account for a reduction in the DCV due to canopy interception and evapotranspiration. The tree does not need to intercept runoff from a curb. Therefore, why does the "Tree well placement" require that the full DCV drains to the well?	If using Tree wells to reduce DCV then the tree well must intercept flows from the DMA of at least the DCV credit claimed. The reduction in DCV from tree wells includes the root and soil volume along with canopy interception. Refer to Appendix B.2.2.1 and E.6 for more information.
32	Chelisa Pack	E.7 SD-B Impervious Area Dispersion	E.7 SD-B – Can disconnected sidewalks count for dispersion if the length of pervious area is less than 10'? I am assuming that it would not qualify, but I just want to double-check.	Less than 10 feet would not qualify.
33	Chelisa Pack	Appendix H	a typo on page H-20 and H-21. I think the GLU table should reference Table H.6.2-3, not Table H.6-3	Several section references have been corrected prior to release of the final guidance document.
34	Public Workshop (2/1/2016)	Appendix B	Have the automatic calculation (excel) worksheets prepared by the County shared with other Copermittees for use in other jurisdictions? Would other jurisdictions accept the County worksheets during project submittal?	The worksheets are available for use by the other Copermittees. Each Copermittee has the option to use them.
35	Public Workshop (2/1/2016)	Appendix B	Can a PDP use tree wells to treat the entire DCV?	No. Each PDP is required to have at least one structural BMP .
36	Public Workshop (2/1/2016)	Appendix B	Do bioretention BMPs have a minimum sizing factor?	No. The sizing of bioretention BMPs (i.e., pure infiltration and evapotranspiration, with no underdrain) requires the use of the Percent Capture Method, which is an iterative process that requires applicants to make initial assumptions about BMP design parameters (e.g., drawdown time, BMP depth, and allowable footprint) and to subsequently confirm that these assumptions are valid. The Percent Capture Method is explained in Appendix B-4.1.

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37	Public Workshop (2/1/2016)	Appendix B	Do the County's automated worksheets provide HMP calculations?	No. These worksheets are for pollutant control only.
38	Public Workshop (2/1/2016)	Appendix H	If a PDP is subject to coarse sediment requirements, under what scenarios can stream rehabilitation projects be implemented to show no net impact?	This option is under development and not currently available.
39	Public Workshop (2/1/2016)	Appendix H	What is the difference between the 10-20% encroachment allowance under the County's RPO mapping method versus 5% allowed under the WMAA mapping method?	The RPO method typically results in more restricted areas but permits higher levels of encroachment. The WMAA method typically has less area mapped as potential critical coarse sediment and is subsequently less flexible in encroachment allowances.
40	Public Workshop (2/1/2016)	Appendix H	What area is the RPO encroachment allowance based upon, the total project site? The mapped RPO areas?	The RPO Method should be analyzed at the project-level.
41	Public Workshop (2/1/2016)	Appendix H	Will project proponents be required to perform grain size distribution analyses to determine if an RPO area is a CCSYA?	Applicants may defer to regional geology maps to identify if their site contains coarse soils. However, if the applicant seeks more specific information, they may elect to perform a grain size distribution at their site.
42	Public Workshop (2/1/2016)	Appendix H	If an area is protected by the RPO but will not produce coarse sediment, is a PDP required to protect that area?	This would be an area of fine sediment and would not need to be preserved in relation to critical coarse sediment.
43	Public Workshop (2/1/2016)	Appendix H	Where can project applicants find the regional geology datasets used to determine if an area will produce coarse or fine sediment?	The regional geology datasets are included as part of the Final Watershed Management Area Analysis that can be found on the Project Clean Water website.
44	Public Workshop (2/1/2016)	Appendix H	When a project is subject to coarse sediment requirements and CCSYAs have been mapped onsite or upstream, what is the location of the point of compliance?	The point of compliance for the RPO Method is the downstream Project Boundary. If additional analyses such as mapping refinement or demonstration of no net impact are used, the POC may also include the point of discharge to a natural system.
45	Public Workshop (2/1/2016)	Appendix J	What is the status of regional scale alternative compliance projects, when will these types of projects be available?	Regional scale projects are not currently planned, but may be considered in the future.
46	Public Workshop (2/1/2016)	Appendix J	Should the offsite alternative compliance projects be in County jurisdiction?	Yes, cross-jurisdictional alternative compliance options are not currently allowed.
47	Public Workshop (2/1/2016)	Appendix J	How does participation in an alternative compliance program affect a project's CEQA application/determination?	This issue is currently being explored.
48	Public Workshop (2/1/2016)	Appendix K	Is the County (Public Works) going to accept all types of Green Street infrastructure in the guidance document?	County Public Works (Road) will review each project on an individual basis to determine if they will accept the green infrastructure.
49	Public Workshop (2/1/2016)	Appendix K	Which portions of private developments can be excluded from PDP requirements and treated with Green Street elements (i.e. private development that creates a public road)?	The project is required to be examined as part of the whole. Therefore, individual portions of a project cannot be exempted from the PDP requirements.

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50	Public Workshop (2/1/2016)	Appendix K	What are the requirements for numeric sizing of Green Streets elements? How are Green Street elements sized? Are they subject to retention and flow-thru sizing requirements?	Green street elements that are not PDP-exempt must meet all applicable performance standards for PDPs. This includes the General, Source Control, and Site Design requirements of BMPDM Chapter 4, the Structural Pollutant Control requirements of Chapter 5, and the Hydromodification Management requirements of Chapter 6. PDP-exempt green street elements do not need to meet the Chapter 6 Hydromodification Management requirements, i.e., they must only comply with the requirements of Chapters 4 and 5.
51	Public Workshop (2/1/2016)	Appendix L	If a project has a prior lawful approval (PLA) based on the previous issuance of a grading permit, but that permit has expired, is the issuance of a subsequent grading permit covered under the initial PLA determination?	<p>It depends on which PLA scenario is being considered. Under a vested rights scenario, the PLA cannot be carried forward unless the new permit is obtained, and use and reliance established on the permit, by the February 26, 2016 effective date. If these conditions are met, the “new” PLA is limited to the work covered under the newer permit. For example, if a building permit were later issued after the effective date, the project would be reviewed for compliance with updated MS4 Permit standards at that time.</p> <p>In the second “grandfathering” scenario allowed under the 2013 MS4 Permit, the newer permit is included in the initial PLA so long as it is issued within 5 years (i.e., by February 16, 2021). This assumes that all other applicable conditions are met for the PLA.</p>
52	Mike McSweeney, BIA	Appendix K	a) Recognizing the inequality of treatment between privately funded and public road retrofit projects, update the stormwater permit in the future to establish equal treatment under the law.	<p>The County does not have the authority to modify the MS4 Permit. We will consider providing this input to the RWQCB when the MS4 Permit is up for renewal in 2018. The MS4 Permit currently requires that privately funded road widening projects be considered PDPs because they cannot be separated out from the larger project. As such, they must meet applicable numeric sizing criteria. The County has also elected to utilize the 85th percentile treatment standard for PDP-exempt road widening projects. If, in the future, the MS4 Permit is modified to allow privately funded road widening projects to be PDP-exempt, the County will consider further discussion of the appropriateness of potential exceptions to the numeric treatment standard under specified conditions. Until such time, the County does not have the authority to implement these suggested changes.</p>
53	Mike McSweeney, BIA	Appendix K	b) Revise the BMP Design Manual, establishing a category for privately funded road widening projects that cannot provide infiltration or bio-retention measures due to site constraints, and allow use of green streets without numerical sizing as mitigation for those improvements.	
54	Mike McSweeney, BIA	Appendix K	c) Include a roadside swale detail in the pending regional standard drawing details to allow it to be referenced on PDP exempt public projects and used on offsite roads in private development projects as discussed above.	