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LONG RANGE PLANNING

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To: El Dorado County Board of Supervisors

From: Brendan Ferry, Principal Planner

Subject: California Trash Policy

Executive Summary
The Community Development Services, Planning and Building Department, Long Range Planning (LRP), recommends the Board receive a presentation on the California Trash Policy and endorse staff's recommendation to select compliance Track 2 for the West Slope and compliance Track 2 for the Tahoe Basin to comply with that Policy.

The State Water Resources Control Board (SWRCB) adopted amendments to the Statewide Trash Policy in April 2015 that require the implementation of a consistent statewide approach for reducing environmental issues associated with trash. Subsequently, the Environmental Protection Agency (EPA) approved the amendments in January 2016. The SWRCB finalized its internal policy on these amendments and has now finalized the statewide Trash Policy. The provisions in the Final Trash Policy include the following six elements: 1) narrative water quality objective, 2) applicability, 3) prohibition of discharge, 4) implementation provisions, 5) time schedule, and 6) monitoring and reporting requirements.

On June 1, 2017 the SWRCB sent the County a 13383 Order (Attachment 2B) for the West Slope and the Lahontan Regional Water Quality Control Board (RWQCB) sent the County a 13383 Order (Attachment 2C) for the Lake Tahoe Basin requiring the County to select compliance Track 1 or Track 2 by September 1, 2017. An overview of the Trash Policy requirements and the compliance Tracks are included in this staff report and the attached presentation (Attachment 2D) along with the analysis on Track selection that lead to the staff recommendation.

Background and Discussion
Storm Water Program Overview
Storm water from urban runoff is one of the leading causes of pollution in creeks, rivers, and lakes. In fields and forests, most of the rain water that falls is absorbed by the soil where it can be taken up by plants and trees or enter groundwater. However, developed areas contain impermeable surfaces like rooftops, parking lots, and streets that cause rainwater and snowmelt to runoff, creating storm water that collects pollutants. Storm water that flows from those impermeable surfaces and into storm drains or other conveyance structures without first flowing

through best management practices (BMPs), such as grass lined swales or detention basins, goes untreated directly into our creeks, rivers, lakes, deltas and eventually, the ocean. That untreated storm water causes undue harm to those ecosystems. Storm water is a resource and is ultimately part of the hydrologic cycle, along with our potable water, so it is imperative to keep it as clean as possible.

Storm water pollution is controlled by the Federal Clean Water Act (CWA) amendments of 1987. The amendments authorized the U.S. Environmental Protection Agency (EPA) to expand the National Pollutant Discharge Elimination System (NPDES) Program in the CWA to cover storm water discharges (CWA Section 402). In California, under the authority of the Porter-Cologne Water Quality Control Act of 1969, the SWRCB and the nine RWQCBs beneath it, have the responsibility of managing NPDES Permits under the auspices of EPA. The NPDES Program is a permitting mechanism that requires the implementation of controls designed to prevent harmful pollutants from being washed by storm water runoff into local water bodies. Ultimately, the SWRCB has complete authority over State water rights and water quality policy.

El Dorado County is covered under two Regional Boards. The West Slope Phase II Municipal NPDES Permit is administered by the Central Valley RWQCB (Region Five). The Lake Tahoe Phase I Municipal NPDES Permit is administered by the Lahontan RWQCB (Region Six). The current West Slope Municipal NPDES Permit was adopted by the SWRCB on February 5, 2013. The Permit became effective on July 1, 2013 for a term of five years and focuses on the enhancement of surface water quality within high priority urbanized areas. The current Lake Tahoe Phase I Municipal NPDES Permit was adopted and took effect on March 9, 2017 for a term of five years and focuses on protecting and enhancing the waters of the Lake Tahoe Basin primarily by controlling fine sediment discharges from the County's jurisdiction.

Trash Amendments Adoption Schedule

The SWRCB adopted an Amendment to the Water Quality Control Plan for Ocean Waters of California to Control Trash and Part 1 Trash Provisions of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California. Together they were collectively termed as the "Trash Amendments" – and are now called the Trash Policy. The Trash Policy will eventually be incorporated into all NPDES Permitting programs including but not limited to Phase I and Phase II Municipal Permits, Construction General Permits (CGP), and Industrial General Permits (IGP).

The Draft Trash Amendments and Substitute Environmental Documentation (SED) were released for public review in June 2014. LRP submitted written comments on the Trash Amendments during this period to the SWRCB. On December 31, 2014 the SWRCB released a Notice of Revised Documents stating the proposed Final Trash Amendments were available online for review. On February 12, 2015 the SWRCB released a Notice of Public Meeting scheduled for April 7, 2015 to consider the adoption of the proposed Final Trash Amendments. LRP staff attended the meeting and provided oral comments on this date. Despite our and many other jurisdiction's attempts to delay or amend this policy, the SWRCB adopted amendments to the Statewide Trash Policy at this meeting in April 2015. Subsequently, the Office of Administrative Law approved the amendments in December 2015 and EPA approved them on January 12, 2016.

After this time, the SWRCB worked internally to determine how to roll out the Trash Policy requirements – with little involvement of their permittees. Finally, on June 1, 2017 the SWRCB sent the County a 13383 Order for the West Slope and the Lahontan RWQCB sent the County a 13383 Order for the Lake Tahoe Basin requiring us to select compliance Track 1 or Track 2 by September 1, 2017.

Official Trash Policy documents, public comments, and contact information can be accessed on the SWRCB's website:
http://www.waterboards.ca.gov/water_issues/programs/trash_control/

Unfunded Mandate
Staff has been in discussion with other municipalities on whether this new Trash Policy could be determined to be an unfunded mandate by the courts. If RWQCBs exercise discretion under state, rather than federal law to mandate certain requirements, those requirements can be determined to be unfunded mandates, and can be subject to reimbursement by the state. A ruling in August of 2016 by the California Supreme Court held that certain requirements of the 2001 Los Angeles County Municipal Permit could be considered unfunded mandates – specifically the requirements to install trash receptacles at transit stops and conduct inspections at certain industrial and commercial facilities. That case was sent back to the trial court for a final decision. This could help play into how the Trash Policy is implemented and paid for. County staff will keep abreast of this and will provide the Board any relevant updates.

Track Discussion
Based on the 13383 Orders received on June 1, 2017, the County is required to commit to one of two compliance Track options to comply with the Trash Policy. Track 1 generally includes the installation and operation and maintenance of full trash capture systems for priority land use (PLU) areas within our jurisdiction - which for Tahoe is the entire unincorporated area and for the West Slope is the 2010 census boundary area. The Trash Policy defines PLU areas as High Density Residential (10 units per acre), Industrial, Commercial, Mixed Urban, and Public Transportation Stations. A portion of the definition of a full trash capture system is "a treatment control (either a single device or a series of devices) that traps all particles that are 5 millimeters (mm) or greater". The 5 mm threshold would capture trash as small as cigarette butts. These devices are typically things like screens, baffle boxes, netting systems, hydrodynamic separators or mechanical units.

Track 2 includes the implementation of a combination of full trash capture systems only in high PLU areas, along with institutional controls, and/or other treatment controls to achieve full trash capture system equivalency. So, full capture devices could be installed where possible and then those are coupled with other trash reduction strategies, like enhanced street sweeping, litter abatement crews, clean up days, outreach campaigns and product bans. Track 2 requires more front end planning and back end monitoring and reporting. Specifically we would be required to conduct two baseline trash assessments, and to develop an implementation plan and a monitoring plan to assess and confirm the effectiveness of the selected controls and compliance with full trash capture system equivalency. Both Tracks require the County to conduct preliminary mapping and analysis of our PLU areas and associated storm drain system.

Timeline
The time schedule for achieving full compliance with the Trash Policy is ten years following the effective date of the first implementing NPDES permit or fifteen years after the effective date of the Trash Policy adoption – which is approximately December 2030. The Trash Policy requires the completion of interim milestones such as average trash load reductions of approximately ten percent (10%) per year. Also, any new development within a PLU area must be built to immediately comply with the Permittee's selected Track.

An overview of Compliance Tracks for the Amendments is provided in the table below:

	Track 1	Track 2
NPDES Storm Water Permit	MS4 Phase I and II IGP/CGP*	MS4 Phase I and II Caltrans IGP/CGP*
Plan of Implementation	Install, operate and maintain full capture systems in storm drains that capture runoff from one or more of the priority land uses/facility/site.	Implement a plan with a combination of full capture systems, multi-benefit projects, institutional controls, and/or other treatment controls to achieve full capture system equivalency.
Time Schedule	10 years from first implementing permit but no later than 15 years from the effective date of the Trash Amendments.**	10 years from first implementing permit but no later than 15 years from the effective date of the Trash Amendments.**
Monitoring and Reporting	Demonstrate installation, operation, and maintenance of full capture systems and provide mapped location and drainage area served by full capture systems.***	Develop and implement set of monitoring objectives that demonstrate effectiveness of the selected combination of controls and compliance with full capture system equivalency.***

* IGP/CGP permittees would first demonstrate inability to comply with the outright prohibition of discharge of trash.

** Where a permitting authority makes a determination that a specific land use or location generates a substantial amount of trash, the permitting authority has the discretion to determine a time schedule with a maximum of ten years. IGP/CGP permittees would demonstrate full compliance with deadlines contained in the first implementing permit.

*** No trash monitoring requirements for IGP/CGP, however, IGP/CGP permittees would be required to report trash controls.

Next Steps

The next steps pursuant to Water Code section 13383, as outlined in our Order from the SWRCB, on the West Slope are:

1. By September 1, 2017, submit electronically via SMARTS:
a. A letter to SWRCB identifying the permittee's selected compliance option, (Track 1 or Track 2) as defined in the Order; and
b. A preliminary jurisdictional map(s) identifying the following:
i. PLU areas discharging to the storm drain network; and
ii. The corresponding storm drain network that receives discharges from PLU areas.

2. Permittees Selecting Track 1: By December 1, 2018, submit electronically via SMARTS, an updated jurisdictional map(s) identifying the following:
i. All PLU areas discharging to the storm drain network;
ii. The corresponding storm drain network;
iii. Proposed locations of all certified Full Capture Systems and,
iv. Proposed equivalent alternative land uses, documentation demonstrating that the substitution of equivalent alternative land uses has been approved by the appropriate RWQCB Executive Officer, and corresponding storm drainage network, if applicable.

3. Permittees Selecting Track 2: By December 1, 2018, submit electronically via SMARTS, the following:
i. An updated jurisdictional map(s) identifying the following:
a) All PLU areas and selected locations and land uses, other than the PLU areas, discharging to the storm drain network;
b) The corresponding storm drain network; and
c) Proposed locations of all certified Full Capture Systems and where any combination of controls will be implemented that will achieve Full Capture System Equivalency;
d) Trash levels, using the methodology described in the attached recommended Visual Trash Assessment Approach or other equivalent trash assessment methodology, for all PLU areas, and for other selected locations or land uses within the MS4s jurisdiction if proposing to implement any combination of controls in locations other than PLU areas; and
ii. An Implementation Plan that includes the following:
a) The rationale for how the selected combination of controls will achieve Full Capture System Equivalency;
b) The rationale for how Full Capture System Equivalency will be demonstrated;
c) If using a methodology other than the recommended Visual Trash Assessment Approach to determine trash levels, a description of the methodology used and rationale of how the alternative methodology is equivalent to the recommended Visual Trash Assessment Approach; and
d) If proposing to select locations or land uses other than PLU areas, a rationale demonstrating that the alternative land uses generate trash at rates that are equivalent to or greater than the PLU areas.

The next steps pursuant to Water Code section 13383, as outlined in our Order from the Lahontan RWQCB, in the Tahoe Basin are:

1. By September 1, 2017 - Submit a letter to Lahontan RWQCB identifying the permittee's selected compliance option, (Track 1 or Track 2) as defined in the Order;

2. Permittees Selecting Track 1: By December 1, 2018, submit an updated jurisdictional map(s) identifying the following:
i. All PLU areas discharging to the MS4 system(s);
ii. The corresponding MS4 network;
iii. Proposed locations of all certified Full Capture Systems.

3. Permittees Selecting Track 2: By December 1, 2018, submit an Implementation Plan that includes:
a) Proposed locations where any combination of controls will be implemented that will achieve Full Capture System Equivalency;
b) The rationale for how the selected combination of controls will achieve Full Capture System Equivalency; and
c) A description and rationale for how Full Capture System Equivalency will be demonstrated.

Lake Tahoe vs. the West Slope
The two slopes of El Dorado County are very different for many obvious reasons including elevation, topography, urbanization, size, environmental awareness, etc. Also, the County is in a different position with its storm water management program implementation and its infrastructure and asset management in Lake Tahoe than it is on the West Slope. The County has been working on storm water and pollutant control in Lake Tahoe since 1992, because the lake is an Outstanding National Resource Water, and have constructed significant storm water treatment infrastructure since that time to aid in its protection. We have also conducted extensive mapping work in Lake Tahoe and have thorough knowledge of our assets and storm drain network. Finally, we have been able to develop a closer and more open relationship with our regulator in Lake Tahoe, which allows us to work together more closely to meet our mutual goals and objectives. Therefore, the Tahoe Basin is better positioned to comply with this 13383 Order.

On the West Slope, we have been working on storm water management since 2003. However, while complying with our MS4 Permit, the County's program is not at the same level as our program in Lake Tahoe. For instance, we have not mapped all of our assets or infrastructure (the County was not required to have our storm drain system mapped prior to the 13383 Order), we have not constructed significant regional storm water treatment facilities, and there is not the same level of public awareness on stewardship or water quality protection on the West Slope (TRPA presence/Tahoe water quality requirements). Also, we own and operate infrastructure in a much larger geographic area on the West Slope with more intensive development that will meet the definition of a PLU than in Lake Tahoe. As a result we will have more work to do and more cost to incur on the West Slope to comply with the 13383 Order.

Existing County Programs Aimed at Trash Abatement
The County is already doing many things that work towards compliance with the Trash Policy. An abbreviated list of these activities is as follows:

- County Maintenance crews conduct an extensive street sweeping program.

- The County runs a litter abatement crew. This is currently down from four employees historically to two employees currently. Perhaps there is room for re-expansion?
- The County recently purchased heavy duty bear resistant trash receptacles with recycling grant funds tied to beverage container collection. We could likely use funds like these for installing similar containers at transit stops and other high priority public use areas.
- The Material Recovery Facility recently implemented additional fees for loads transferred to the facility without being properly tied down. This will prevent littering during transport.
- The County has an Adopt a Roadway Program, which received more support and activity in the past. Perhaps this Program could be reinvigorated?
- There is an ongoing conversion of cans to garbage carts equipped with lids program managed by the Environmental Management Department.
- There is potential to expand mandatory trash collection areas based on public and BOS approval.

Cost Estimate and Analysis Between Tracks
Costs are very difficult to estimate to comply with the Trash policy; however a fiscal analysis for implementing the Trash Policy was prepared by the SWRCB and is provided in their SED. Their projected cost to implement Track 1 is $10.67 per capita per year at year 10 for Phase I Permittees (Tahoe) and $7.91 per capita per year at year 10 for Phase II Permittees (West Slope). Given these assumptions, which are not verified nor endorsed in anyway, this could cost the County approximately $320,100/year in Lake Tahoe and $564,560/year on the West Slope. IGP compliance costs are anticipated to increase by $3,670 per site and no expected increase is anticipated for CGP projects.

Their projected cost to implement Track 2 of the Trash Amendments for Municipal Permittees is $4.09 per capita per year at year 10 for Phase I Permittees (Tahoe) and $7.77 per capita per year at year 10 for Phase II Permittees (West Slope). Given these assumptions, which again are not verified nor endorsed in anyway, this could cost the County approximately $122,700/year in Lake Tahoe and $554,568/year on the West Slope. IGP compliance costs are still anticipated to increase by $3,670 per site and no expected increase is anticipated for CGP projects.

A very simplistic analysis suggests that Track 2 has more upfront costs for planning work and more monitoring costs, but implementation costs are less. This is because significantly less full capture devices are installed and existing programs are leveraged or expanded. Track 1 has less upfront costs and no monitoring costs, but has more significant capital and maintenance costs. Track 2 is most likely less costly overtime for a County like ours, however there may be less compliance certainty with Track 2.

To further expand on this, a Track 1 single screening device or insert in a drop inlet costs around $1,500. A netting system at the end of a pipe network can cost around $300k - $450k installed and large hydrodynamic systems at key junction locations can cost around $450k - $700k installed. To comply with this Policy, the County would most likely need to install many of these types of devices. These pieces of infrastructure must be inspected and maintained several times a year, which can cost anywhere from $50 to $3,000 per occurrence. There are also

disposal fees. And finally, there will be replacement costs once these pieces of infrastructure reach their intended lifespan.

For Track 2, an implementation plan could cost $100k or more. A monitoring plan could cost anywhere from $25k-$50k. Also, more staff time is needed to conduct the two required baseline trash assessments. Estimating cost to expand existing programs like street sweeping and additional litter abatement crews, along with adding new ones (like clean up days, product bans, stronger partnerships with waste haulers and more education and outreach) is difficult to estimate. Combinations of these various approaches will no doubt cost the County hundreds of thousands of dollars over the compliance timeframe. Also, it is possible that some full capture devices may need to be installed in key PLU areas under Track 2.

Regardless of cost, one very key determinate to support staff's recommendation is that while we conducted our West Slope field work, we realized that from an infrastructure standpoint, our County is not ideally setup to be able to implement full trash capture devices. This is because our priority land uses are too spread out and we do not have extensive storm drain networks throughout them that support having new full capture device installed.

A breakdown of Pros and Cons between Track 1 and Track 2 is illustrated in the Table below.

Track 1 Pros:	**Track 1 Cons:**
• Compliance certainty	• Capital costs
• Can potentially implement through existing capital programs	• Maintenance considerations
• No monitoring required	• Construction and permitting
• Defined level of effort	• Feasibility
Track 2 Pros:	**Track 2 Cons:**
• More options (structural and non-structural)	• Implementation Plan – Cost
• Not limited to PLU areas	• Compliance bar is higher – must demonstrate Full Capture System Equivalency
• Leverage existing programs	• Monitoring can be challenging and expensive
• May be less maintenance intensive	• More reporting and management of program
• May be more cost effective	• Social/behavioral barriers

As active permittees of the CGP, IGP, and Phase I and II Municipal Permits, staff anticipates the Trash Policy will present many physical and financial challenges for the County. Both Track 1 and 2 options may substantially increase current program implementation costs among many County Divisions and could potentially divert resources, at the Boards discretion, from other core County programs and services in order to remain in compliance. Additionally, flooding,

snow and other traffic hazards for the general public and maintenance staff present significant safety concerns.

Because the Water Boards did not provide us ample time to conduct a thorough analysis between Tracks - in the County's submittals to the Water Boards, we will state very clearly that we reserve the right to modify our Track selections once a more detailed analysis has been conducted. This has been vetted with other key stakeholders and permittees and is permissible.

Finally, additional work needs to be done on mapping out funding options that the County can take advantage of to be able to comply with this Trash Policy. Due to Prop 218 in California, passing a new tax is challenging because of the 2/3 vote hurdle. Other options include parcel fees, Franchise Fee adjustments, storm water utility, SB1 money, Tribal Funds, General Fund, etc. Staff will continue to explore these and other options to help the County be as successful as possible with this policy.

Recommendation
The Community Develop Services, Planning and Building Department, Long Range Planning is recommending the Board select Track 2 for the West Slope and Track 2 for the Lake Tahoe Basin to comply with the Trash Policy.

Reason for Recommendation
The recommendation is provided in order to allow the County to comply with the 13383 Orders in the most cost effective and efficient way.

Next Steps
By September 1, 2017 and December 1, 2018, staff will provide the SWRCB and the Lahontan RWQCB the required submittals discussed above.

Alternatives
One alternative is for the County to select different tracks. The County could select Track 1 in Lake Tahoe and Track 1 on the West Slope. Another alternative is noncompliance. The County could choose to wait to see if this Policy gets challenged in court by another permittee. However, there are mandatory minimum penalties that are possible for noncompliance. Per Section 13385 of the CA Water Code, those penalties could go up to $10,000 per day of the violation plus an additional liability of $10 per gallon for each gallon over 1,000 gallons where there is a discharge that is not cleaned up.

Clerk of the Board Follow Up Actions
None

Contact
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