

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

MEMORANDUM OF UNDERSTANDING BETWEEN THE CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD, SAN FRANCISCO
BAY REGION, AND THE COUNCIL OF BAY AREA RESOURCE
CONSERVATION DISTRICTS

MAY 1980

I. THE PROBLEM

Current estimates of annual sediment inflow to San Francisco Bay are 10.5 million cubic yards with 8.1 million cubic yards contributed through the Delta and 2.4 million cubic yards from Bay Area tributary streams. By the year 1990 Delta inflows are expected to decrease to 4.3 million cubic yards annually. However, by the year 2000, ABAG has estimated that approximately 322,500 acres of land area will be converted to urban use. This is approximately a 73% increase above the 1975 urbanized land area. This increase in urbanized land use can be expected to be the future source of much of the sediment that will reach the rivers, streams and channels and ultimately the bay system each year.

Natural erosion processes are accelerated when existing protective cover is removed before, during, and following construction and agriculture activities. Studies relate that erosion on land where construction activities are taking place is about 10 times greater than on land in cultivated row crops, 200 times greater than on pasture land, and 2,000 times greater than on timber land.

Soil erosion and related water quality impacts may result from a wide variety of causes including construction, hillside cultivation, non-maintained roads, ranchettes, timber harvesting, and off-road vehicles.

The exposure of the soil mantle to falling rain, overland and channelized flow, and the impact of equipment moving over the site results in the increased movement and loss of soil particles.

Damage from erosion and sedimentation can be categorized in the following ways:

- . Damage to the construction site
- . Damage to stream channels
- . Damage to water quality/beneficial uses
- . Damage to public and private property
- . Damage to agricultural lands resulting from adverse cultural practices

In most cases, the adverse results of man's activities can be reduced and in some instances eliminated through the use of both structural and non-structural measures of various types that are properly employed at the appropriate time.

It is recognized that local government have responsibilities and broad powers to prevent water pollution through **planning** efforts and issuance of permits for land use and development. However, during the past few years increasing incidents of pollution and nuisance caused by erosion associated with construction activities have come to the attention of water pollution control regulatory agencies. Many of these pollution problems reveal that local agencies have failed to require erosion control measures, detect potential erosion problems and monitor and regulate construction activities where a potential water quality problem exists under a permit.

II. RECOGNITION OF NEED FOR MEMORANDUM OF UNDERSTANDING

During the past few years, the staff of the California Regional Water Quality Control Board, San Francisco Bay Region, (Regional Board) has received a number of complaints from concerned citizens and public agencies relative to pollution and nuisance caused by erosion and sediment generated from construction and other land use activities in the Bay Area. In most instances local governments have not recognized the need to require specific control measures to prevent severe erosion, have not monitored construction activities that threatened beneficial uses, and have not developed and/or implemented ordinances to regulate construction and other adverse land use activities under **their** authority.

We expect the Association of Bay Area Governments to develop a model erosion control ordinance, including "Best Management Practices", identify improvements in local agency ordinances needed to conform to the model ordinance, determine the effectiveness of the implementation of present erosion control ordinances, and provide implementation strategies for construction and agricultural erosion control.

The Resource Conservation Districts (RCDs) have the technical expertise to review and evaluate erosion control practices relating to agricultural and construction activities while the Regional Board has the regulatory authority to enforce erosion and sediment control measures. A Memorandum of Understanding between the Council of Bay Area Resource Conservation Districts (CBARCD) and the Regional Board will greatly strengthen the ability to identify and correct erosion control problems related to agricultural or construction activities. The Memorandum of Understanding will also provide for the assessment, control and monitoring of potential and existing soil erosion related water quality problems such as rangelands being converted to ranchettes or forest and rangelands that are being converted to vineyards. It is expected that the RCDs will exhaust all means at their disposal to remedy potential and existing water quality problems prior to Regional Board involvement. However, in those cases where significant problems have been identified and cannot be resolved by the RCD the Regional Board, with the assistance of the RCD, will attempt to alleviate the problem through administrative procedures and if necessary **formal** enforcement proceedings. Finally, the Memorandum of Understanding will provide for improved coordination between the RCDs and the Regional Board through joint identification of resource management concerns and short and long term planning needs, and through increased information exchange.

III. COUNCIL OF BAY AREA RESOURCE CONSERVATION DISTRICTS AUTHORITY

The CBARCD was formed pursuant to the authority granted to Resource Conservation Districts in Article 9, Chapter 3, Division IX of the Public Resources Code for the State of California. The CBARCD is composed of 13 RCDs established to conserve soil and water resources through the prevention and control of soil erosion and to preserve prime agricultural land which serves in the production of food and fibre. The 13 RCDs cover about 80 percent of the nine Bay Area counties. Eleven of the 13 RCDs are either partially or entirely within the jurisdiction of the Regional Board.

The CBARCD has adopted Best Management Practices (BMPs) for agricultural and construction activities contained in the Handbook of Best Management Practices for the 9-Bay Area Counties. Individual ranchers, farmers, and other land owners voluntarily contact the RCDs for assistance in developing management programs including erosion and sediment control measures which conform to the BMPs. The United States Department of Agriculture, Soil Conservation Service, coordinates with and assists the RCDs in conducting their soil and water conservation and resources use program.

The RCDs do not possess enforcement powers but on request provide technical review and advice on environmental documents, local permits, and field operations relating to agricultural and construction activities that have a potential for erosion.

IV. AUTHORITY OF THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, SAN FRANCISCO BAY REGION

The Regional Board administers the State's water quality control program under the Porter-Cologne Water Quality Control Act (Water Code) and the Federal Clean Water Act within the area of its jurisdiction described in Section 13200(b) of the Water Code.

The primary responsibility of the Regional Board is to prevent and abate water pollution and nuisance to ensure the reasonable protection of designated beneficial uses. The direction that water quality control management shall take for the protection of State waters is given in the Water Quality Control Plan, San Francisco Bay Basin (Basin Plan). The Basin Plan delineates beneficial water uses to be protected and water quality objectives and control actions/discharge prohibitions which serve as a basis for prescribing waste discharge requirements and for applying appropriate enforcement action to provide conformance with the Basin Plan.

It is the policy of the Regional Board that local governments should develop and implement "Best Management Practices" to reduce pollutant loads from surface runoff. The Regional Board has stated its intent to work closely with local governments in the development and implementation of "Best Management Practices" and, if necessary, will use its regulatory authority to assure that these practices are implemented.

V. REGIONAL BOARD AND RCD JOINT PROGRAM

- A. The RCDs will aid the Regional Board staff in the review of early consultation notices. The Regional Board staff is responsible for informing the lead agency of the joint findings.
- B. The Regional Board staff and the RCDs have jointly developed a list of information (attachment 1) outlining the issues to be addressed by lead agencies in EIR's regarding soil erosion and sediment control.
- C. The Regional Board staff and the RCDs have jointly developed the essential elements of an Erosion Control Plan (Attachment 2). The Executive Officer is authorized, on behalf of the Regional Board, to negotiate and execute modifications in the contents of attachment 2 with the RCDs.
- D. The RCDs will identify areas within the San Francisco Bay Region (utilizing county maps) that have significant potential or actual erosion or sedimentation problems. This information should be used to identify which EIR's should receive highest priority for review.
- E. The RCDs will review those EIRs for projects they feel may involve significant soil erosion impacts on water quality. The RCDs will then inform the Regional Board staff of their findings. Based on these findings one of two routes will be taken.
 1. Water quality impacts may occur as a result of the proposed project. The RCDs will provide technical review and advice on the adequacy of the proposed mitigation measures contained in the EIR. The Regional Board staff will inform the lead agency of concerns and request the following:
 - (a) Appropriate mitigation measures be identified and become part of the final approved EIR;
 - (b) All mitigation measures in the final EIR become conditions of the use/building permit; and
 - (c) A copy of the use/building permit be submitted to the Regional Board and the appropriate RCD.
 2. The RCD has determined that significant water quality impacts may occur and has requested that the Regional Board Executive Officer (E.O.) require the filing of a report of waste discharge (ROWD) and/or an Erosion Control Plan (ECP). The Regional Board E.O. will review the RCD findings and if appropriate will require the filing of an ROWD and/or an ECP. The Regional Board E.O. will review his decision with the appropriate RCD. The RCD will assist the Regional Board staff in the review of the ECP and development of waste discharge requirements.

- F. The RCDs will provide Use/Building permit review and/or field inspections for categories E.1 and E.2 as follows:
1. Under category E.1 the RCD will review the Use/Building permit to determine if the required mitigation measures have been included. The RCD will inform the lead agency of any deficiencies and will subsequently determine whether mitigation measures have been incorporated. The RCD will keep the Regional Board informed of these proceedings. In cases where mitigation measures have not been incorporated after RCD review the Regional Board, with the assistance of the RCD, will attempt to obtain compliance through administrative procedures and if necessary formal enforcement proceedings.
 2. Under category E.2 the RCD will provide ECP and/or WDR compliance inspections at a minimum of once per month, during the rainy season (October-April). The RCD will provide the Regional Board and the lead agency with the compliance inspection reports. Where noncompliance is reported the Regional Board, with the assistance of the RCD, will attempt to obtain compliance through administrative procedures and if necessary formal enforcement proceedings.
- G. Upon request by the Regional Board Executive Officer the RCD(s) will provide technical expert testimony in enforcement proceedings including litigation. Such requests are contingent upon the ability of the RCD to provide the technical services required.
- H. The Regional Board and CBARCD will work cooperatively in the control of potential and existing significant water pollution problems caused by erosion and sediment from construction and other adverse land use activities, regardless of the need for permitting or compliance with CEQA requirements, within the limits of available staff.
- I. This Memorandum of Understanding shall be renegotiable at any time upon the written request of either party or may be terminated by either party by giving ninety (90) day's notice in writing to the other party.
- J. The actions agreed to by the parties to this memorandum are contingent upon budgetary constraints.
- K. This MOU becomes effective on July 1, 1980.

APPROVED BY



JOHN W. KEKER, CHAIRMAN
SAN FRANCISCO BAY REGIONAL WATER
QUALITY CONTROL BOARD

Date: May 20, 1980



WILLIAM H. BARBOUR, PRESIDENT,
COUNCIL OF BAY AREA RESOURCE
CONSERVATION DISTRICTS

Date: May 20, 1980

DEFINITIONS

Terms used in this Memorandum of Understanding are defined as follows:

Early Consultation Notices - Letters or notices requesting comments on whether an EIR or negative declaration is required.

Environmental Impact Report (EIR) - means an environmental impact report which includes detailed statements setting forth the environmental effects and considerations pertaining to a project as specified in Section 21100 of the Public Resources Code, and may include either a draft or a final EIR.

Lead Agency - means the public agency which has the principal responsibility for carrying out or approving a project which may have a significant effect on the environment.

Negative Declaration - means a statement by the lead agency briefly presenting the reasons that a project, although not otherwise exempt, would not have a significant effect on the environment and therefore does not require an EIR.

Notice of Preparation - means a brief notice sent by a lead agency to notify the responsible agencies that the lead agency plans to prepare an EIR on the project. The purpose of the notice is to solicit guidance from the responsible agencies as to the scope and content of the environmental information to be included in the EIR.

Responsible Agency - means a public agency other than the lead agency, which has responsibility for carrying out or approving a project.

Significant Effect - means a substantial, or potentially substantial, adverse change in the environment.

ATTACHMENT 1

EIR INFORMATION LIST FOR SOIL EROSION AND SEDIMENT IMPACTS

A. Physical impacts

1. Hydrological cycle alterations

- a. Increased velocities of flow
- b. Changed flood peaks
- c. Loss of natural flood plains and marshes through reclamation

2. Geological changes

- a. Increased channel erosion from higher velocities
- b. Higher silt loads
- c. Shoaling in channel downstream
- d. Increased deposition on downstream deltas and floods plains

3. Net topsoil loss

4. Terracing and gulying of local land areas

B. Biological impacts

1. Water-oriented community

- a. Increased velocity
- b. Increased silt load
- c. Destruction of reproduction habitat
- d. Loss of benthic communities
- c. Loss of wetlands

2. Terrestrial community affected by loss of wetlands

C. Aesthetic impacts

1. Changes in diversity

2. Alterations in vegetation

3. Restructuring of stream channels and wetland drainage can modify aesthetic enjoyment

D. Social impacts

1. Shoaling and silt deposition in channels can affect navigation

2. Bringing more acreage under cultivation affects agricultural markets

ATTACHMENT 2

EROSION CONTROL PLAN, INFORMATION TO SUPPLEMENT ROWD

The required erosion control plan is a plan for controlling erosion and sediment during construction.

This plan should be part of the total site development plan and prescribe all the steps necessary, including scheduling, to assure erosion and sediment control during all phases of construction including final stabilization. The plan should reflect the following engineering principles.

1. Construction site selection should consider potential occurrence of erosion and sediment losses. Study of the site conditions should include soil and geologic limitations, topography, vegetation, wildlife habitats, proximity to surface water, and climate.
2. The project plan and layout should be designed to fit the local topography and soil conditions.
3. When appropriate, land grading and excavating should be kept at a minimum to reduce the possibility of creating runoff and erosion problems which require extensive control measures.
4. Whenever possible, topsoil should be removed and stockpiled before grading begins.
5. Land exposure should be minimized in terms of area and time.
6. Exposed areas subject to erosion should be covered as quickly as possible by means of mulching or vegetation.
7. Natural vegetation should be retained whenever feasible.
8. Appropriate structural or agronomic practices to control runoff and sedimentation should be provided during and after construction.
9. Early completion of stabilized drainage system (temporary and permanent systems) will substantially reduce erosion potential.
10. Roadways and parking lots should be paved or otherwise stabilized as soon as feasible.
11. Clearing and grading should not be started until a firm construction schedule is known and can be effectively coordinated with the grading and clearing activity.

The general and specific information which should be contained within the plan is as follows:

General Information

1. General location map sketch not larger than 8 1/2 x 11 inches.
2. Written description of the project specifically describing the phasing, if any, and the construction time schedule.
3. Copy of deed to the subject property or a statement of land ownership.
4. Copies of any pertinent permits, or approvals that have been granted by any local, state, regional, or federal agencies.



Specific Information

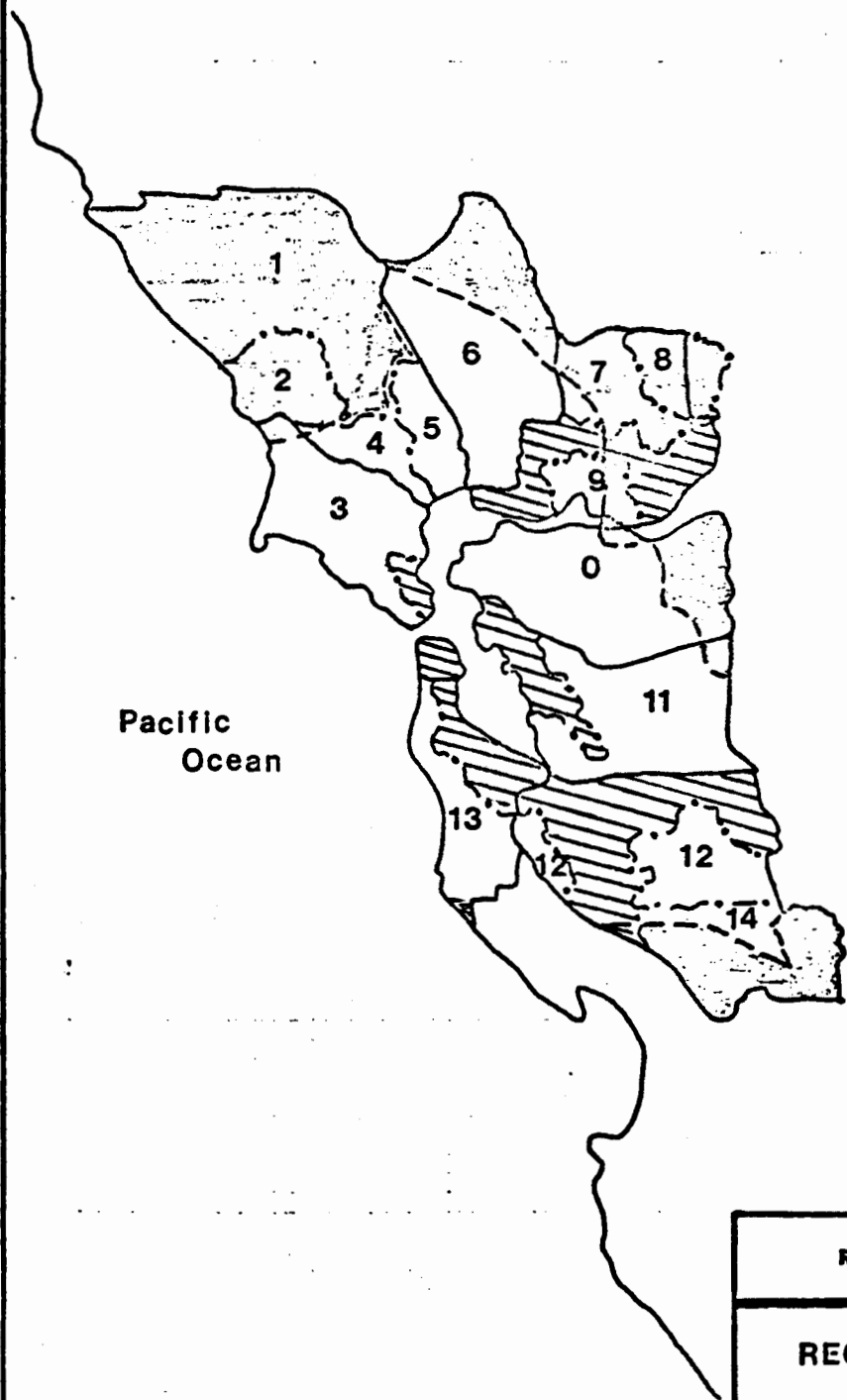
1. Grading and excavation plans of adequate scale to illustrate detail and showing contours at sufficient interval to accurately determine ground slope before and after grading operations. The plans shall also clearly illustrate:
 - a. cut slopes
 - b. fill areas
 - c. drainage ways
 - d. trenching location and extent
 - e. storm drainage systems existing and to be constructed
 - f. location and extent of all structures, landscaping, impervious surfaces, and other features likely to affect water quality through erosion.
 - g. appropriate stabilization measures
2. Engineering plans, specifications, and reports describing specific measures to be taken to prevent a discharge of waste earthen material and other construction wastes from the property as much as practicable during the construction phase.
3. Engineering plans and specifications describing details of sedimentation basins, gravity filters, oil separators, and infiltration facilities. Engineering calculations shall be presented to show the expected volume of runoff from impervious surfaces and the capability of the site to infiltrate all or a portion of the volume.
4. A technical report describing the elements listed in 1-3 above, inclusive of engineering calculations, design criteria and operational procedure.

LEGEND

RCD Boundaries

- 1 Sotoyme/Santa Rosa
- 2 Gold Ridge
- 3 Marin
- 4 Petaluma
- 5 Sonoma
- 6 Napa
- 7 Ulatis
- 8 Dixon
- 9 Suisun
- 10 Contra Costa
- 11 Alameda
- 12 Evergreen
- 13 San Mateo
- 14 Loma Prieta

- Region 2 boundary
-  out-side Region
-  out-side RCD but in Region



Pacific
Ocean

STATE OF CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION		
REGION and RCD BOUNDARIES		
DRAWN BY:	DATE:	DRWG. NO.