# **Coordinate BMP implementation with Load Reduction Plans**

#### Overview:

This information sheet addresses the BMP Compliance Working Group discussion item #5 related to prioritizing BMP implementation in coordination with Load Reduction Plans:

5. Target and prioritize accelerated BMP implementation in coordination with local jurisdiction Load Reduction Plans.

TRPA has conducted targeted enforcement of BMP retrofit requirements in all land use categories with the support of grant funding since 2003. These efforts typically involve sending a Notice of Failure to Implement BMPs to targeted properties, follow up and providing technical assistance to facilitate compliance. Current grant funding supports continued enforcement with the highest priorities being 1) properties already in receipt of a notice of non-compliance and 2) initiating accelerated BMP implementation of targeted properties in both Nevada and California until 2017. TRPA prioritizes areas targeted for BMP enforcement consistent with the 2009 TRPA BMP Enforcement Strategy, appended as Attachment A. The strategy prioritizes properties for enforcement based on their proximity to EIP projects and SEZs, source of pollutants, or the recipient of complaints. TRPA has not updated the strategy since 2009 and needs to be updated to reflect current policies of the Regional Plan to coordinate with local jurisdictions, TMDL load reduction plans, and/or Area Plans.

The enforcement process can also be informed by the EIP Parcel Specific Working Group, which is made up of staff from partner agencies and local jurisdictions implementing stormwater programs to meet TRPA and TMDL requirements. Using existing grant funds to update the BMP Strategic Plan with the EIP Working Group can inform future priorities for BMP enforcement consistent with the 2012 Regional Plan and TMDL load reduction plans. In addition, some properties have met BMP requirements but for a variety of reasons do not have a BMP certificate on record. TRPA will update the BMP compliance status in the database, and issue a certificate for properties in compliance with BMP requirements.

The BMP Compliance Working Group is focused on advancing recommendations that guide TRPA's efforts and limited resources to the most effective stormwater management strategies in a manner that is consistent with the Regional Plan, local Area Plans and TMDL load reduction plans. This information sheet provides background data, analysis of options to address the topic and advances recommendations from TRPA staff and the EIP Parcel Specific Working Group.

## **Recommendation Summary:**

- 1. Continue current enforcement strategies with available funding.
- 2. Refer the topic of targeting enforcement efforts to the EIP Parcel Specific Working Group to review staff recommendations and identify any additional opportunities as part of developing final recommendations.

<sup>&</sup>lt;sup>1</sup> California Proposition 50 Supplemental Grant funds supports sending a Notice of Failure to Implement BMPs to 350 prioritized CA single family residential properties by December 2014. NV319 grant funding supports continued compliance of BMPE files and sending a Notice of Failure to Implement BMPs to 150 prioritized properties by December 2015. CA 319 awarded but not yet under contract supports accelerated implementation and certification of 75 multi-family residential and 45 commercial properties by December 2017. California limits CA319 funds such that they cannot contribute to local jurisdiction load reduction crediting.

<sup>&</sup>lt;sup>2</sup> BMP Compliance Options Working Group Meeting #1 – Meeting Notes, March 12, 2014

- 3. Use existing grant funds to update the BMP Strategic Plan and the EIP Parcel Specific Working Group Charter, which outline the mission and strategic goals for the BMP Retrofit Program and roles for partner agencies and implementers.
- 4. Update TRPA enforcement strategy to coordinate with local jurisdiction load reduction plans and Area Plans.
- 5. Update BMP database to more accurately reflect compliance information.

#### **Background**

## 2012 Regional Plan

Water Quality Policy WQ-3.11 states that areas targeted for accelerated BMP implementation should occur in coordination with local jurisdiction TMDL load reduction plans.

#### TRPA Code of Ordinances

Section 60.4 of TRPA Code outlines BMP requirements including project compliance programs and priorities for BMP retrofits.

#### TRPA Rules of Procedure

Article 9 of TRPA's Rules of Procedure addresses compliance procedures including those related to violation of BMP requirements.

#### Local Area Plans

TRPA adopted the South Shore Area Plan in Douglas County and the Tourist Core Area Plan in the City of South Lake Tahoe since adoption of the Regional Plan in 2012. Both plans include specific provisions on BMP implementation and coordination with TRPA on BMP enforcement.<sup>3</sup>

## **TMDL and Load Reduction Plans**

Local jurisdictions must prepare load reduction plans that outline their approach to meeting TMDL load reduction requirements. Some plans are complete while others are in progress. Priorities focus on the most feasible and cost effective approach to reduce pollutants from urban runoff, which often focus in the highest loading areas. Some local jurisdictions include parcel specific BMPs as part of their load reduction strategy, while others rely on area-wide treatments that involve public-private partnerships.<sup>5</sup>

#### Data Needs

The BMP Compliance Working Group requested information on areas targeted for BMP enforcement as well as information on load reduction plan priorities.

TRPA coordinated with agency and local jurisdiction staff to identify the following as possible priority areas for current rounds of BMP enforcement. The areas selected meet criteria in TRPA's 2009

<sup>&</sup>lt;sup>3</sup> 2013 Douglas County MOU states TRPA will enforce BMPs associated with permits issued by TRPA and for BMP retrofits not associated with a TMDL load reduction plan and Douglas County will enforce BMPs associated with permits issued by the County and for properties identified in their Load Reduction Plan. The MOU for the Tourist Core Area Plan has yet to be complete, but Policy NCR-3.2 in the Area Plan supports coordination with TRPA on private property BMP enforcement.

<sup>&</sup>lt;sup>4</sup> Final Load Reduction Plans for Nevada jurisdictions are expected to be complete by August 2014 – Email communication from Kris Klein at Washoe County, May 29, 2014.

<sup>&</sup>lt;sup>5</sup> Washoe County intends to rely on private parcel BMPs to meet TMDL load reductions and CSLT relies on areawide treatment.

enforcement strategy, provided in Attachment A, and coordinate with local jurisdiction load reduction plans and Area Plans:

- Washoe County Central Incline Village Phase I and II EIP project areas as well as properties
  adjacent to Country Club Drive to compliment the Fairview Fairway EIP water quality
  improvement project. See Attachment B for a map of Washoe County EIP project areas.
- City of South Lake Tahoe Subcatchment F1, which corresponds to the previously implemented Sierra Tract Water Quality Improvement Project. See Attachment C for a map of the subcatchment. TRPA also suggests targeting properties within the approved Tourist Core Area Plan for future enforcement to complement enhanced street sweeping by the City on Pioneer Trail.
- Placer County properties within the Lake Forest area in proximity to the public water quality improvement project.

The City of South Lake Tahoe, El Dorado County, and Placer County each submitted a Pollutant Load Reduction Plan to the Lahontan Regional Water Quality Control Board on March 15, 2012. Plans describe how the local jurisdictions plan to meet urban runoff pollutant load reduction requirements for the first TMDL implementation phase. Strategies identified include enhanced street sweeping, public/private area-wide water quality treatments, EIP water quality improvement and infiltration projects, road shoulder condition improvements and private property BMPs. Final load reduction plans for Nevada local jurisdictions are not available until August, 2014, but a similar range of strategies is expected. For further reference, Attachment D provides a summary of the City of South Lake Tahoe's TMDL priorities.

## **Options and Analysis**

#### Targeted enforcement of BMPs

Updating TRPA's enforcement strategy and BMP Strategic Plan in coordination with the EIP Parcel Specific Working Group ensures BMP enforcement will occur in coordination with TMDL load reduction plans and local jurisdiction Area Plans. Properties targeted for BMP enforcement may have to install parcel specific requirements or participate in an approved area-wide treatment. During the Regional Plan Update, TRPA staff assembled data on BMP compliance, with emphasis on Town Centers prioritized for environmental redevelopment. This process illuminated gaps in TRPA's compliance data in that certain parcels did not have a BMP certificate recorded in the BMP database yet had completed BMPs as part of a redevelopment project. See Attachment E for the map packet distributed to the Regional Plan Update Committee. Once targeted through the enforcement process, TRPA can update the BMP compliance status in the BMP database for these properties.

#### Recommendations

Continue current enforcement strategies with available funding.
 Using existing grant funding, TRPA is currently working with staff at the City of South Lake Tahoe and Washoe County to identify properties in strategic locations without BMP certificates to initiate enforcement on. See Attachments B and C for more detail.

http://www.waterboards.ca.gov/lahontan/water issues/programs/tmdl/lake tahoe/docs/eldorado plrp.pdf Placer County Load Reduction Plan:

http://www.swrcb.ca.gov/lahontan/water issues/programs/tmdl/lake tahoe/docs/placer plrp.pdf City of South Lake Tahoe Load Reduction Plan:

<sup>&</sup>lt;sup>6</sup> El Dorado County Pollutant Load Reduction Plan:

- 2. Refer the topic of targeting enforcement efforts to the EIP Parcel Specific Working Group to review staff recommendations and identify any additional opportunities as part of developing final recommendations. The EIP Parcel Specific Working Group is made up of state and federal agency and local jurisdiction staff implementing and enforcing stormwater management programs to meet TRPA and TMDL requirements. Due to the large number of topics to address and the technical nature of targeting enforcement efforts, TRPA staff recommends referring this topic to the EIP Parcel Specific Working Group to review staff recommendations and identify any additional opportunities as part of developing final recommendations by August 20, 2014. Four members of the BMP Compliance Working Group serve on the EIP Parcel Specific Working Group and can communicate between the groups.
- 3. Use existing grant funds to update the BMP Strategic Plan and Charter for the EIP Parcel Specific Working Group, which outline the mission and strategic goals for the BMP Retrofit Program and roles for partner agencies and implementers.
  The group of state and federal partner agencies and local jurisdictions that implement BMP projects focuses on parcel specific requirements. TRPA secured grant funds to develop a charter for the working group and update the BMP Strategic Plan consistent with the 2012 Regional Plan and TMDL. The updated Strategic Plan will help guide priorities for future BMP implementation and create uniform processes for different enforcement strategies.
- 4. Update the TRPA enforcement strategy to include coordination with local jurisdiction load reduction plans and Area Plans, and other priorities recommended by the EIP Parcel Specific Working Group. <sup>7</sup> Updated enforcement priorities intend to implement the 2012 Regional Plan, support the TMDL and be additive to existing criteria by which TRPA prioritizes enforcement. Include the updated strategy as part of the BMP Strategic Plan previously mentioned.
- 5. Streamline the BMP database to improve operational efficiency and accuracy of BMP compliance information.
  Seek funding for TRPA's Stormwater Management Program and the newly formed Research and Analysis Division to streamline BMP data collection processes and improve accuracy of BMP compliance information. Improving BMP compliance information systems supports the TRPA Strategic Plan.

<sup>&</sup>lt;sup>7</sup> Washoe County staff support enforcement priorities that consider sediment load, date of catchment registration and connectivity. Email communication with Kris Klein on May 29, 2014. Other BMP enforcement priorities for the EIP Parcel Specific Working Group to consider may include, but are not limited to, source control and Fire Defensive Space requirements in approved area-wide water quality treatment areas and non-compliant marinas. BMP enforcement should avoid areas known to be contaminated with MTBE so as not to accelerate dispersion with infiltrated stormwater. Personal Communication with Jason Burke, CSLT Stormwater Coordinator on May 27, 2014.

June 15, 2009

The Erosion Control Team's (ECT) primary task is stated in section 25.3 or the TRPA Code of Ordinances: Property owners shall install and maintain BMPs on their property with existing uses... All developed properties within the Tahoe Region are required to have BMPs installed no later than October 15, 2008. Therefore any property that has not installed BMPs is out of compliance with the current Code.

Currently the ECT has enforced and been successful in implementation of BMPs on the majority of commercial and large multi-family properties in priority 1 watersheds, and has initiated enforcement on residential properties in priority 1 watersheds. If we continued with the status quo, the ECT will continue this track and move on to enforcement of properties in priority 2 watersheds. The ECT believes there are more effective means to improving water quality on private property and is recommending the following strategies subject to discussion, refinement, and advice.

# BMP ENFORCEMENT STRATEGY RECOMENDATIONS

The purpose of this memo is to initiate discussion regarding Agency direction on BMP Enforcement for the next several years. Beyond that time, the Regional Plan Update and associated new codes should provide more guidance and refinement. There are four main categories below containing bullet points. If this direction is supported, then the ECT will develop a more detailed plan under each bullet point.

**Education and Outreach-** The traditional method of the Erosion Control Team (ECT) to compel property owners to install BMPs uses the philosophy that people want to do the right thing. If they know the reasons for BMPs, and information and help is available, then many people care about preserving Lake Tahoe enough that they willingly do their part.

- Increase advertising and public visibility through various media methods, and public presentations. Current and future grant proposals include a greater emphasis and funding for these efforts. Grants contain start dates based on funding and associated deliverables.
- Build stronger relationships with Region groups (e.g. realtors, chambers of commerce, contractors, engineers, consultants, public interest groups, media groups, and HOA's.)

**Targeted Accelerated Compliance-** Geographic targeting of certain properties up to now is based solely on the priority watershed system established in Chapter 25 of the Code, which is based on the overall health of the watershed. While that factor should still be considered, the ECT believes other critical criteria should be considered in allocating valuable resources to the efforts of BMP enforcement. The following bullet points should also be used as criteria before choosing which properties should be targeted. There are six categories of properties below. The ECT is not proposing to enforce on all properties that fit into the categories, but using these factors to choose which neighborhoods or individual properties warrant the most attention. The factors would be

discussed amongst the ECT and properties within EIP project areas would be discussed with the EI team. Resources would then be allocated accordingly.

- Private and public properties adjacent to upcoming public EIP Erosion Control Projects. The following four bullets represent a proposed approach, especially for larger project areas of multiple properties.
  - o RCDs would have a neighborhood informational meeting outlining the project and encouraging people to contact them for a site evaluation.
  - o TRPA to communicate with local politicians and jurisdictional employees to discuss strategy, information dissemination, and solutions to potential public dissent.
  - TRPA would send an informal informational letter to property owners with future compliance dates, and a reminder that formal enforcement is pending.
  - Send a formal enforcement letter and initiate Article IX procedures to those properties not in compliance.
- Properties adjacent to Lake Tahoe, other lakes, tributaries and stream environment zones (SEZs).
- Properties with obvious discharges.
- Properties within catchments identified in the TMDL as large contributors to fine particles (hotspots).
- Properties with existing violations or existing properties with expired open permits and retained securities.
- Properties in which TRPA receives verified complaints from other jurisdictions.

# Area-wide Drainage, Coordination with EIP Projects

- This is the concept, mainly useful for constrained neighborhoods, of creating area-wide drainage districts as one project area incorporating private and public parcels for the purpose of stormwater treatment. Some of this may me formalized in the Regional Plan Update with the idea of placing responsibility on the local jurisdictions in conformance with TMDL particle reduction plans. Current thought on this includes a possible fee paid to the jurisdiction as an alternative to infiltration of run-off onsite.
  - O Under the current Code, area-wide drainage is still an option and has been done in several areas around the region. Any group of property owners, public and private, may create their own project area for the purposes of stormwater treatment. These agreements can take many forms and currently are up to the project proponents.
  - Jurisdictions, RCDs, and TRPA may facilitate groups to help coordinate area-wide efforts.
  - Due to limited Agency resources, the EI Branch should determine which EIP projects will benefit most from this approach and allocate resources accordingly.
  - o If it makes sense, do it.

# **Incentives for BMP Installation**

- For example, the buoy permitting program requires installation of BMPs prior to issuance of BMP Certificate.
- BMPs are required as a condition for TRPA permits.
- Point of sale disclosure statement on status of property BMPs.

August 5, 2009

Dear Property Owner:

Everyone at Lake Tahoe has a role to play in protecting Lake Tahoe. As property owners, you and your neighbors are integral to reducing the impact of stormwater pollution. Runoff transports pollutants, such as fine sediment and nutrients to Lake Tahoe and its tributaries. In fact, the fine sediment in stormwater runoff has been identified as one of the principal factors contributing to Lake Tahoe's clarity loss.

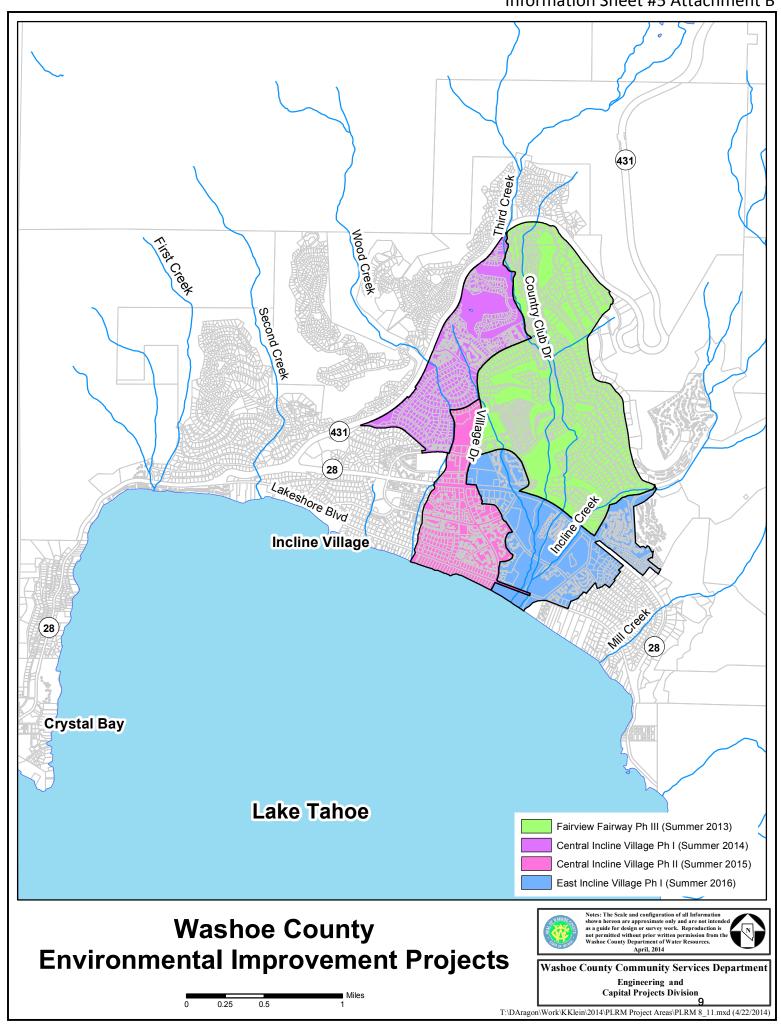
We hope you'll join the 11,000 other property owners at Lake Tahoe in participating in the Tahoe Regional Planning Agency's Best Management Practices (BMP) Retrofit Program. By doing your BMPs, you can help reverse the lake's clarity loss by installing erosion and stormwater control measures on your property. While we recognize these are tough economic times, and investing in property upgrades pose fiscal challenges, we hope by working together we can establish BMP implementation plans with all property owners along this stretch of Highway 50.

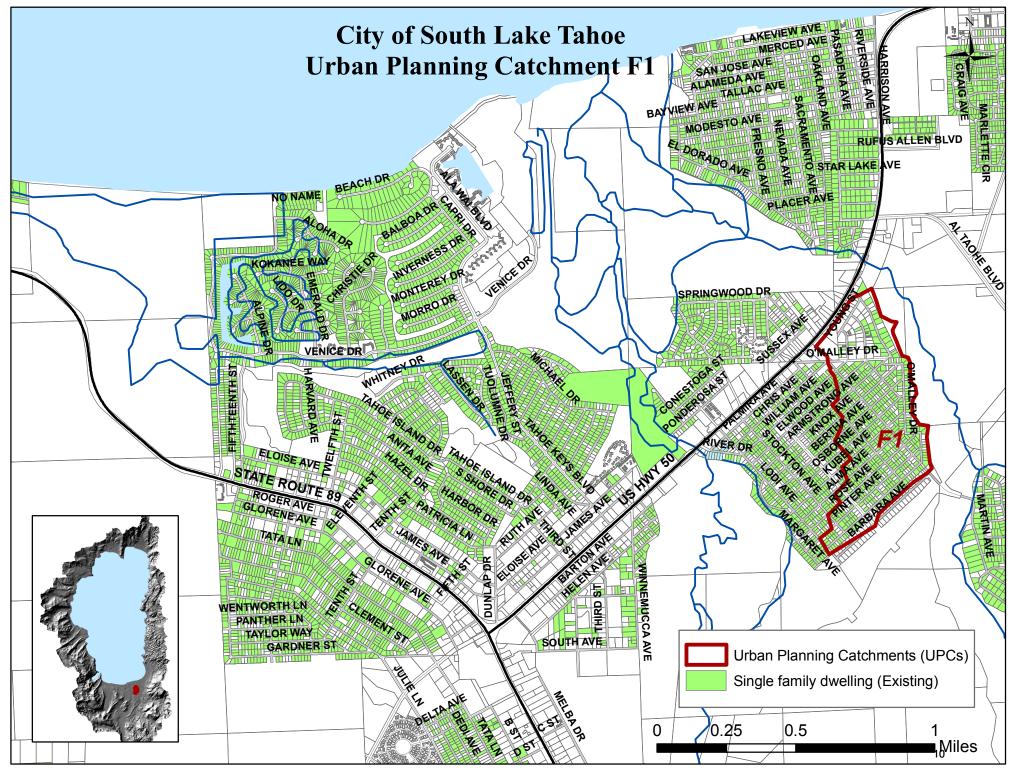
There will be an informational meeting on September 8, 2009, at 5:30 pm at the Tahoe Regional Planning Agency office at 128 Market Street on Kingsbury Grade to discuss private parcel BMPs. This meeting will provide property owners with an opportunity to ask questions about commercial scale BMPs as well as meet neighboring property owners to discuss project coordination. Coordination of multiple projects can often provide cost savings for property owners because of economies of scale.

BMP installation is a key component in protecting Lake Tahoe's famous clarity. TRPA appreciates your assistance and cooperation in solving non-point source pollution problems in the Lake Tahoe Region. If you have additional questions about BMP requirements please contact Jessica Schwing at 775-589-5318, or email <a href="mailto:jschwing@trpa.org">jschwing@trpa.org</a>.

Sincerely

Jessica Schwing
Associate Environmental Specialist II
TRPA Erosion Control Team





# **Coordinate with local Load Reduction Plans**

City of South Lake Tahoe

#### **Background**

The 2010 Lake Tahoe TMDL noted that fine sediment particles (FSP) are the largest contributor to clarity loss and pollution of Lake Tahoe, in addition to Nitrogen and Phosphorus. As shown in Figures 1 and 2, the TMDL Technical report provides scientific background data indicating that primary roads, multifamily residential, CICU (commercial, industrial, communications and utilities) and secondary road land uses contribute the highest concentrations of total suspended solids (TSS) and Dissolved Nitrogen found in urban runoff. Considering the total areas of land use for each category, all single family residential land use areas only contribute 10% of the total annual FSP loading, while roads contribute 60% (controlling for the limited total area of roads within the basin) as shown in Figure 3.

Based on the scientific data contained in the TMDL and TMDL Technical Report, the City of South Lake Tahoe developed a TMDL Baseline Load Estimate (September, 2011), defining the urban planning catchment (UPCs) within the City that contribute the highest FSP loads. Given the high runoff pollutant concentrations and loading from roadways, CICU and multi-family residential land uses, the City has prioritized these primary sources of pollution in determining the most cost effective approach to addressing urban runoff pollution and improving water quality in Lake Tahoe. Based on the scientific data in the TMDL and the City's Baseline Load Estimate Report (2011), the City has prioritized the most feasible and cost effective actions to reduce pollutant loads from urban runoff. The Strategy Report identified three primary load reduction strategies:

- 1. Road maintenance operations for water quality
  - a. Changing abrasives from volcanic cinders to Washoe sand (less prone to pulverization)
  - b. Targeted sanding only at intersections, steep slopes and high use areas
  - c. Enhanced street sweeping at targeted sanding locations
- 2. Public water quality improvement projects (WQIPs)
- 3. Private parcel BMPs implemented through retrofit or redevelopment

The City's TMDL Baseline Load Estimate also includes the catchment connectivity methodology, used to determine the connectivity factor for various UPCs.

The City's 2013 Pollutant Load Reduction Plan (PLRP) identifies the City's approach to meeting the TMDL load reduction requirements in the first five-year load reduction cycle (ending September 30, 2016). The PLRP identifies primary water quality improvement actions, status, and planned registration year (Table 2.7 – Catchment Registration Schedule). For the next five-year load reduction cycle, the City has developed a summary of projects and actions to further improve stormwater quality in the upcoming load reduction cycle (ending in 2021).<sup>3</sup>

<sup>&</sup>lt;sup>1</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

<sup>&</sup>lt;sup>2</sup> Lake Tahoe TMDL Technical Report, June 2010, Source Analysis, page 4-61:

http://www.waterboards.ca.gov/lahontan/water issues/programs/tmdl/lake tahoe/docs/techrpt.pdf

<sup>&</sup>lt;sup>3</sup> City of South Lake Tahoe Pollutant Load Reduction Strategy and Plan, Identification of Stormwater Improvement Opportunities (April 2012):

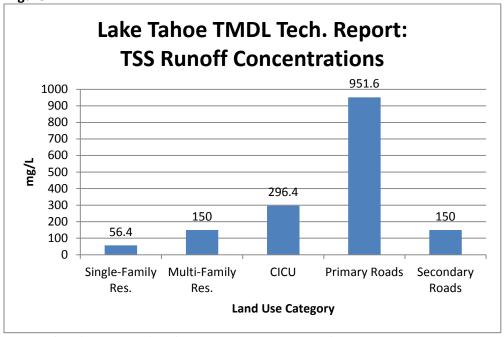
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#### **Existing Programs and Projects:**

- 1. Final Lake Tahoe Total Maximum Daily Load Report (November, 2010) and Lake Tahoe TMDL Technical Report (June 2010), developed by the California Regional Water Quality Control Board, Lahontan Region and Nevada Division of Environmental Protection.
- City of South Lake Tahoe, TMDL Baseline Pollutant Load Estimate (September, 2011), provides urban planning catchment (UPCs) identifies high load UPCs that are highly connected (drain directly to Lake Tahoe).<sup>4</sup>
- 3. Bijou Commercial Core WQIP BMP enforcement coordinated with TRPA in order to increase participation and compliance through a Community Facilities District (CFD) to fund ongoing operations and maintenance of the WQIP. Participation in the regional treatment system through the CFD enabled property owners constrained by high groundwater to gain BMP Certification through the CFD.
- 4. Local jurisdictions must ensure Stormwater Treatment Facilities and BMPs are maintained to receive TMDL credit for them, utilizing the BMP Rapid Assessment Methodology (BMP RAM) and Lake Clarity Crediting Program (LCCP).
- 5. Southern Nevada Public Lands Management Act (SNPLMA) funding purchased mobile BMP high efficiency sweepers, which facilitate local jurisdiction operations and maintenance. This funding program has since concluded.

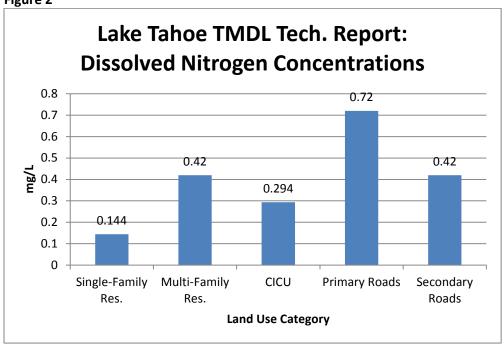
<sup>&</sup>lt;sup>4</sup>City of South Lake Tahoe:

Figure 1



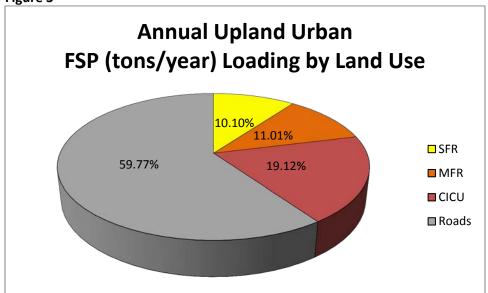
Source: Lake Tahoe TMDL Technical Report, June 2010, Source Analysis, page 4-61

Figure 2



Source: Lake Tahoe TMDL Technical Report, June 2010, Source Analysis, page 4-61

Figure 3



Source: Lake Tahoe TMDL Technical Report, June 2010, Source Analysis, page 4-77

