

**Water Quality Management Plan and Best Management Design Handbook  
Summary of Changes Between 2004 and 2006 Versions**

<b>Water Quality Management Plan (WQMP)</b>		
<b>Description</b>	<b>September 17, 2004</b>	<b>July 24, 2006 update</b>
<i>Through-out document</i> References to web page changed:	<a href="http://www.swrcb.ca.gov">www.swrcb.ca.gov</a>	<a href="http://www.waterboards.ca.gov">www.waterboards.ca.gov</a>
<i>Section 4.0 - Project-Specific WQMP Preparation (page 8)</i> Edit to sentence (1 <sup>st</sup> paragraph, 1 <sup>st</sup> sentence)	Prior to submitting...	Category projects must submit...
<i>Section 4.3 - Identify Pollutants of Concern (page 12)</i> Edit to sentence (3 <sup>th</sup> paragraph)	...pollutants expected to be generated by the project	... potential pollutants of concern generated by the project.
<i>Section 4.3 - Identify Pollutants of Concern (page 12)</i> Edit to sentence (4 <sup>th</sup> paragraph, last sentence)	See Section 4.5, ....	See Section 4.5.3, ....
<i>Section 4.5.2.1 - Non-Structural Source Control BMPs (page 19)</i> Edit to sentence (9 <sup>th</sup> paragraph, last sentence)	The project applicant shall request these materials (in writing) at...	The project applicant shall request these materials at...
<i>Exhibit B – Potential Pollutants Generated by Land Use Type (page B-2)</i> Edit to each Expected (E) value	E	P

<b>WQMP Template</b>		
	<b>Previous Version</b>	<b>August 23, 2006 update</b>
File format	*.doc format	*.dot format
Protection	None	Password-protected
Fill-in forms	Incompatible w/ current Word versions	Upgraded to Word 2003 & fixed bugs

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	Yellow highlights	Removed yellow highlights
Yes/No/NA Inputs	Type-in only	Check boxes
Instructions	In fill-in field only	Special section above fill-in fields
Automatic field updates	Project title, tract/development nos., owner/preparer info, document date	Fixed bugs & added auto-update for page numbers.
Section I	Planning Area/Community Name	Planning Area/Community Name/Development Name

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<b>Best Management Practices (BMP) Design Handbook</b>		
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<i>Table 2 - Potential Pollutants Generated by Land Use Type (page 2)</i> Table correction	Table has been updated to be consistent with WQMP Exhibit B table	
<i>Table 3 - Treatment Control BMP Selection Matrix (page 3)</i> Table correction	Table has been updated to be consistent with WQMP Table 3	
<i>Austin Sand Filter Design Procedure</i>  <i>3. Sedimentation Basin Design (page 37)</i> Formula correction  <i>Worksheet 7 - Design Procedure Form for Austin Sand Filter (page 43 and 44)</i> Formula correction	Width = $A_s / (3)$ Length = $(2) \times (\text{width})$  Width = $A_s / (3)$ $V_r \geq V_f?$	$A_s = 2 \times W^2$ length = $2 \times \text{width}$  $A_s = 2 \times W^2$ $V_r \leq V_f$
<i>Appendix B - BMP Design Examples</i>		
<i>cover sheet (page 65)</i> Typographical error change	Austin San Filter	Austin Sand Filter
<i>Extended Detention Basin Example</i> Calculation/value change <i>Datasheet, Worksheet 1: Item 2.b, and Worksheet 3: Item 1.a.</i>	$A_{\text{total}} = 80$ acres	$A_{\text{total}} = 40$ acres

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Typographical error change <i>Through-out datasheet</i> Total Basin Volume check: Forebay Design: Basin Outlet, For this size orifice:	$\neq$ $\dots(108\% V_{\text{BMP}}) ? V_{\text{BMP}}$ $\dots((4 * \text{Area}_f) / ?) = 89.9$ $\dots 27 \text{ hours} ? 24 \text{ hours}$ $\dots 60 \text{ hours} ? 48 \text{ hours}$	$\rightarrow$ $\dots(108\% V_{\text{BMP}}) \geq V_{\text{BMP}}$ $\dots((4 * \text{Area}_f) / \pi) = 89.9$ $\dots 27 \text{ hours} \geq 24 \text{ hours}$ $\dots 60 \text{ hours} \geq 48 \text{ hours}$
Grass Swale Example Calculation/value change <i>Datasheet</i> Table 4: Runoff Coefficients for an Intensity and Worksheet 2: Item 2 Worksheet 2: Item 4 Worksheet 2: Item 5 and Worksheet 9: Item 1 Worksheet 9: Item 1	$Q_{\text{BMP}} = 9.27 \text{ cfs}$ slight coefficient value changes through-out table $C = .579$ $Q_{\text{BMP}} = 9.27 \text{ ft}^3/\text{s}$ $D = 0.42 (5'') \text{ ft}$	$Q_{\text{BMP}} = 9.31 \text{ cfs}$ $C = .582$ $Q_{\text{BMP}} = 9.31 \text{ ft}^3/\text{s}$ $D = 0.41 (5'') \text{ ft}$
Austin Sand Filter Example Typographical error change <i>Datasheet and Worksheet 7: Item 1</i> Through-out datasheet Filter Basin Design:	$A_{\text{total}} = 80 \text{ acres}$ $\neq$ $\dots = 10164 \text{ ft}^3 ? V_{\text{fb}}$ $\dots = 8469 \text{ ft}^3 ? V_{\text{fb}}$	$A_{\text{total}} = 40 \text{ acres}$ $\rightarrow$ $\dots = 10164 \text{ ft}^3 \geq V_{\text{fb}}$ $\dots = 8469 \text{ ft}^3 \geq V_{\text{fb}}$

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<i>Worksheet 7: Item 4.d.</i>	$V_r \geq V_f?$	$V_r \leq V_f,$
<p><i>Infiltration Basin Example</i></p> <p>Calculation/value change <i>Datasheet and Worksheet 1: Item 4</i></p> <p><i>Datasheet: 3. Trench Surface Area</i></p> <p><i>Worksheet 4: Item 1b</i></p> <p><i>Worksheet 4: Item 3</i></p>	$V_{BMP} = 1.13$ in-acre $V_{BMP} = 0.0942$ ft-acre $V_{BMP} = 4103$ ft <sup>3</sup> $A_m = 5952$ feet = 0.1366 Acres $V_{BMP} = 4103$ ft <sup>3</sup> $A_m = 5952$ feet	$V_{BMP} = 1.12$ in-acre $V_{BMP} = 0.093$ ft-acre $V_{BMP} = 4051$ ft <sup>3</sup> $A_m = 5880$ ft <sup>2</sup> = 0.135 Acres $V_{BMP} = 4051$ ft <sup>3</sup> $A_m = 5880$ feet
<p><i>Filter Strip Example</i></p> <p>Calculation/value change <i>Table 4: Runoff Coefficients for an Intensity and</i> <i>Worksheet 2: Item 2</i></p> <p><i>Worksheet 2: Item 4</i></p> <p><i>Worksheet 10: Item 1</i></p> <p><i>Worksheet 10: Item 2</i></p>	<p>slight coefficient value changes through-out table</p> <p><math>C = .83</math>  <math>Q_{BMP} = .211</math> cfs  <math>W_m = 42.2</math> ft</p>	<p><math>C = .82</math>  <math>Q_{BMP} = .21</math> cfs  <math>W_m = 42</math> ft</p>