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MEMORANDUM

Date: March 6, 2014

To: BMP Compliance Option Working Group

From: TRPA Staff

Subject: BMP Compliance Options Working Group Meeting #1 – Conceptual Approach.

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Requested Action:

Develop and vet a recommended conceptual approach for options related to Best Management Practices (BMP) compliance to advance for TRPA Regional Plan Implementation Committee (RPIC) review and consideration.

Summary:

At their annual priority setting workshop, the TRPA Governing Board directed TRPA staff to create a subcommittee of the TRPA Governing Board, along with interested parties, to explore options to increase BMP compliance. Attachment 5 of the Regional Plan lists this topic as a priority project.<sup>1</sup> The topic originated as an issue from the Regional Plan Update analysis of requiring BMPs installation at point-of-sale, but was not unanimously supported or included in the adopted Regional Plan. TRPA convened this working group to consider options related to increasing BMP compliance.

Background:

**TRPA Best Management Practices Requirements**

Addressing stormwater runoff and nonpoint source pollution generated on developed parcels reduces runoff volumes and pollutant loads reaching Lake Tahoe. Section 60.4 of the TRPA Code of Ordinances outlines BMP requirements for all developed properties within the Tahoe Region. TRPA requires BMPs to infiltrate the volume from a 20-year, one hour storm, which equals one inch of water per hour from all impervious surfaces on site. TRPA may approve alternative BMPs to meet water quality standards where special circumstances exist. Alternative BMPs may include treating runoff to meet concentration-based discharge standards before releasing back to the environment or participating in an area-wide treatment system. Properties must also implement sediment source control BMPs to prevent any sediment from being mobilized and transported off-site. Once a property completes its BMP requirements, TRPA issues a certificate of completion. Property owners must maintain BMPs pursuant to TRPA Code section 60.4.9 to ensure their continued effectiveness otherwise TRPA can revoke the certificate.

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<sup>1</sup> 2012 Regional Plan Update Attachment 5 – Preliminary List of Priority Projects, pp A5-1 thru A5-3:  
[http://www.trpa.org/wp-content/uploads/12-12-2012\\_RP\\_Final\\_Adopted\\_Attachments\\_clean.pdf](http://www.trpa.org/wp-content/uploads/12-12-2012_RP_Final_Adopted_Attachments_clean.pdf)

TRPA's Current Planning Department and local governments, through MOUs with TRPA, oversee implementation of BMPs on new development or sites that are redeveloped through a TRPA development permit. The TRPA Stormwater Management Program and partner resource management agencies administer the Lake Tahoe BMP Retrofit Program, which oversees BMP implementation on parcels developed prior to the 1987 Regional Plan. The Lake Tahoe BMP Retrofit Program currently relies on grant funding and uses a multi-faceted approach to achieve BMP implementation on private parcels. Limited funding opportunities mandates a concentrated focus on high priority and highly effective approaches.

### **Accelerated BMP Implementation and Enforcement Program**

After emphasizing voluntary compliance through education and outreach efforts from its inception, the TRPA Stormwater Management Program developed an accelerated BMP implementation and enforcement program in 2007. The program directs compliance efforts and accelerates BMP implementation in areas with the greatest potential for water quality improvements. Target areas include: drainage catchments with large areas of pavement and other impervious surfaces; areas adjacent to Environmental Improvement Program (EIP) water quality improvement projects implemented or in progress; locations where opportunities exist to explore area-wide water quality solutions that integrate private and public BMPs; and areas in proximity to Lake Tahoe, stream environment zones, and other sensitive lands.<sup>2</sup> The accelerated implementation program has increased BMP compliance rates, with approximately 30 percent of targeted properties achieving BMP compliance within one to three years after receiving an official notice from TRPA.<sup>3</sup> Approximately half of all BMP certificates issued, occurred since 2007 as a result of the accelerated implementation program.<sup>4</sup> As of December 31, 2013, 16,382 of 43,470 parcels in the Tahoe Region achieved a BMP Certificate. This equates to 62 percent compliance in Nevada and 28 percent compliance in California and total Region-wide compliance of 38 percent. Currently, TRPA ensures BMP compliance associated with permits issued by TRPA and for BMP retrofits not associated with a TMDL pollutant/stormwater load reduction plan, and local governments ensure BMP compliance associated with permits issued by local governments through their MOU and for properties identified in their TMDL pollutant/stormwater load reduction plan(s).

### **Total Maximum Daily Load (TMDL)**

Under Section 303(d) of the Clean Water Act, the U.S. EPA requires states, territories, and authorized tribes to identify impaired waters not meeting water quality standards and establish total maximum daily load (TMDL) water quality restoration plans to address their impairments.<sup>5</sup> The States of California and Nevada determined total maximum daily loads for fine sediment particles (FSP), total phosphorous, and total nitrogen that may enter Lake Tahoe in order to restore the desired clarity. The U.S. EPA approved the Lake Tahoe TMDLs in 2011 after more than 10 years of research and analysis at a cost of approximately \$10 million. The Lake Tahoe TMDL Technical Report recognizes stormwater runoff from

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<sup>2</sup> TRPA Regional Plan DEIS, Hydrology and Water Quality, p. 3.8-38: [http://www.trpa.org/wp-content/uploads/3.8\\_Hydrology\\_WQ.pdf](http://www.trpa.org/wp-content/uploads/3.8_Hydrology_WQ.pdf)

<sup>3</sup> TRPA Regional Plan DEIS, Hydrology and Water Quality, p. 3.8-38: [http://www.trpa.org/wp-content/uploads/3.8\\_Hydrology\\_WQ.pdf](http://www.trpa.org/wp-content/uploads/3.8_Hydrology_WQ.pdf)

<sup>4</sup> Stormwater Management/BMP Retrofit Program Overview, Presented to the Regional Plan Implementation Committee January 31, 2012, AR055402 - AR055409.

<sup>5</sup> TRPA Final Lake Tahoe Water Quality Management 208 Plan, June 19, 2013, p. 8: [http://www.trpa.org/wp-content/uploads/Final-U.S.-EPA-Adopted-Lake-Tahoe-208-WQMP\\_2013.06.19.pdf](http://www.trpa.org/wp-content/uploads/Final-U.S.-EPA-Adopted-Lake-Tahoe-208-WQMP_2013.06.19.pdf)

urbanized land uses as the largest source of FSP and phosphorous to Lake Tahoe.<sup>6</sup> The California and Nevada Lake Tahoe TMDLs identify BMP installation as one of several key strategies to attain pollutant load reduction goals.<sup>7</sup> The State of California administers their Lake Tahoe TMDL through issuing National Pollutant Discharge Elimination System (NPDES) permits to local governments and their state transportation agency. The Municipal NPDES permit for local governments specifies that permittees must ensure that changes in land use, impervious coverage, or operations and maintenance practices do not increase a catchment's average annual baseline pollutant load.<sup>8</sup> The State of Nevada administers their Lake Tahoe TMDL through Memoranda of Agreement (MOA) with local governments and their state transportation agency. Currently, both States are working with their respective local governments, state transportation agencies and other resource management agencies in the Lake Tahoe Region to identify and implement the necessary steps to reduce pollutant loads.<sup>9</sup>

### **TRPA Regional Plan**

TRPA developed a Regional Plan and corresponding Code of Ordinances to attain environmental threshold carrying capacities ("thresholds"). The TRPA Regional Plan establishes a number of goals and standards that address water quality thresholds, including reducing inputs of sediment and nutrients to Lake Tahoe and installing BMPs to mitigate impacts associated with development.<sup>10</sup> In accordance with the Regional Plan, TRPA developed and maintains a BMP Handbook to guide proper application, installation and maintenance of BMPs.<sup>11</sup> TRPA adopted a number of modifications to water quality policies as part of the 2012 Regional Plan Update. These included, but are not limited to, provisions to better coordinate with the Lake Tahoe TMDL and allow local jurisdictions greater flexibility for the use of area-wide BMPs.<sup>12</sup>

TRPA recognizes the authority of California and Nevada and plays a supportive role to facilitate implementation of the TMDL. The 2012 Regional Plan improves coordination with the Lake Tahoe TMDLs by requiring regulatory agencies to provide TRPA with annual progress reporting and analysis, and copies of all memoranda of agreements (MOAs) and National Pollutant Discharge Elimination System (NPDES) permits.<sup>13</sup> The Regional Plan Introduction and Water Quality Subelement also improve coordination with the Lake Tahoe TMDLs by ensuring consistent requirements and eliminate duplicative reporting. Finally, the Regional Plan specifies that areas targeted by TRPA for accelerated BMP

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<sup>6</sup> Lake Tahoe TMDL Technical Report, Lahontan Regional Water Quality Control Board and Nevada Division of Environmental Protection, 2009.

<sup>7</sup> Final Lake Tahoe Total Maximum Daily Load Report, November 2010:

[http://www.waterboards.ca.gov/lahontan/water\\_issues/programs/tmdl/lake\\_tahoe/docs/tmdl\\_rpt\\_nov2010.pdf](http://www.waterboards.ca.gov/lahontan/water_issues/programs/tmdl/lake_tahoe/docs/tmdl_rpt_nov2010.pdf)

<sup>8</sup> State of California Lahontan Regional Water Quality Control Board Municipal NPDES Permit No. CAG616001,p.26: [http://www.waterboards.ca.gov/lahontan/board\\_decisions/adopted\\_orders/2011/docs/r6t\\_2011\\_101a1.pdf](http://www.waterboards.ca.gov/lahontan/board_decisions/adopted_orders/2011/docs/r6t_2011_101a1.pdf)

<sup>9</sup> TRPA Final Lake Tahoe Water Quality Management 208 Plan, June 19, 2013, p. 4: [http://www.trpa.org/wp-content/uploads/Final-U.S.-EPA-Adopted-Lake-Tahoe-208-WQMP\\_2013.06.19.pdf](http://www.trpa.org/wp-content/uploads/Final-U.S.-EPA-Adopted-Lake-Tahoe-208-WQMP_2013.06.19.pdf)

<sup>10</sup> TRPA Regional Plan Water Quality Subelement Policies WQ-1.3; WQ-2; WQ-3; WQ-3.1; WQ-3.9; WQ-3.11; WQ-3.12: [http://www.trpa.org/wp-content/uploads/Regional\\_Plan\\_Goals\\_Policies\\_Final-2012-12-12.pdf](http://www.trpa.org/wp-content/uploads/Regional_Plan_Goals_Policies_Final-2012-12-12.pdf)

<sup>11</sup> TRPA Regional Plan Water Quality Subelement Policy WQ-3.11: [http://www.trpa.org/wp-content/uploads/Regional\\_Plan\\_Goals\\_Policies\\_Final-2012-12-12.pdf](http://www.trpa.org/wp-content/uploads/Regional_Plan_Goals_Policies_Final-2012-12-12.pdf); TRPA Best Management Practices Handbook: <http://www.tahoebmp.org/bmphanbook.aspx>

<sup>12</sup> TRPA Regional Plan Water Quality Subelement Policies WQ-1.5: [http://www.trpa.org/wp-content/uploads/Regional\\_Plan\\_Goals\\_Policies\\_Final-2012-12-12.pdf](http://www.trpa.org/wp-content/uploads/Regional_Plan_Goals_Policies_Final-2012-12-12.pdf)

<sup>13</sup> TRPA Final Lake Tahoe Water Quality Management 208 Plan, June 19, 2013, pp. 9-10: [http://www.trpa.org/wp-content/uploads/Final-U.S.-EPA-Adopted-Lake-Tahoe-208-WQMP\\_2013.06.19.pdf](http://www.trpa.org/wp-content/uploads/Final-U.S.-EPA-Adopted-Lake-Tahoe-208-WQMP_2013.06.19.pdf)

Implementation should occur in coordination with local government Pollution/Stormwater Load Reduction Plans.<sup>14</sup>

Prior to the 2012 Regional Plan Update, area-wide BMPs in the Tahoe Region occurred only where special circumstances existed that limited infiltration on individual parcels. The 2012 Regional Plan Update specified that as an alternative to certain site-specific BMPs, local jurisdictions may implement area-wide water quality treatment facilities and funding mechanisms where area-wide treatments can achieve equal to or greater water quality benefits.<sup>15</sup> This update expanded the ability to implement area-wide treatment facilities to any area in the Region where TRPA approves the area-wide project and the improvements are installed in accordance with the approved area-wide BMP plan.<sup>16</sup> The Regional Plan DEIS found area-wide water quality treatment facilities more cost effective than individual parcel BMPs because they allow for greater flexibility in siting and design of treatment systems, and are more efficient with maintenance practices compared to conducting maintenance activities on many smaller and widely distributed individual parcels and sites.<sup>17</sup>

The Regional Plan Update also developed a number of incentives to increase the rate of BMP installation on private properties and advanced provisions to accelerate environmental redevelopment of Tahoe's existing urban centers, which would bring these properties into conformance with modern environmental standards including BMPs.

#### **BMPs at Point-of-Sale**

Another strategy to further accelerate BMP compliance analyzed, but not adopted, as part of the Regional Plan Update included requiring BMP installation on a property at the point-of-sale or posting a financial guarantee at the point-of-sale equal to the cost of implementing BMPs for the property.<sup>18</sup> Current TRPA regulations require that before the sale of a property within the Tahoe Region, the property owner must disclose the property's BMP compliance status to the buyer who must provide the disclosure form to TRPA within 30 days of sale.<sup>19</sup> The current disclosure system alerts the buyer of a property to their responsibilities for complying with BMP regulations related to the property, but does not enforce BMP requirements at the point-of sale. TRPA informally partners with Lake Tahoe's Real Estate community to direct buyers and sellers to informational materials<sup>20</sup> and the BMP disclosure form<sup>21</sup>, located on the Stormwater Management Program website.<sup>22</sup> Low return of disclosure forms led TRPA staff to secure grant funding from the State of California in 2011 to enhance the TRPA Real Estate

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<sup>14</sup> TRPA Regional Plan Water Quality Subelement Policy WQ-3.11: [http://www.trpa.org/wp-content/uploads/Regional\\_Plan\\_Goals\\_Policies\\_Final-2012-12-12.pdf](http://www.trpa.org/wp-content/uploads/Regional_Plan_Goals_Policies_Final-2012-12-12.pdf)

<sup>15</sup> TRPA Regional Plan Water Quality Subelement Policy WQ-3.11: [http://www.trpa.org/wp-content/uploads/Regional\\_Plan\\_Goals\\_Policies\\_Final-2012-12-12.pdf](http://www.trpa.org/wp-content/uploads/Regional_Plan_Goals_Policies_Final-2012-12-12.pdf)

<sup>16</sup> TRPA Regional Plan Water Quality Subelement Policy WQ-3.12: [http://www.trpa.org/wp-content/uploads/Regional\\_Plan\\_Goals\\_Policies\\_Final-2012-12-12.pdf](http://www.trpa.org/wp-content/uploads/Regional_Plan_Goals_Policies_Final-2012-12-12.pdf)

<sup>17</sup> TRPA Regional Plan DEIS, Hydrology and Water Quality, p. 3.8-48: [http://www.trpa.org/wp-content/uploads/3.8\\_Hydrology\\_WQ.pdf](http://www.trpa.org/wp-content/uploads/3.8_Hydrology_WQ.pdf)

<sup>18</sup> TRPA Regional Plan DEIS, Hydrology and Water Quality, p. 3.8-40: [http://www.trpa.org/wp-content/uploads/3.8\\_Hydrology\\_WQ.pdf](http://www.trpa.org/wp-content/uploads/3.8_Hydrology_WQ.pdf)

<sup>19</sup> TRPA Code of Ordinances, Section 60.4.

<sup>20</sup> Lake Tahoe EIP Stormwater Management Program, *A Homeowner's Guide to Best Management Practices in the Lake Tahoe Basin*: [http://www.tahoebmp.org/Documents/BMP\\_SFR\\_Mailer.pdf](http://www.tahoebmp.org/Documents/BMP_SFR_Mailer.pdf)

<sup>21</sup> TRPA BMP Disclosure Form, November 2012: [http://www.tahoebmp.org/Documents/BMP\\_Real\\_Estate\\_Disclaimer.pdf](http://www.tahoebmp.org/Documents/BMP_Real_Estate_Disclaimer.pdf)

<sup>22</sup> TRPA Stormwater Management Program Website: <http://www.tahoebmp.org/Realtors.aspx>

Disclosure process and increase BMP implementation following real estate transactions.<sup>23</sup> Funding for the enhanced process includes stakeholder interviews, updating the disclosure form for clarity, providing online submittal options and tracking and initiating enforcement on California properties out of compliance following real estate transactions. TRPA put work on the enhanced BMP disclosure process on hold during the Regional Plan Update and will resume following recommendations from the BMP Compliance Options priority project process.

Although the Regional Plan Update DEIS found that increasing BMP implementation through point-of-sale requirements results in a beneficial impact<sup>24</sup>, it was not unanimously supported by the Regional Plan Implementation Committee. Requiring BMPs at point-of-sale presented a number of concerns from stakeholders including, but not limited to, the Real Estate community. As a result, the topic of BMP compliance was placed on the Regional Plan Attachment 5 Preliminary List of Priority Projects to be addressed at a later date.

### **Area Plans**

TRPA approved local Area Plans help implement and become part of the TRPA Regional Plan and Code of Ordinances. Local Area Plans address BMPs in addition to the TRPA Regional Plan and Code requirements. Chapter 13 of TRPA Code allows Area Plans to propose area-wide water quality treatments and funding mechanisms in lieu of certain site-specific BMPs, subject to requirements.<sup>25</sup> Both the TRPA approved Douglas County South Shore Area Plan and City of South Lake Tahoe Tourist Core Area Plan, include provisions for area-wide BMP installation and BMP compliance in their respective areas.<sup>26</sup>

### Proposed Conceptual Approach:

***Develop feasible and implementable policies and/or other recommendations addressing limitations with existing BMP compliance rates that meet project objectives and fit within the overall context of stormwater priorities.***

### **Objectives:**

- I. *Support Regional Plan goals and policies including protecting and enhancing water quality and coordinating with the Lake Tahoe TMDL Programs.*
- II. *Support local government Area Plan goals and policies.*
- III. *Simplify/streamline operational processes.*
- IV. *Focus on options related to BMP compliance.*
- V. *Meet feasibility criteria outlined in Attachment A, consider funding constraints for the Lake Tahoe BMP Retrofit Program and pursue recommendations that offer the “biggest bang for the buck” in terms of pollutant load reductions.*

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<sup>23</sup> California Department of Water Resources Grant Agreement No. 4600009196 - Supplemental Proposition 50 - Project Component 5: Tahoe Regional Planning Agency-BMP Retrofit for the Lake Tahoe Region

<sup>24</sup> TRPA Regional Plan DEIS, Hydrology and Water Quality, p. 3.8-40: [http://www.trpa.org/wp-content/uploads/3.8\\_Hydrology\\_WQ.pdf](http://www.trpa.org/wp-content/uploads/3.8_Hydrology_WQ.pdf)

<sup>25</sup> TRPA Code Section 13.5.3.B.3

<sup>26</sup> TRPA Area Plan Documents Webpage, March 2014: <http://www.trpa.org/regional-plan/area-plans/area-plan-documents/>

Discussion items to consider may include but are not limited to:

- Maintaining or modifying the existing BMP disclosure system.
- Require BMP installation on properties at the point-of-sale or post a financial guarantee at the point-of-sale equal to the cost of implementing BMPs.
- Enhance the TRPA Real Estate Disclosure process to increase BMP implementation following real estate transactions or alternative.
- Revise BMP compliance procedures for permitted projects to provide flexibility in the use of forfeited securities and/or in imposing penalties.
- Consider additional enforcement options for special circumstances, such as recording a notice of noncompliance to a property deed.
- Target accelerated BMP Implementation in coordination with local government Pollution/Stormwater Load Reduction Plans.
- Facilitate and promote area-wide BMPs and in-lieu fees.
- Provide additional incentives to encourage BMP compliance.
- Consider requesting future Governing Board prioritization of other topics outside the scope or requesting the *EIP Parcel Specific BMP Water Quality Working Group* to review and provide recommendation on other topics including, but not limited to BMP maintenance and monitoring.

**Contact Information:** If you have any questions, please contact Shay Navarro, Senior Planner, at 775.589.5282 or [snavarro@trpa.org](mailto:snavarro@trpa.org)

**Attachments:**

- A. Pathway 2007 Feasibility Criteria

## Pathway 2007 Feasibility Criteria:

- 1) Effectiveness: The relative environmental benefit of the regulatory requirement.
- 2) Cost: The relative cost to project applicants, contractors, property owners, or public agencies to comply with the regulatory requirement. This also includes the cost to TRPA or local jurisdictions to monitor and enforce compliance with the requirement.
- 3) Public Acceptability: The relative impact of the requirement on the public. This criteria is based on factors other than cost that could place a burden on project applicants, contractors, property owners, or public agencies. Factors include potential delays in project implementation, reductions in the workforce available to implement projects in compliance with requirements, complicated procedural requirements, or other non-monetary impacts to project proponents or other members of the public.
- 4) Technical Feasibility: The level of technical difficulty in complying with and enforcing compliance with the requirement. Technical feasibility includes the availability of technologies or materials necessary to comply with the requirement, the feasibility of monitoring compliance with the measure, whether compliance can be objectively measured, and whether monitoring and enforcement would require specialized skills or technologies.
- 5) Effects on Other Resources: The level to which the requirement would have positive or negative impacts on other resource areas. Requirements that would have secondary benefits to other resource areas, such as vegetation preservation or scenic quality, would rank higher. Requirements that have unintended impacts to other resource areas would rank lower.