

EXECUTIVE OFFICER SUMMARY REPORT
July 1, 2009

- ITEM: 9
- SUBJECT: Information Item: Algalita Marine Research Foundation – Information item on reducing marine debris (*Bruce Posthumus*)
- PURPOSE: Regional Board member Rayfield requested this report to provide information to the Regional Board about efforts to reduce marine debris. This is not an action item but the Regional Board may wish to provide direction to staff.
- PUBLIC NOTICE: Information about this item was provided in the agenda mailing and posted on-line.
- DISCUSSION: Debris in the marine environment includes wastes that are intentionally discarded as well as materials and products that are inadvertently lost. An estimated 6.4 million tons of litter enter the oceans of the world annually. Although significant amounts and types of marine debris originate from marine sources (such as overboard disposal of vessel wastes, lost vessel cargo, and lost fishing gear), it is estimated that nearly 80% of anthropogenic marine debris originates from land-based sources. Consequently, such debris moves through and can adversely affect watersheds and inland waters as well as coastal and open ocean waters. An estimated 60% to 80% of marine debris consists of plastic. In addition to being aesthetically undesirable, plastic debris damages habitat and has direct adverse effects on marine life, including endangered and threatened species of marine mammals, sea birds, and sea turtles (e.g., as a result of entanglement and ingestion). Because of the durability of plastics, the effects of plastic debris are long lasting and can occur far from where the debris first enters the environment.
- Although various legal requirements govern disposal of trash on land and at sea, the movement of marine debris across jurisdictional boundaries and the difficulty of identifying the source(s) of any particular assortment of marine debris complicates both creation of effective legal requirements and enforcement of legal requirements.

The Regional Board Basin Plan includes several prohibitions that make it illegal to discharge trash, litter, and other anthropogenic debris to waters (including marine waters) in the San Diego region. These prohibitions are enforceable whether or not they are included in waste discharge requirements for a particular discharge or category of discharges. Various waste discharge requirements (WDR) adopted by Regional Board, notably WDR for discharges from municipal separate storm sewer systems (MS4s) also apply (explicitly or implicitly) to anthropogenic debris, among other wastes. WDR adopted by the State Board for discharges of runoff from industrial facilities and construction sites also apply to anthropogenic debris.

The problem of marine debris has been highlighted by a number of entities. For example, the U.S. Environmental Protection Agency (USEPA) has a marine debris fact sheet (see Supporting Document No. 1) and website (see <http://www.epa.gov/owow/oceans/debris/>). In the water quality section of its 2004 final report, the U.S. Commission on Ocean Policy devoted a chapter to the topic of “Reducing Marine Debris” (see Supporting Document No. 2). The National Oceanic and Atmospheric Administration has a marine debris program (see <http://marinedebris.noaa.gov/>). The California Coastal Commission has a marine debris website (see <http://www.coastal.ca.gov/publiced/marinedebris.html>).

The Algalita Marine Research Foundation (AMRF) is a non-profit 501(c)(3) organization that works to protect the marine environment and watersheds through research, education, and restoration. Much of the work of AMRF, including its State Board-funded “Plastic Debris, Rivers to Sea Project” (see Supporting Document No. 3) has focused on marine debris. AMRF is based in Long Beach, California.

KEY ISSUES: N/A

LEGAL CONCERNS: N/A

SUPPORTING DOCUMENTS

1. USEPA marine debris fact sheet
2. U.S. Commission on Ocean Policy final report: Chapter 18: “Reducing Marine Debris”
3. AMRF brochure: “Plastic Debris, Rivers to Sea Project”

RECOMMENDATION(S): None. This is not an action item.