

**San Diego Regional Stormwater Copermittees
Land Development Workgroup**

Meeting Notes

Date	Location	Agenda Summary
May 2, 2019 Start time: 9:00 a.m. End time: 11:30 a.m.	County of San Diego 5500 Overland Avenue, Room 312 (Santa Fe) San Diego, CA 92123	<ol style="list-style-type: none"> 1. Introductions 2. Approval of October 23, 2018 Meeting Minutes 3. Announcements and Future Events 4. Non-Agenda Public Comment 5. Presentation: Orange County (OC) Stormwater Tools – Project to Support BMP Tracking and Analysis 6. Report of Waste Discharge (ROWD) 7. LDW Program Updates and Action Items <ol style="list-style-type: none"> a. BMP Design Manual Task b. Alternative Compliance Tools Task c. Copermittee Expenditures 8. Meeting Schedule

Meeting Attendance:

Number of Voting Copermittees Represented: 16

- | | | | |
|--|--|---|---|
| <input checked="" type="checkbox"/> City of Escondido
Mitchell Beacon
Juan Magdaraog | <input checked="" type="checkbox"/> City of Oceanside
Ryan Rodman | <input checked="" type="checkbox"/> City of Del Mar
Fiona McHenry-Crutchfield | <input checked="" type="checkbox"/> City of Solana Beach
Fiona McHenry-Crutchfield |
| <input checked="" type="checkbox"/> City of Santee
Scott Johnson | <input type="checkbox"/> City of Lemon Grove
Mike James | <input type="checkbox"/> City of San Marcos
Doug Dowden | <input type="checkbox"/> City of Poway
Tracy Beach |
| <input checked="" type="checkbox"/> Port of San Diego
Christian Braun | <input checked="" type="checkbox"/> City of Vista
Jon Nottage | <input checked="" type="checkbox"/> City of National City
John Draminski | <input checked="" type="checkbox"/> City of El Cajon
Craig Bonner |
| <input checked="" type="checkbox"/> City of Chula Vista
Marisa Soriano | <input type="checkbox"/> City of Imperial Beach
Wbaldo Arellano | <input checked="" type="checkbox"/> SD Airport Authority
Richard Gilb | <input checked="" type="checkbox"/> City of Coronado
Jessie Powell |
| <input checked="" type="checkbox"/> City of San Diego
Eric Mosolgo
Raymond Ngo | <input checked="" type="checkbox"/> City of Carlsbad
David Rick
Tim Carroll
Tim Murphy | <input checked="" type="checkbox"/> City of Encinitas
Jesse Owens
Paul Maechler | <input checked="" type="checkbox"/> County of San Diego
René Vidales
Juli Hughes
Andrea Araujo
Chris Lawrence
Jeremy Fantaroni
Gladys Gonzalez
Charles Mohrlock |
| <input checked="" type="checkbox"/> Geosyntec*
Venkat Gummadi
Aaron Poresky | <input checked="" type="checkbox"/> Wood*
Victoria Apaldetti | <input type="checkbox"/> Contech*
Noel Thurston | <input checked="" type="checkbox"/> Excel Engineering*
Samuel Bellomio |
| <input checked="" type="checkbox"/> Michael Baker Int'l*
Miguel Avalos (Secretary) | | | |

*One vote per Copermittee.
Indicates non-voting representative

4 **1. Introductions**

5 René Vidales (County of San Diego) began the meeting. Attendees introduced themselves, as
6 usual.

7 **2. Approval of the Minutes for the October 23, 2018 meeting**

8 Tad Nakatani (City of National City) clarified via email that under Section 7.a.ii. *Survey on*
9 *Copermittees Updating their Manual*, line 130, the statement reading “The following
10 Copermittees did not provide a response...” should be updated to note that those parties *did*
11 respond, having answered that they will not be updating their manual.

12 *MOTION:* Approval of the October 23, 2018 meeting minutes as amended. **(APPROVED)**

- 13 ♦ Moved by: Christian Braun (Port of San Diego)
- 14 ♦ Seconded by: Richard Gilb (San Diego Airport Authority)
- 15 ♦ Vote: 14-0 in favor, 0 abstentions

16 **3. Announcements & Future Events**

17 René Vidales (County of San Diego) announced that abstract submissions are being accepted for
18 the CASQA 2019 Annual Conference. The deadline is May 20th at noon. A link was provided with
19 the agenda: <https://www.casqa.org/events/annual-conference/abstract-submittal>.

20 **4. Non-Agenda Public Comments**

21 No comments were made by members of the public.

22 **5. Presentation: Orange County (OC) Stormwater Tools – Project to Support BMP Tracking and**
23 **Analysis**

24 Aaron Poresky (Geosyntec) presented on the Orange County (OC) Stormwater Tools that are
25 being used for:

- 26 • Building and maintaining a consistent inventory of BMP assets
- 27 • Supporting field users and maintenance managers with rapid BMP condition assessment
28 and maintenance tracking, including prioritization of BMPs for maintenance
- 29 • Tracking BMPs within private development parcels and performing O&M verification
- 30 • Creating spatial linkages between drainage assets (i.e., pipes, inlets) and BMPs and
31 establishing the connectivity of these BMPs to their tributary watershed and downstream
32 drainage pathway
- 33 • Modeling the performance of built and planned BMPs
- 34 • Reporting progress and future projections intended to streamline annual reporting

35 Aaron began his presentation by outlining the South OC Water Quality Improvement Plan and
36 how the webtool supports its implementation. He explained the Water Quality Asset Inventory
37 and Pollutant Load Estimate special study, which is comprised of three primary goals: to develop
38 and maintain a WQ asset inventory, to improve datasets to describe watershed connectivity,
39 and to quantify and track BMP benefits. Each of these aspects ultimately supports collaboration
40 for planning and reporting and is supported by the OC Stormwater Tools.

41 The key study approaches include the creation of a custom web application. The intent was to
42 support Copermittee collaboration across the regions while maintaining a flexible architecture
43 that could be used on both desktop and mobile devices. The open source webtool would
44 support future partnerships. The development team agreed that the tool should live beyond the
45 scope of the special study and decided to do away with licensing restrictions. Sitka Technology
46 Group, the web developer partnered with Geosyntec, leveraged prior open-source investments
47 in Lake Tahoe to help create the tool. Ultimately, the app would support flexible approaches for
48 building new and existing inventories, allowing for direct entry and bulk uploads of data.

49 Aaron explained the development of the webtool, covering the three main modules. The
50 inventory module was intended to improve BMP inventory and perform field observations such
51 as rapid assessments. It would also track O&M events and record PDP verifications. The trash
52 module/modeling module would connect BMPs to local drainage areas and evaluate the current
53 progress of each BMP. Reports could be organized by BMP, watershed, or jurisdiction. Lastly,
54 the planning and reporting module would evaluate planning scenarios, prioritizing
55 implementation. Progress reports would also be available through this module.

56 The development process started with the inventory module, at a small trial approach. The team
57 worked closely with the OC Copermittees to address specific requests and respond to feedback.
58 The trash and modeling module followed and is still in development; it aims to facilitate trash
59 reporting for Copermittees.

60 The inventory module has been completely developed. The webtool can track a variety of BMP
61 types, including the 24 types implemented in OC. The tool is configurable for specific BMPs, if
62 they vary by region. The module records specific BMP attributes such as maintenance
63 frequencies and other design related information like drawdown, size, volume, and flow
64 capacity, among other specifics.

65 Field records are also a key element of the module. The tablet-optimized webtool facilitates
66 field operations, allowing users to record their findings. The tool includes workflows for general
67 BMP inventory, rapid assessment, maintenance, and post-maintenance assessment. When
68 performing rapid assessments, users can record the condition of the BMP, including significant
69 issues such as failures along the system (i.e. at inlets/outlets). Other types of observations can
70 also be noted, such as vegetation, infiltration rate, and surface erosion. Although all workflows
71 can be operated independently, the information collected is linked to the same BMP and stored

72 on the webtool. User observations can be quantified with the rapid assessment method, which
73 calculates an assessment score (ranging from 1 through 5 out of 5) based on the status of
74 certain observed qualities such as inlet/outlet condition and infiltration rate. The score is
75 intended to help track and address deficient systems.

76 Another main component of the webtool involves tracking PDP attributes. Users would be able
77 to track information such as the permit term, hydromodification requirements, ownership, and
78 maintenance/emergency contacts. Aaron acknowledged that most of this information is already
79 carefully inventoried by jurisdictions throughout the region. The open source webtool, however,
80 offers certain advantages. Namely, the tool associates the entries with any pertinent parcels.
81 Updates to ownership information, for instance, will flag the BMP prompting the user to follow
82 up. This ensures that the inventory is up to date. Similarly, O&M verification events can be easily
83 recorded. The web-based tool serves as a single repository, making it easy to manage related
84 files. Additionally, BMPs can be associate to watersheds and SWQMPs. BMPs can be categorized
85 based on watershed area, allowing for a collective assessment.

86 The Jurisdictional Manager Record Verification allows users to better organize these records,
87 particularly as they are verified. The process works similar to the public records processes.
88 Records are not subject to public records request (PRA) until verified. Once a record is verified, it
89 can be added to the module using the Jurisdictional Manager Record Verification. Through the
90 incorporation of the webtool, jurisdictions would be better prepared to respond to PRAs.

91 The Phase 1 Trash Module is expected to be completed during summer 2019. The trash-focused
92 portal and workflows are built on the inventory module functionality. Trash devices can be
93 inventoried based on type (i.e. full capture) and other parameters. The tool will be rolled out for
94 both Track 1 and Track 2 Implementation Plans. Considering several trash records are
95 anticipated, Aaron explained that the webtool provides a favorable system to track those items.
96 The tool working space can display delineations, demonstrate trash generation rates, and map
97 capture devices.

98 The Trash Module also incorporates on-land visual trash assessments (OVTA) and procedures,
99 taking into consideration priority land uses. The flexible system can be integrated within the
100 web database. Users can create preliminary delineations through the module by simply
101 dropping pins. The tool will autogenerate OVTA areas that can then be refined, which can
102 support planning level efforts.

103 The Modeling Module in currently being developed and is intended to work as a living model,
104 based on inventory data and connectivity to drainage assets. The module would include
105 information on stormwater runoff and pollutant loads, including modeled runoff hydrology and
106 stormwater routing, as well as data-driven water quality estimates. Dry weather flow
107 information would also be specified, including data-driven flow generation via flow monitoring
108 and surface and subsurface water and pollutant sources. As users import their inventory, they

109 would be able to intersect it with certain other data such as land and hydrological uses. This
110 would allow for a collective analysis, watershed wide. The first phase of the modeling module is
111 already completed, with the inventory of existing BMPs. The inventory reach can be extended to
112 soft assets such as planned BMPs, which can provide a representation of proposed conditions.
113 Once the BMPs are built, the information can be updated, and the BMP can be classified as
114 permanent structures, rather than planned devices.

115 Aaron continued with a demo of the online web app, explaining several features as he
116 showcased the modules. As a jurisdictional manager for OC, Aaron had webtool access to create
117 and modify BMPs. Jurisdictional managers can also invite and manage other users without
118 having to request permission from the master administrator. He again noted that jurisdictions
119 with existing inventories can upload their data via the bulk upload feature. This allows users
120 with a straightforward way to incorporate existing inventories. As explained before, users also
121 have the option to access SWQMPs, field records, and other files.

122 Current privacy settings only show BMPs within the user's jurisdiction. The plan is to eventually
123 display assets from neighboring jurisdictions, specifically those pertaining to the local
124 watershed. Aaron explained that as jurisdictions become more conformable with sharing
125 inventory information, the privacy settings can be updated.

126 Aaron continued to demonstrate the web app capabilities. He pulled up an existing biorientation
127 system in San Clemente to highlight the information available including design details and
128 photos. BMP attributes are listed on the webtool, including design parameters, conditions,
129 drainage area, and more. The other field visit workflows also boast additional information.
130 Users have the option to detail the system's conditions, add notes and observations, and attach
131 photos. Aaron explained that these assessment criteria are modifiable and can be adapted to
132 specific jurisdictional goals.

133 David Rick (City of Carlsbad) asked if the webtool is currently being used. Aaron explained that 7
134 Cities currently implement and embrace the tool, using it to track local BMPs. Most have been
135 very receptive, particularly for the field monitoring benefits. He explained that most also ceded
136 their data, uploading existing inventories and adding new BMPs not previously listed. The most
137 common bulk data uploads are lists of full capture systems or PDP parcels. The City of Dana
138 Point has been using the app heavily for storm drain maintenance. There is a variety of ways the
139 different jurisdictions have been using the app, although they all currently rely on the inventory
140 module alone. The trash capture module is in trial mode with a few communities. Geosyntec is
141 monitoring it closely, although most of the participants do not have complete trash capture data
142 for the app to work at its full potential.

143 René Vidales (County of San Diego) was curious as to how jurisdictions with major inventories
144 already in place would implement the webtool. He specifically inquired about where the data
145 would reside and how files would be uploaded. Aaron explained that the records and the BMP

146 inventory data would be hosted within the tool. Much of the storm drain data information is
147 taken from the County's GIS data. The regional items are also sourced from the County and are
148 updated consistently through SanGIS. Since the webtool references this data, it will always
149 present the most updated information. Additionally, the files and information uploaded to the
150 web app is hosted on Sitka Technology Group's own industrial grade servers. Aaron assured that
151 there is plenty storage capacity. René explained that the concern stemmed from recent server
152 issues with PCW.

153 Those with asset management system already in place, such as Lake Forest, may implement the
154 webtool to supplement their existing inventory without replacing any of their current systems.
155 Users have the liberty to choose how much of the tool is incorporated in their procedures. Aaron
156 acknowledged that separate data sources may result in inconsistency issues and create the need
157 for linkages between separate asset management systems. A single repository is ultimately
158 preferred. Ultimately, the extent of implementation depends on the level of the jurisdiction's
159 current asset management plan.

160 Eric Mosolgo (City of San Diego) inquired about the BMP information to input, particularly the
161 level of assumed effluent and other more technical details. Aaron explained that the tool does
162 not require those type of technical parameters, although it can be modified to include such
163 specifics. However, he would rather not override the module and instead promote common and
164 simple criteria region wide.

165 Juan Magdaraog (City of Escondido) asked if the rapid assessment work flow also tracks
166 escalating enforcement. Aaron explained that although the development team has considered
167 incorporating a similar feature, they have yet to create it. The challenges include gathering the
168 contact information for BMP owners and furthermore, notifying those contacts via the webtool.
169 The most likely approach would be to have the app flag issues internally and require the user to
170 follow up. Jesse Owens (City of Encinitas) also asked if the webtool could incorporate existing
171 notification procedures. Aaron believed it would be likely, although it will depend on the
172 jurisdiction's procedures.

173 Christian Braun (Port of San Diego) asked about incorporating annual reports and other major
174 documents. Aaron explained that these supplemental documents are extremely important
175 features as they facilitate communication with the RWQCB. He reiterated that a key goal of the
176 tool is to streamline annual reporting. The intent is to track and create reports. The architecture
177 is currently being finalized and needs to be incorporated into the webtool.

178 Aaron continued, explaining that his team will be reporting to the RWQCB in June 2020, after
179 completing all the modules. The WQIP allows for some flexibility to follow through as a case
180 study of local watersheds. The RWQCB is on board, although Aaron understands that
181 conversations are still early on. More technical and detailed discussions are forthcoming.

182 Scott Johnson (City of Santee) asked how much it would cost to have this webtool optimized for
183 the County of San Diego. Aaron explained that the costs would be shared by the participating
184 jurisdictions within the County. OC has invested about \$200,000 in software development and
185 about \$100,000 in time and materials, which include data processing. Sheri McPherson (County
186 of San Diego) also asked if there are any subscription costs associated. Aaron explained that
187 Sitka Technology Group charges \$12,000 per year for the servers, which is relatively minimal.
188 Otherwise, base costs could be considered subscription costs, at least as the tool is developed.
189 As the app is refined, these base costs can also decrease.

190 The group discussed the focus of the web app as it pertains to public assets and PDPs. Members
191 asked if it will also categorize new and re-development, particularly regarding WQIP reports.
192 Currently, these items are not consistently tracked throughout the County. The webtool
193 presents the opportunity in incorporate those items.

194 The group discussed general security issues and clarified what information would be publicly
195 available. Aaron explained that the long-term goal is full transparency. However, inspection
196 records and other sensitive information will remain confidential. Other basic information, such
197 as location, type, and contact information can potentially be shared. In addition, the information
198 will need to be simplified into meaningful metrics for the public to easily digest.

199 Eric Mosolgo (City of San Diego) asked for a recommendation on the minimum vegetation cover
200 required to maintain compliance. Aaron explained that vegetation helps with resistance to
201 clogging and is a major factor in maintaining long term infiltration sites. However, cleaner sites
202 may not require substantial vegetation. The requirements would ultimately depend on the
203 RWQCB's definition of biofiltration. Eric mentioned that he would be interested in following up
204 on this topic.

205 Jesse Owens (City of Encinitas) agreed that vegetation is a clear requirement. However, there is
206 great variance between different types of vegetation. Additionally, irrigation can get
207 complicated, particularly in more isolated developments. Sheri McPherson (County of San
208 Diego) also mentioned that the Green Street Design Standards take a more mobile
209 interpretation, allowing for non-vegetated BMPs where appropriate and justifiable. René will
210 include BMP vegetation requirements as an agenda item for the next LDW meeting.

211 The group discussed implementing the tool in San Diego County and gauged the interest among
212 jurisdictions. René will send an email inquiry to all Copermittees requesting that they provide
213 their jurisdiction's stance on the OC Web-App and the possibility of its incorporation.

214 **6. Report of Waste Discharge (ROWD)**

215 The group previously agreed on the high priority items to be discussed with the Regional Board.
216 The final proposed revision on the ROWD will include these items. The meeting with the
217 Regional Board, however, has yet to be scheduled. Eric Mosolgo (City of San Diego) and Marisa

218 Soriano (City of Chula Vista) each expressed interest in participating in the meeting. René
219 Vidales (County of San Diego) will coordinate with the Regional Board to schedule a meeting.

220 **7. LDW Program Updates and Action Items**

221 *a. BMP Design Manual and Help Desk Task*

222 Effective Date of Finalized Version

223 The effective date of the finalized version of the BMP Design Manual was inadvertently listed as
224 May 15, 2016 on the introduction of the Model BMP Design Manual. The issue has been
225 resolved by removing the sentence with the typo. The revised version of the Model has been
226 uploaded to PCW.

227 Solar Farm Projects and Impervious Surface

228 The County has had several Solar Farm Projects in open areas of the unincorporated County.
229 Most instances are in the Region 7 jurisdiction, but a few have already been constructed in
230 Region 9. René Vidales (County of San Diego) explained that for these instances, the solar panel
231 surfaces were not identified as impervious surfaces and therefore did not trigger PDP
232 requirements.

233 The County had a phone conversation with the Regional Board where they requested the
234 removal of the footnote specifying, "For solar energy farm projects, the area of the solar panels
235 does not count toward the total impervious area of the site" from the County of San Diego BMP
236 Design Manual, citing downstream erosion impacts as the main reason. Juan Magdaraog (City of
237 Escondido) mentioned that the City of Escondido has had similar experience with the Regional
238 Board. Venkat Gummadi (Geosyntec) added that the Regional Board had asked to remove the
239 solar farm exemption language from the Model BMP Design Manual back in 2014. He explained
240 that the board issued a comment letter when the Model was posted for public review.

241 Survey on Structural Soil

242 René summarized the survey on structural soil conducted in lieu of a February LDW meeting.
243 The main questions asked to the Copermittees were as follows:

- 244
- 245 • Have you used Cornell University (CU) Structural Soil for a tree well where pavement
246 had to be supported above growing medium?
 - 247 • Have you used Silva Cells™ or StrataCells™ for tree wells where pavement had to be
248 supported above growing medium?
 - 249 • For other Tree Wells where the pavement is not supported above growing medium,
what kind of soil media was used?

250 A total of four Copermittees responded, including the Cities of Del Mar, Encinitas, Santee, and
251 Vista. Rey Pellos (County of San Diego) explained that the County is reviewing a few projects
252 proposing tree wells with different soil mediums. The purpose of the survey was to gain more
253 information on the different mediums' effectiveness and to highlight any potential issues. Rey
254 explained that it has been difficult to research the topic, noting that the structural soil is mostly
255 seen in private developments, with little to no implementation in public projects. He noted that
256 a private sector study claims that Silva Cells are better for tree growth than structural soil.
257 However, there is only a single study in support of the claim.

258 Eric Mosolgo (City of San Diego) mentioned that there have been a few projects proposing these
259 materials in the City of San Diego and would also be interested in more information.

260 René noted that the City of Del Mar recently finished a streetscape project that implemented
261 Silva Cells. The group also noted that the Cities of Vista and San Marcos have each had projects
262 with Silva Cells.

263 Aaron Poresky (Geosyntec) mentioned that Geosyntec developed a fact sheet for Silva Cells in
264 the Bay Area. The focus, however, was on inflow capacity and general storm water compliance,
265 rather than on the structural soil medium.

266 Rey again encouraged that anyone with additional information on the matter please forward it
267 to the County.

268 Help Desk and Q&A Log

269 Venkat Gummadi (Geosyntec) highlighted two items from the Help Desk. He first noted that the
270 BMP hydromodification sizing factors have again been revised; version 3.1 of the BMP Sizing
271 Spreadsheet has been uploaded to PCW. He clarified that the updated version is the only one
272 available on the site and that there are no impacts to the design manual. The other item
273 concerned the source files of the SWMM models. Venkat noted that there were several requests
274 for the latter. Other items were either technical comments or general discussion topics.

275 When asked how busy the help desk has been, Venkat explained that the questions come in
276 waves. For instance, during early permit issuance, there were several questions. Most of the
277 questions received recently are from people new to the manual looking for clarification on
278 topics previously discussed through the Help Desk.

279 René announced that Juli Hughes and Jeremy Fantaroni (County of San Diego) will lead the Help
280 Desk efforts following Nancy Richardson's retirement.

281 *b. Alternative Compliance Tools Task*

282 City of San Diego's Alternative Compliance Program

283 Eric Mosolgo (City of San Diego) provided an update on the City of San Diego's Alternative
284 Compliance Program. A cost benefit analysis is currently being developed. Eric explained that
285 although the process has slowed down recently, the scope is set. The City needs to present one
286 final supporting item to the Mayor's Office, after which they will present to the TAC committee
287 around summer-time. Although the EIR is currently on hold, the consultant preparing the EIR
288 will likely commence work during summer.

289 Water Quality Equivalency Update & Technical Advisory Committee

290 Charles Mohrlock (County of San Diego) provided an update and noted that the 2018 WQE
291 update was accepted in March of this year. The updated document is posted to PCW and is
292 available for use. Charles noted that certification statements are required from all Copermittees
293 by January 31, 2020. He mentioned that most Copermittees have already signed with the trash
294 capture.

295 Regardless, Charles will distribute the WQE Acceptance Letter dated March 15, 2019 and will
296 also verify the Copermittee contacts listed on the approval letter. Once those contacts are
297 verified, he will coordinate with Copermittee representatives to complete certification
298 statements.

299 *c. Copermittee Expenditures*

300 FY 18-19 Third Quarter (Q3) Expenditures

301 The first and second quarter expenditures were approved via email due to the February LDW
302 meeting cancellation. In total, 15 Copermittees voted to approve Q1 and Q2 Expenditures for
303 \$737.52 and \$3,950.71 including Contract Management, respectively.

304 The Q3 Expenditures totaled at \$5,233.55 plus Contract Management for a total of \$5,495.23.
305 René explained that the running total is still light; usually the group experiences a heavier spike
306 in Q4. There has been no work done on the BMP Design Manual Update task since the model
307 was completed. The Help Desk is currently the group's major effort. If the money is not used,
308 the total will be credited back to the Copermittees. Starting in July, the group will start fresh
309 with a previously approved \$300,000 budget. René also mentioned that the County plans to
310 close out the task order at the end of the fiscal year, eliminating the carryover trend.

311 *MOTION:* Approve Third Quarter expenditures totaling in \$5,233.55 plus contract management,
312 for a total of \$5,495.23 **(APPROVED)**

313 ♦ Moved by: Eric Mosolgo (City of San Diego)

- 314 ♦ Seconded by: David Rick (City of Carlsbad)
- 315 ♦ Vote: 16 - 0 in favor, 0 abstention

316 With the new budget effective July 1st, René opened the discussion for recommendations of
317 new work opportunities.

318 Jesse Owens (City of Encinitas) proposed updating the hydrology manual. René mentioned that
319 update is being handled by the County’s Public Works Department. The funds for the hydrology
320 manual will not come from the LDW. However, the data resulting from the update will be for the
321 group’s use. The group discussed the possibility of refining the data, including the rain gauges
322 for continuous simulation data on PCW.

323 Jesse also opened the discussion on infiltration, noting that conditions and regulations vary
324 widely across the region. He noted that it can be particularly difficult to infiltrate in coastal
325 developments, which often have limited available space. Additionally, he noted the potential for
326 bluff failures among other issues. He argued that the long-term effects of perpetuated
327 infiltration need to be analyzed and considered. His main concern was the state of the region’s
328 hydrogeology. René noted that UCSD had been looking for study topics. The group agreed it
329 would be worthwhile to compile a list of potential study topics that could be forwarded to
330 UCSD.

331 Eric Mosolgo (City of San Diego) suggested funding pilot studies in support of alternative
332 compliance. Specifically, a study on the effectiveness of BMP vegetation would be worthwhile,
333 as discussed earlier in the meeting. Aaron Poresky (Geosyntec) noted that the first phase of the
334 study should be to identify the success factors of thriving BMPs. Other topics include the study
335 of real time controls on storm water facilities. The group agreed that there are several topics to
336 consider.

337 The last topic discussed was dry wells. René spoke about two projects currently under review at
338 the County. Eric mentioned UCSD recently proposed one as well. Aaron spoke of his experience
339 with dry wells in Orange County, noting that more clarification is needed in the area. Due to the
340 permitting requirements, developers often avoid proposing dry wells altogether.

341 **8. Action Items**

Action Item	Responsible Party	Timeline
1. Distribute the Orange County (OC) Stormwater Tools presentation along with a link to the Web-App.	René Vidales	5/16/2019
2. Send an email inquiry to all Copermittees requesting that they provide their jurisdiction’s stance on the OC Web-App and the possibility of its incorporation.	René Vidales	5/16/2019

Action Item	Responsible Party	Timeline	
3.	Include BMP vegetation requirements as an agenda item for the next LDW meeting.	René Vidales	7/23/2019
4.	Schedule a meeting with the Regional Board to discuss the high priority items of the final proposed modifications on the ROWD.	René Vidales, Eric Mosolgo, Marisa Soriano	ASAP
5.	Distribute the WQE Acceptance Letter dated March 15, 2019 to the contacts listed and verify the Copermittee contacts listed on the approval letter. Charles Mohrlock to coordinate with Copermittee representatives to complete certification statements.	Charles Mohrlock	5/10/2019
6.	Certification statements are required from all Copermittees for the approved 2018 WQE Update by January 31, 2020.	Charles Mohrlock, All Copermittee WQE Contacts	1/31/2020
7.	Make an announcement regarding the need for the WQE Certification Statements at the following PPS meeting.	René Vidales	5/16/2019

342 **9. Next Meeting**

343 The next LDW meeting is tentatively scheduled for Tuesday, July 23, 2019 from 9:00 a.m.-12:00
344 p.m.