

## **ATTACHMENT ONE**

### **SUMMARY OF PROPOSED BASIN PLAN AMENDMENT**

#### **Total Maximum Daily Loads (TMDLs) for Toxicity and Pesticides in the Santa Maria Watershed**

##### **Background Information:**

Section 303(d) of the Federal Clean Water Act requires every state to evaluate the water quality of its waters, and maintain a list of waters that are considered “impaired”, which means to exceed water quality standards. For each water on the Central Coast’s “303(d) Impaired Waters List,” the California Central Coast Water Board (Water Board) must also develop Total Maximum Daily Loads (TMDLs) to restore clean water.

TMDLs are plans that determine the sources of water quality impairments in the watershed and the TMDLs of pollutants that a water can receive and still achieve water quality standards. To ensure water quality to standards are met, pollutant loads are allocated to sources such that the sum of the allocations meet water quality standards. The TMDL also includes an implementation plan that describes activities and measures to address water quality problems and a water quality monitoring plan. The TMDL process includes stakeholder involvement and input. TMDLs are incorporated into the Central Coast Basin Plan, which is the legal document that describes how water quality is managed in the Central Coast Region. Once adopted the TMDL would be incorporated into Water Board regulatory programs for implementation.

##### **TMDL Project Area**

The geographic scope of the Santa Maria Watershed TMDL encompasses the 1,856 square mile Santa Maria Hydrologic Unit (HU) located along the border of northern Santa Barbara and southern San Luis Obispo Counties and with-in the boarder of northwestern Ventura County. The Santa Maria HU is located in the jurisdiction of the Central Coast Regional Water Quality Control Board. In the TMDL project area there are three major subwatersheds: the Sisquoc watershed and the Cuyama and the Santa Maria Valleys. The Sisquoc and Cuyama areas are primarily undeveloped as are the foothills of the Santa Maria Valley. The polluted water bodies are located in the flat valley floor of the Santa Maria Valley, which has urban development and extensive irrigated agriculture lands. The Santa Maria Valley is a coastal valley with a strong marine influence that moderates the climate making it a prime area for cool season vegetable and berry production.

##### **Impairments Addressed**

This TMDL addresses toxicity and pesticide impairments that are based on standards in the Basin Plan. The Basin Plan has the following narrative general objectives for toxicity and for pesticides, which apply to all surface waters:

General Objective for Toxicity:

*All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. Compliance with the objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, toxicity bioassays of appropriate duration, or other appropriate methods.*

#### General Objective for Pesticides:

*No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.*

#### **Pollutants Addressed**

The specific pollutants addressed in the TMDL are pesticides. Several water quality studies have associated toxicity impairments with detections of currently applied pesticides. The currently applied pesticides are in two general pesticide classes; one is organophosphate pesticide (diazinon and chlorpyrifos) and the other is synthetic pyrethroids.

In addition to addressing currently applied pesticides, the TMDL addresses surface water impairment from legacy organochlorine pesticides (e.g., DDT, DDE, toxaphene). Legacy pesticides are persistent and bioaccumulate in the environment they were present in water and sediment and in and were detected in fish tissue samples.

#### **Proposed Basin Plan Amendment**

Staff is proposing these total maximum daily loads and allocations because these beneficial uses are not being supported due to violations of the aforementioned water quality objectives. Accordingly, this TMDL project will recommend Central Coast Water Board and State Water Board approve a basin plan amendment to establish and implement Total Maximum Daily Loads for toxicity and pesticides in the Santa Maria watershed.