STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION

STAFF REPORT FOR REGULAR MEETING OF DECEMBER 10, 2009
Prepared November 9, 2009

ITEM NUMBER: 13

SUBJECT: TMDL Status Report

DISCUSSION

TMDL Program staff is working on thirteen projects during the 2009-2010 fiscal year. Of the thirteen projects:

- Four are TMDL projects in development that have not been approved by the Regional Board;
- Five are TMDL projects that have been approved by the Regional Board and are pending State Board approval;
- Three projects are implementation projects implementing approved TMDLs, and;
- One project is the continuing effort to update the Clean Water Act section 303(d) list.

Of the four TMDL projects in development, staff anticipates bringing two before the Regional Board for consideration this fiscal year; these two projects are the Salinas River Pathogen TMDL, and the Salinas River Pesticide TMDL.

One of the other TMDL projects in development is a Watershed TMDL for the Santa Maria Watershed. The Watershed approach to TMDL development is a novel approach where all the impairments in the watershed are addressed in the same TMDL project, whether the pollutants causing impairment are related or not. In the case of the Santa Maria project, staff is simultaneously developing TMDLs for nutrients, bacteria, pesticides, and salts, for a total of 89 pollutant-waterbody combinations addressed in a single project. To this effort, staff is developing analysis in pollutant groups, e.g. a nutrient grouping, a pesticide grouping, etc. Staff will draft a technical TMDL for each grouping before developing a Master Implementation Plan. The Master Implementation Plan will aim to identify economies of scale of the implementation activities to address the various listings. For example, a single management practice may not only address impairments related to nutrients, but might also address temperature, pH, or pesticide-related impairments as well; one of the benefits of the Watershed TMDL approach is the implementation of such strategies.

The 2008-2012 Water Board Strategic Plan calls on the TMDL program to achieve economies of scale in TMDL development and implementation; the Master Implementation Plan is an example identified in the Strategic Plan. The Watershed TMDL strategy is another example of how the TMDL program can use staff time, as well as stakeholder time, more efficiently.

TMDL program staff is considering other opportunities for time-efficiency. For example, federal approval of TMDLs lies with USEPA and often occurs after Regional Board, State Board, and Office of Administrative Law approvals of TMDL basin plan amendments. This approval sequence can lead to inefficiency in TMDL development and implementation. Earlier USEPA approval of the technical components of TMDLs, which we refer to as staff-developed, technical TMDLs, could have several advantages, including:

- Potentially increasing the rate of TMDLs submitted to USEPA for approval. Both USEPA and the State Board are seeking innovation to increase the approval and implementation rate of TMDLs. The Water Board's Strategic Plan asks us to "Implement a statewide strategy to efficiently prepare, adopt, and implement TMDLs, which result in water bodies meeting water quality standards, and adopt and begin implementation of TMDLs for all 2006-listed water bodies by 2019." The Strategic Plan is asking us to adopt and implement all 303(d) listed waterbodies within thirteen years of the listing; to accomplish this we must increase the rate of TMDL approval and implementation.

- Reducing the potential for USEPA rejection of the TMDL on technical grounds. In some cases, USEPA has rejected state-approved TMDLs, resulting in the need for more resources to be invested in a lengthy re-approval process. USEPA approval of technical TMDLs developed by TMDL program staff could alleviate this inefficiency.

- Improving the potential for earlier implementation of measures to attain existing water quality objectives, as interpreted in the technical TMDL. For example, USEPA approval of staff's interpretations of narrative objectives gives added credence of those interpretations and the impetus for moving forward with implementation measures to achieve those narrative objectives.

TMDL program staff will request USEPA approval of technical TMDLs developed for the pollutant groupings of the Santa Maria Watershed TMDL project, as discussed above. Staff will consider requesting USEPA approval of other technical TMDLs as they are developed.

TMDL program staff is also assisting in efforts to achieve the Central Coast Region's Vision and Measurable Goals by helping develop parameters that define healthy aquatic habitat, and are researching administrative tools for protecting and enhancing aquatic habitat-related beneficial uses. Staff will use the results of these efforts in TMDL development, as well as across other programs; TMDL staff is assisting in the agricultural order renewal effort.

The Summary of TMDLs table below identifies the TMDLs that are approved or being developed. Staff has provided a brief description regarding the status of implementation for each approved TMDL.

ATTACHMENT

1. Summary of TMDLs

Summary of TMDLs

Project Name (Final approval date)	Pollutants considered	Waterbodies Included	Status
TMDLS WITH FINAL APPROVAL			
San Lorenzo River Watershed (1/2003)	Nitrate	San Lorenzo River, Carbonera Cr. Branciforte Cr., Shingle Mill Cr.	General decreasing trend of annual nitrate concentration, but summer and fall concentrations remain the same. Episodic nitrate concentration increases during low-flows in recent years.
San Lorenzo River; including Carbonera Creek, Lompico Creek, and Shingle Mill Creek) (12/18/2003)	Sediment	San Lorenzo River, Carbonera, Lompico, and Shingle Mill Creeks	Staff drafted progress drafted in 2007; implementing parties making progress by implementing required actions. Staff contracted data collection and assessment work. Contractor delivering report in December 2010. Staff will follow with TMDL progress report.
Morro Bay; including Chorro Creek, Los Osos Creek, and the Morro Bay Estuary (1/20/2004)	Sediment	Morro Bay, Los Osos, Chorro, Dairy, Pennington, San Luisito, San Bernardo, and Warden Creeks.	Many implementation projects implemented in the watershed. Monitoring efforts aimed at characterizing sediment loading are in place; it will take years of varying rain years and events to assess trend. Staff anticipates drafting progress report in fiscal year 2010-2011.
Clear Creek and Hernandez Reservoir (6/21/2004)	Total Mercury	Hernandez Reservoir, Clear Creek	Potential success story. Annual reports submitted by responsible party indicate several quarters of achieving the TMDL target. Staff developing a TMDL progress report this fiscal year.
Morro Bay and	Fecal coliform	Morro Bay, Chorro, Los Osos,	Staff drafted a progress report in 2007;

Project Name (Final approval date)	Pollutants considered	Waterbodies Included	Status
Chorro and Los Osos Creeks (11/20/2004)		Pennington, San Bernardo, San Luisito, Walters, and Warden Creeks	no changes in bacteria levels at that time. Next progress report will be in 2010. BMPs continue in the watershed. Bacteria levels reduced following BMPs in San Luisito subwatershed; sampling continuing to assess whether reductions are permanent. Exceedances of TMDL targets protecting aquaculture persist in the Bay.
Dairy Creek (12/03/2004)	Dissolved Oxygen	Dairy Creek	Exceendances of TMDL target persists. Implementation projects to address TMDL implemented in watershed.
Los Osos Creek, Warden Creek, and Warden Lake Wetland (3/1/2005)	Nitrate	Warden Creek	Staff drafted progress report in 2008-2009. Results indicate TMDL is not on path to being achieved. Exceedances of the TMDL target persist, especially downstream of agricultural land uses. Staff is working with the Ag Program to address the problem.
San Luis Obispo Creek (9/23/2005)	Fecal Coliform	San Luis Obispo, Stenner, and Brizziolari Creeks	Exceedances of TMDL targets persist in downtown area. The City of San Luis Obispo has concentrated efforts on eliminating human sources; animal sources likely persist. Implementation continuing.
Pajaro River and Llagas Creek (10/13/2006)	Nitrate	Pajaro River Llagas Creek	Exceedances of TMDL targets persist. Implementation continues.
San Luis Obispo Creek (1/10/2007)	Nitrate	San Luis Obispo Creek Prefumo Creek	Exceedances of the TMDL target persist. City of San Luis Obispo researching potential removal of

Project Name (Final approval date)	Pollutants considered	Waterbodies Included	Status
			beneficial use with associated nitrate target. Results show a reduction of nitrate loading from agricultural sources in some areas.
Pajaro River; including Llagas Creek, Rider Creek, and San Benito River (5/3/2007)	Sediment	Pajaro River, San Benito River, Tres Pinos, Llaga, Uvas, Corralitos, and Rider Creeks	Exceedances of TMDL targets persist. Staff devoting significant resources to identification of non-point sources in the project area. Staff will develop progress report at end of this fiscal year.
Chorro Creek (7/19/2007)	Nitrate Dissolved oxygen Sodium TDS Temperature Orthophosphorus	Chorro Creek	Success story; dissolved oxygen TMDL target achieved. CMC upgraded WWTP to address nitrate loading. Staff anticipates drafting progress report in 2010.
Watsonville Slough (7/19/2007)	Fecal Coliform	Watsonville Sl., Struve Sl., Harkins Sl., Gallighan Sl., Hanson Sl.	Exceedances of TMDL target persist. TMDL implementation requirements recently written into and approved in MS4 permits.
WATER BOARD APPROVED TMDLS (DO NOT YET HAVE FINAL APPROVAL)			
San in San Lorenzo River Estuary Watershed (Water Board approved May 8, 2009)	Fecal Coliform	San Lorenzo River Estuary, San Lorenzo River, Branciforte, Camp Evers, Carbonera, and Lompico Creeks	Pending State Board approval. Staff is incorporating TMDL requirements into stormwater permits.
Soquel Lagoon Watershed (Water Board approved May 8,	Fecal Coliform	Soquel Lagoon, Soquel Creek, Noble Gulch	Pending State Board approval. Staff is incorporating TMDL requirements into stormwater permits.

Project Name (Final approval date)	Pollutants considered	Waterbodies Included	Status
2009)			
Aptos Creek, Valencia Creek, and Trout Gulch (Water Board approved May 8, 2009)	Fecal Coliform	Aptos Creek, Valencia Creek, Trout Gulch	Pending State Board approval. Staff is incorporating TMDL requirements into stormwater permits.
Pajaro River Watershed (Water Board approved March 20, 2009)	Fecal Coliform	Pajaro River, San Benito River, Tequesquita Slough, Llagas, San Juan, Carnadero/Uvas, Bird, Pescadero, Tres Pinos, Furlong (Jones), Santa Ana, and Pachecho Creeks	Pending State Board approval. Staff is incorporating TMDL requirements into stormwater permits.
Corralitos and Salsipuedes Creeks (Water Board approved March 20, 2009)	Fecal Coliform.	Corralitos Creek, Salsipuedes Creek	Pending State Board approval. Staff is incorporating TMDL requirements into stormwater permits.
TMDLs IN DEVELOPMENT			
Santa Maria River Watershed TMDL	Multiple pollutants: nutrients (nitrate, un-ionized ammonia, dissolved oxygen, temperature, etc), fecal coliform, pesticides (several polluants), toxicity, turbidity, salts (several pollutants)	15 waterbodies included in the project	TMDL program staff coordinating with other programs during TMDL development to inform and implement ongoing efforts.
Lower Salinas River Watershed	Chlorpyrifos, diazinon	10 waterbodies included in the project	TMDL program staff coordinating with other programs during TMDL development to inform and implement

Project Name (Final approval date)	Pollutants considered	Waterbodies Included	Status
			ongoing efforts.
Lower Salinas River Watershed	Multiple pollutants: nutrients (e.g. nitrate, un-ionized ammonia)	10 waterbodies included in the project	TMDL program staff coordinating with other programs during TMDL development to inform and implement ongoing efforts.
Lower Salinas River Watershed	Fecal Coliform	10 waterbodies included in the project	TMDL program staff coordinating with other programs during TMDL development to inform and implement ongoing efforts.