



MEMORANDUM

TO: Ocean Protection Council
FROM: Jonathon Bishop
DATE: November 29, 2012
RE: State Water Resources Control Board's Proposed Trash Policy

SUMMARY:

The State Water Resources Control Board's staff is developing a Statewide Policy for Trash Control in Waters of the State, known as the "Trash Policy". This policy defined trash as all improperly discarded solid material from any production, manufacturing, or processing operation including, but not limited to, product packaging or containers constructed of steel, aluminum, glass, paper, plastic, or other synthetic or natural materials. In addition it identifies trash as a separate pollutant and establishes methods to control trash pollution in waterways, statewide. Most marine debris originates from land-based trash, so this policy will significantly reduce the amount of trash in the ocean.

BACKGROUND:

In this document, "trash" primarily refers to litter but also includes the terms "floating debris," "floatable waste," and "settleable waste." Plastics are one of the most abundant types of trash. Other significant categories include cigarette butts, wood, cardboard, and metal.

There are three primary transport mechanisms for trash into the state's water bodies:

- Storm drains – trash deposited throughout the watershed is transported during and after rain events to water bodies via storm drains.
- Wind blowing trash into water bodies.
- Direct disposal (dumping) of trash into water bodies.

Trash adversely impacts the states waters; it affects the health of both humans and aquatic life. Some trash (e.g., diapers, medical and household waste, and chemicals) can be a source of bacteria, viruses, and toxins that can affect human and aquatic life. Trash in water bodies can threaten public health when water is used for recreational purposes. Large trash items such as containers or tires can result in standing water that supports mosquitoes and mosquito borne diseases such as encephalitis and West Nile virus.

Trash in water bodies also threatens the aquatic ecosystem and damages habitat. Aquatic life and wildlife living in rivers, riparian areas, estuaries and the ocean can be harmed by ingesting plastic particles, which can lead to wildlife and aquatic life feeling "satiated," when in reality they have eaten nothing of nutritional value. Trash that settles to the bottom of a river, lake, or

the ocean can harm bottom-feeding aquatic life, contribute to sediment contamination, and smother river, lake, and ocean bottom habitat. Small and large floatable trash can inhibit the growth of aquatic vegetation decreasing spawning areas. Wildlife living in rivers, riparian areas, estuaries, and the ocean can become entangled in trash. Mammals such as dolphins and seals, and reptiles such as turtles, can become entrapped in trash and drown. Trash can also impede the ability of fish to move water through gills, choking off the oxygen supply.

Trash is unsightly. Trash ends up on beaches or collects in “trash hot spots,” repelling visitors and degrading lake, riverine, and coastal waters aesthetics. Except for large items such as shopping carts and tires, trash that settles to the bottom of the water body is not always obvious to the eye. Trash may eventually end up on the beaches or in the open ocean, repelling visitors away from beaches and degrading lake, riverine and coastal waters.

Plastic trash, including plastic bag trash, is a nuisance and also poses a threat to aquatic life. Plastic does not degrade; rather, it breaks down into very small pieces. Small preproduction plastic pellets as well as postproduction discards float at various depths in the ocean and affect organisms at all levels of the food chain.

EXISTING REGULATORY STRUCTURE:

The State Water Board and Regional Water Quality Control Boards (Regional Water Boards) are delegated the responsibility for implementing California’s Porter-Cologne Water Quality Control Act (Porter-Cologne Act) and the federal Clean Water Act (CWA). Sections 13140 and 13240 of the Porter-Cologne Water Quality Control Act authorize the State Water Board to adopt statewide water quality control policies and plans.

In addition, section 13240 requires each Regional Board to formulate and adopt water quality control plans, known as Basin Plans, for all areas within the Region. Each Basin Plan and statewide plan contains water quality standards, which consist of beneficial uses, water quality objectives to protect those beneficial uses, a program of implementation for achieving the water quality, and an anti-degradation policy. Currently, the Regional Water Board Basin Plans contain narrative water quality objectives that prohibit the presence of floatable, solid, suspended, and settleable materials in amounts that adversely affect beneficial uses, although exact wording is not the same among the Plans.

Beneficial uses of water impacted by trash include: contact recreation (e.g., swimming and wading), non-contact recreation (e.g., fishing and aesthetics), warm fresh water habitat, wildlife habitat, estuarine habitat, marine habitat, rare, threatened or endangered species, migration of aquatic organisms, spawning, reproduction and early development of fish, commercial and sport fishing, wetland habitat and cold freshwater habitat. The presence of trash in California waters can impair these beneficial uses and violate water quality objectives.

Section 303(d) of the CWA requires states to identify certain waters within their borders that are not attaining water quality standards and to establish the total maximum daily load (TMDL) for certain pollutants impairing those waters. In California, various water bodies are included on the Section 303(d) List because they are impaired for trash. To date, ten TMDLs have been developed and approved for these trash-impaired water bodies, nine of which are within the Los

Angeles Regional Water Board's jurisdiction. The remaining approved TMDL is in San Diego and covers trash deposition resulting from illegal dumping to open drains in Mexico, which lead directly across the border to California via the New River. TMDLs and associated implementation plans adopted prior to the establishment of a Trash Policy could continue unchanged and may not be subject to the new Trash Policy.

PROPOSED TRASH POLICY

The proposed policy will take the form of amendments to the statewide water quality controls plans, including the Ocean Plan, Enclosed Bays and Estuaries Plan, and Inland Surface Water Plan. The proposed policy will identify trash as a separate pollutant and provide a narrative water quality objective, an implementation program to control trash pollution in waterways, and appropriate discharge prohibitions.

One goal of the proposed Trash Policy is to ensure that beneficial uses are protected. The intention of the policy is to control the discharge of trash in all regions of the state without having to wait for the lengthy 303(d) listing process and consequent development of TMDLs. The State Board is hoping that the Trash Policy will be ready for adoption in the fall of 2013.