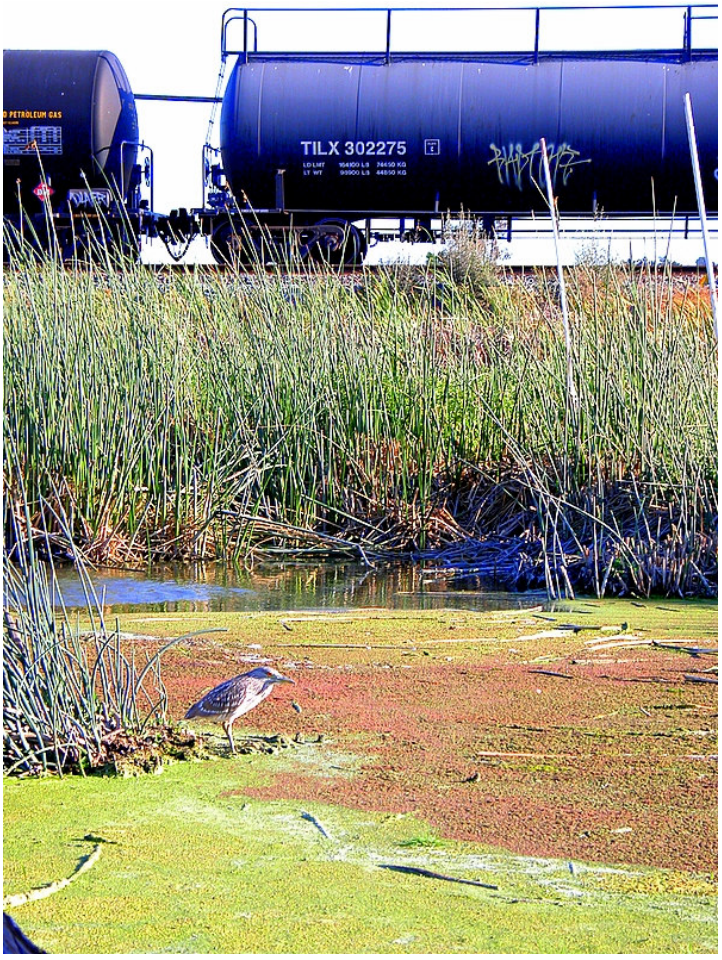
CALIFORNIA
Water Boards
STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

CWA SECTION 401
WATER QUALITY CERTIFICATION PROGRAM

ANNUAL REPORT
2003



February 2005

12/03

Front Cover: Railway on elevated fill alignment in Peyton Slough at the Rhodia groundwater cleanup and wetland restoration site, Martinez, California. Linear fills eliminate aquatic values within the discharge footprint, and can indirectly alter water circulation patterns, fragment habitat, and generate toxic spills and leaks. On April 27, 2004 an aging pipeline unrelated to the railroad spilled 85,000 gallons of diesel fuel near this spot. Transportation and pipeline projects typically require Water Quality Certification, which considers direct and indirect impacts. This immature black-crowned night heron seems tolerant of traffic disturbance but may be vulnerable to toxic effects. (Photo, Greg Gearheart, August 2004).

Back Cover: View after rainstorm of an unpermitted attempt at bank stabilization, San Pedro Creek, Pacifica, California. A silt fence on the bank and fill behind the wooden revetment were removed by stormwater runoff and streamflows. (Photo, Carmen Fewless, December 2004).

CWA SECTION 401
WATER QUALITY CERTIFICATION PROGRAM

ANNUAL REPORT - 2003

Water Quality Certification Unit
Division of Water Quality
State Water Resources Control Board
California Environmental Protection Agency

Oscar Balaguer, Chief, Water Quality Certification Unit
Erin Mustain, Student Assistant
Jamie Burke, Student Assistant

February 2005

Intentionally left blank

CONTENTS

4. Orders Issued

5. Workload Distribution

6. USCOE Permits Used

EXECUTIVE SUMMARY

This Annual Report summarizes issues and activities of the 401 Program[1] administered by the California State Water Resources Control Board (State Water Board) and the Regional Water Quality Control Board (Regional Water Boards) during the 2001-2002 and 2003 periods.

New and Emerging Issues

New issues emerging during this reporting period included:

SWANCC[2]

Although the State responded promptly and in a variety of ways to the SWANCC decision, lack of resources has made it impossible for permitting staff to fully react to the decision. Consequently, most discharges to waters affected by SWANCC went unregulated during this reporting period.

Watershed/Landscape Context

The valuable ability of a wetland to mediate and moderate the movement of water and nutrients through the watershed and to support biodiversity is highly dependent on its location within the drainage. However, regulatory practice usually focus only on protecting or establishing onsite wetland values without regard to landscape position. Integration of the landscape context into regulatory practice is evolving at federal and State levels. One promising approach is the use of wetland rapid assessment protocols such as the California Rapid Assessment Method (CRAM)

Wetland Beneficial Uses (BUs)

Existing statewide BU categories implicitly include all the functions and values provided by wetlands, but absent explicit identification, these functions and values are given inadequate attention by dischargers and regulatory staff. This is especially true of services that are expressed at the watershed-level, such as flood control, pollutant removal, and habitat connectivity. The State has committed to developing wetland-related BUs.

Habitat connectivity

"Habitat connectivity" refers to the need of plant and animal populations to have some mobility over the landscape. The need for connectivity applies to all habitats, including wetlands and other aquatic ecosystems within the Water Boards' regulatory purview. Habitat connectivity is critical to biodiversity maintenance, and will become more so because of global warming.

---

[1] Water Quality Certification Program, Clean Water Act section 401.

[2] U.S. Supreme Court. *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*. January 2001.

Data Report

The data portion of this Report displays data derived from regulatory documents issued by the Water Boards and U.S. Army Corps of Engineers (Corps). The data are used to assess program workload and performance, and to help improve program efficiency. The Report presents tabular data on:

- Discharges to Federal Waters
- Discharges to Non-Federal Waters
- Compensatory Mitigation
- Orders Issued
- RWQCB Workload Distribution
- Corps Permits Used

Data Quality

The fill areas and dredge volumes included in this Report are understated due to incomplete data. However, data completeness is comparable to similar databases and is improving. For the key parameters of acreage/ volume of discharge, complete records increased from 84 to 87 percent from 2001-2002 to 2003. Overall completeness increased from 73 percent to 78 percent (Tables 1A and 1B).

Number of Projects

The number of projects was generally stable at about 1,000 projects per year, but with a 6 percent increase in 2003 from the previous two years (Tables 1A and 1B).

Fill Area

Fill of federal waters increased significantly to 1,877 acres in 2003; 36 percent more than the 2001-2002 average. Streambed fill increased 30 percent in 2003 over the previous two year average, wetland fill increased 38 percent, and riparian fill increased 69 percent (Tables 1A and 1B).

Dredging

Dredge volume in 2003 decreased by 62 percent from the 2001-2002 average. For all three years, the San Francisco Bay and Santa Ana Regional Water Boards accounted for 76 percent of the known dredge volume (Tables 1A & 1B).

Geographic Distribution of Fill

Fill area is distributed unevenly. The North Coast and Central Valley Regional Water Board offices accounted for 52 percent of the known 2001-2003 fill.

Project Types

Activities causing the most fill were in-channel flood control (555 acres, 27 percent of total fill), instream mining (381 acres, 20 percent of total); restoration projects (245 acres, 12 percent of total); and urban development (238 acres, 12 percent of total). Most impact associated with restoration projects was temporary (Table 1C).

Project Size Distribution

Most discharges are small, with more than 80 percent less than 0.5 acres. Most of the total fill comes from a relatively small number of large projects, however, it's important to note that discharge size is only one indicator of impact (Figures 1-4).

"Isolated" Waters

During 2001-2003 the Corps disclaimed jurisdiction over 212 waterbodies comprising more than 463 acres (fill area is significantly underreported because 32 percent of the Corps disclaimers did not document disclaimed water area). Of this total, 256 acres were wetland and 130 acres riparian. Seventy eight percent of the disclaimed area was within the jurisdiction of the Los Angeles, Sacramento, and Lahontan Victorville RWQCB offices. Both the number and area of disclaimed waters decreased significantly in 2003 from the 2001-2002 average, with 28 percent fewer disclaimers and 78 percent less fill (Tables 2A and 2B).

Compensatory Mitigation

The Water Boards achieved "no net loss", at least on paper[3], by requiring compensatory mitigation. To compensate for 1,498 acres of wetland and riparian impact, 2,616 acres were created, restored or preserved, for a net balance of 1,118 acres. The compensation: loss ratio was 2.2:1 for 2001- 2002, declining to 1.3:1 in 2003. "Creation" was the primary means of compensation (Table 3A).

Riparian Compensation

We achieved "no net loss" of riparian area subject to federal jurisdiction, at least on paper. Compensation for riparian-only impacts increased from 1.2:1 during 2001-2002 to 3.2:1 in 2003. Compensation ratios varied among the Regions (Table 3B).

Regulatory Actions – Federal Waters

As a proportion of the total, standard certifications increased and conditional certifications fell slightly. Denials of 401 certification, issuance of waste discharge requirements under State authority, and notifications remained roughly the same. Enforcement actions doubled from 0.6 percent of all actions during the 2001-2002 period to 1.2 percent in 2003 (Table 4A).

Regulatory Actions – "Isolated" Waters

The percent of "isolated" waters regulated by the Water Boards fell from 40 percent in 2001-2002 to eleven percent in 2003. This reduction is almost entirely attributable to the mandated expiration of waivers of waste discharge requirements, which were in effect prior to January 1, 2003 (Table 4B).

[3] This caveat is necessitated by the very low level of field monitoring to verify mitigation success that the Regional Water Boards are able to provide, and also by the general inability to-date to integrate watershed/landscape considerations into regulatory decisions, as reviewed in the "New and Emerging Issues" section of this Report.

Regional Board Workloads & Allocations

There are considerable disparities between the staffing to workload ratios of the Regional Water Boards, when workload is considered as a function of number of projects and fill acres regulated. The number of hours available to process each project averaged 15.3 statewide, ranging from 6 hours per project for the North Coast Regional Water Board to 36.5 hours for the Los Angeles Regional Water Board [4] (Table 5; Figures 5-6).

Corps Permits

The Corps regulated most projects with Nationwide Permits, which were used for 72 percent of known projects in 2001-2002 and 69 percent in 2003. Individual permits were used for 9 percent of the projects in 2001-2002 and 12 percent in 2003; however, individual permits regulated about 45 percent of the filled acres.

[4] Regional Water Board regulatory workload includes participating in pre-application consultations, reviewing applications and technical submittals, insuring compliance with CEQA, coordinating with other responsible agencies, negotiating with applicants to resolve problems and obtain needed technical information, developing technically and legally defensible regulatory orders, monitoring compliance, investigating and enforcing against infractions, responding to petitions, and performing associated clerical, administrative, and management functions.

NEW AND EMERGING ISSUES

SWANCC

The U.S. Supreme Court's (Court) January 2001 Decision in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps if Engineers* (SWANCC) has posed significant challenges for the Water Boards. Although the holding itself was narrow, the Court's broad dicta cast doubt on federal jurisdiction over a wide class of poorly defined "isolated" waters. The Court emphasized that it is up to the states to protect such waters. A significant number and extent of "isolated" waters have been deemed by the Corps to be out of federal jurisdiction pursuant to SWANCC, as documented in the data portion of this report. The additional responsibilities imposed by SWANCC have fallen on California during an unprecedented fiscal crises. Although the State responded promptly and in a variety of ways to the decision, lack of resources has prevented the Regional Water Boards from fully responding to SWANCC. Consequently, most discharges to waters affected by SWANCC went unregulated during this reporting period.

State Water Board responses to SWANCC during this reporting period included:[5]

1. on January 25, 2001, issued a legal memorandum asserting the authority and responsibility of the Water Boards to regulate discharges to "isolated" waters,
2. during 2001, coordinated with the Corps to ensure that all Corps jurisdictional disclaimer letters advise dischargers that they are subject to RWQCB regulatory jurisdiction and that copies of all such letters be sent to the Water Boards,
3. beginning in 2001, developed and populated a database documenting all Corps disclaimers and related Water Board orders,
4. on March 13, 2003 submitted a detailed *Comment On Advanced Notice Of Proposed Rulemaking On Definition Of "Waters Of The United States"* to the federal government regarding a controversial proposal to limit federal jurisdiction under the CWA,
5. submitted to the legislature an April 2003 report titled *Regulatory Steps Needed to Protect and Conserve Wetlands Not Subject to the Clean Water Act* (*Legislative Report*).

Subsequent to this reporting period, the State Water Board:

6. on May 4, 2004, adopted *Statewide General Waste Discharge Requirements For Dredged or Fill Discharges to Waters Deemed by the U.S. Army Corps Of Engineers to be Outside of Federal Jurisdiction* (General WDRs), regulating certain discharges to non-federal waters,

[5] The documents cited below may be accessed from: http://www.swrcb.ca.gov/cwa401/index.html

7. On June 25, 2004 transmitted to the RWQCBs programmatic guidance titled *Guidance for Regulation of Discharges to "Isolated" Waters,* directing the RWQCBs to prioritize such discharges for regulatory attention, to request a report of waste discharge from all recipients of Corps jurisdictional disclaimer letters, to take appropriate regulatory action, and to copy the State Water Board on specified regulatory documents for tracking and reporting purposes.
8. On September 24, 2004 transmitted to the Secretary of the California Environmental Protection Agency a *Workplan: Filling the Gaps in Wetland Regulation* (*SWANCC Workplan*) committing to a number of further actions, including outreach to dischargers; interagency coordination regarding endangered species protection and other issues; developing wetland-related beneficial uses, a wetland definition, and State policy; and monitoring the State's effectiveness in protecting "isolated" waters.

Watershed/Landscape Context

Wetlands are uniquely effective in mediating and moderating the movement of water and nutrients through the watershed and in supporting biodiversity. At least three important wetland functions are expressed primarily at the watershed or landscape level rather than at the site of a particular wetland. These three functions are: (1) floodwater retention, (2) pollutant removal, and (3) habitat connectivity. The ability of a wetland to provide these functions is highly dependent on its location within the watershed. However, usual regulatory practice is focused on protecting only onsite wetland values and does not routinely or systematically protect these watershed or landscape level functions. The National Research Council (NRC) has concluded that this is one of the reasons that the national "no net loss" goal is not being met and also noted that the establishment of wetland *structure* does not necessarily restore all the *functions* of a wetland ecosystem.[6]

The NRC noted that landscape position provides a necessary context to assess potential functions of compensatory wetlands but is not a usual regulatory performance standard; and recommends that site selection for compensation wetlands should be analyzed at a watershed scale. In response, the federal government has initiated changes to federal policy regarding compensatory mitigation for wetlands. The changes include a "National Wetlands Mitigation Action Plan" which, among other things, directs USEPA and USACOE to develop guidance on the use of compensatory mitigation in the watershed context. USACOE simultaneously reissued its regulatory guidance on compensatory mitigation, directing that, "Districts will use watershed and ecosystem approaches when determining compensatory mitigation requirements, consider the resource needs of the watersheds where impacts will occur, and also consider the resource needs of neighboring watersheds.... A watershed-based approach to aquatic resource protection considers entire systems and their constituent parts."

The science-based application of the above principles to regulatory practice is evolving. One promising approach is the use of wetland rapid assessment methods to allow

[6] National Research Council, *Compensating for Wetland Losses Under the Clean Water Act,* Committee on Mitigating Wetland Losses, National Academy Press, Washington, D.C., 2001.

practical field evaluations of the services being provided by any particular wetland, and to help ensure that compensatory mitigation supports the achievement of "no net loss." USEPA Region 9 and State partners are exploring the development of a California Rapid Assessment Method (CRAM).

Wetland Beneficial Uses

Related to the above issue, beneficial use designations (BUs) provide the legal and technical foundation for water quality protection. California has a number of standard BUs which are incorporated into Regional Water Board Water Board Quality Control Plans (Basin Plans), and in addition three Regional Water Board Water Boards have adopted Region-specific wetland-related BUs. The State's historic reliance on Clean Water Act §401 to protect wetlands effectively appended State authority to the federal CWA §404 dredge and fill permitting program and obviated the need for comprehensive stand-alone statewide regulatory policies and guidance. Post-SWANCC, the need for such State wetland policy has become more evident. Existing statewide BU categories implicitly include all the functions and values provided by wetlands, but absent explicit identification, these functions and values are given inadequate attention by both dischargers and regulatory staff. This is particularly true of functions that are expressed at the watershed-level, such as flood control, pollutant removal, and habitat connectivity. In separate analyses of the impacts of SWANCC, the California Research Bureau[7] and the State Water Board's Legislative Report identified the need to develop statewide wetland-specific BUs. The State Water Board's *SWANCC Workplan* includes development of wetland-related BUs.

Habitat connectivity[8]

"Habitat connectivity" refers to the need of plant and animal populations to have some mobility over the landscape, i.e., to avoid becoming "isolated" or "disjunct." Such mobility may occur at the level of the individual organism (e.g., a bird or turtle travelling between separated wetlands) and/or of the population (e.g., a plant species colonizing a new wetland through seed dispersal); and over different time scales.

In recent decades a large body of research has demonstrated that isolated populations face a high probability of eventual extinction, even if their immediate habitats are spared. In general, the smaller such an isolated population, the more quickly it will die out. Urban development typically fragments habitat by creating artificial landscapes which are movement barriers for most species. Unless mitigation measures are taken, isolated, non-viable populations are created as buildings, roads, and landscaping cut off lines of movement.

[7] Jennifer Ruffolo, *The U.S. Supreme Court Limits Federal Regulation of Wetlands: Implications of the SWANCC Decision,* California Research Bureau, California State Library, February 2002. Online: access from http://papers.ssrn.com/sol3/DisplayAbstractSearch.cfm.

[8] This discussion is largely borrowed from the State Water Board's April 2003 Legislative Report, which includes literature citations omitted here.

The principles of habitat connectivity apply generally to biotic communities, including to wetlands and other aquatic ecosystems within the Water Boards' regulatory purview. In the context of wetlands, "habitat connectivity" refers to three related phenomena:

a. The need of some animals to have access to both wetland and upland habitats at different parts of their life cycle. Some wetland animals, e.g., some amphibians and turtles, require access at different seasons and/or at different life stages to both wetland and to nearby upland. Preserving the wetland but not access to upland habitat will locally exterminate such species.

b. The ecological relationship between separate wetlands. Some wetland communities and their associated species comprise networks of "patches" throughout a landscape. Wetland plants and animals are adapted to the presence of wetland complexes within a watershed and are dependent on moving among the wetlands within the complex, either regularly or in response to environmental stressors such as flood or drought, local food shortage, predator pressure, or influx of pollution. Removing one such water from the complex will reduce the biological quality of the rest, and at some point the simplified wetland complex will be incapable of supporting at least some of the species, even though some wetlands remain.

c. The role wetlands and riparian corridors play in allowing larger-scale movements. Some strategically located wetlands and especially continuous strips of riparian habitat along streams facilitate connectivity at watershed and regional scales for terrestrial as well as aquatic and amphibious species.

As noted above, habitat connectivity is critical to biodiversity maintenance, and will become more so because of global warming. Significant range shifts and other biotic responses to global climate change have already occurred. The ability of plant and animal populations to move across the landscape may be critical to their survival in coming decades.

DATA REPORT

The State Water Board maintains a database to support regulatory protection of waters subject to dredge and fill discharges. The database includes regulatory actions taken by the Water Boards under CWA section 401 and the Porter-Cologne Water Quality Control Act. The database also includes information on disclaimers of jurisdiction issued by the Corps pursuant to SWANCC.

The following tables and figures reflect these data for the 2001-2002 and 2003 periods.

Data are generally used to document impacts from regulated discharges, assess program effectiveness, and help allocate staff resources. Specific uses include:

- quantifying Regional workloads for management purposes
- documenting types and numbers of regulatory actions
- quantifying the extent of permanent and temporary impacts to waterbody types within each Region
- quantifying status of compliance with State and federal “no net loss” policies
- quantifying impacts from Corps Nationwide and Regional General Permits to inform State decisions on certifying
- quantifying cumulative impacts to specified waterbodies or watersheds
- quantifying impacts from specified activities (e.g., flood control, urban development, gravel extraction)
- helping Regions efficiently retrieve information on historic discharges and past regulatory actions
- assisting with reports to the legislature, legislative analyses, budget change proposals, and grant requests; and
- responding to other queries regarding impacts and program activities.

The primary data sources are Water Board regulatory documents and Corps disclaimer letters. The State Water Board generates monthly and annual reports based on the database and other information.

Table 1A

FEDERAL WATERS - KNOWN FILL AND DREDGE DISCHARGES[1]

BY REGION AND WATERBODY TYPE

January 1, 2003 - December 31, 2003

Region	No. of Projects	Pct.[23] Records With Ac/CY Data	Pct.[34] Complete Records	Wetland Fill Acres	Riparian Fill Acres	Streambed Fill Acres	Lake Fill Acres	Ocean Fill Acres	Temp Fill[5] Acres	Total Fill Acres	Comp[6] Mitig Acres	Dredge CY x1000
1	93	91	78	62.566	27.680	249.026	0.056	0.707	328.336	340.035	7.095	55.40
2	222	81	64	159.889	21.519	8.125	0.955	5.092	136.221	195.591	99.472	5031.72
3	122	97	74	37.551	12.497	269.566	10.240	1.516	179.987	331.370	18.893	0
4	112	99	93	9.154	73.376	195.223	2.620	3.293	263.347	283.666	184.940	321.20
5F	25	96	88	1.932	49.810	2.205	0.770	0.260	4.330	54.977	33.169	0.03
5R	56	96	88	44.143	39.034	16.701	0	0	41.764	99.878	128.425	0
5S	231	80	72	143.565	2.820	31.953	6.050	0	35.194	184.388	377.648	981.00
6T	28	100	100	0.548	0.101	2.964	0.195	0	0.689	3.808	0.340	0.63
6V	4	100	100	0	0	254.035	0	0	250.008	254.035	4.240	0
7	27	85	59	0.020	0.824	38.810	0.016	0	1.175	39.670	28.350	5.07
8	64	91	86	3.667	11.797	22.827	0.614	0.167	11.950	39.072	97.410	1041.60
9	104	96	88	18.464	15.256	4.067	0	0.130	13.948	37.917	96.544	15.00
SB	3	67	33	0	0	0	0	12.750	12.750	12.750	0	0
Total	1091	87	78	481.509	254.715	1095.501	21.516	23.916	1279.789	1877.157	1076.526	7451.66

1. Due to incomplete reporting, actual filled area and dredge volume are larger; see "Percent Records with Ac/CY Data" column. "Fill" includes permanent fill, temporary construction disturbance ("Temp Fill" column), and excavation. Columns do not include acreage/CY figures for denied projects.
2. "Pct. Records with Ac/CY Data" is the percent of RWQCB 401 actions, which specify a fill acreage or dredge volume. "Percent Records With Ac/CY Data" does not include Notifications submitted directly to the SWRCB.
3. With large data sets, rounding errors may cause apparent discrepancies between (1) the sum of the number of records calculated by applying the displayed percentages to the "No. of Projects" for each region and (2) the displayed column total.
4. "Percent Complete Records" is the percent of 401 actions, which include information, specified in SWRCB guidance: (1) receiving water name, (2) applicant name, (3) Corps permit type, (4) receiving water category (wetland, riparian, streambed, lake, or ocean), (5) fill acres (permanent and temporary) or dredge volume, and (6) type and acreage of compensatory mitigation. Actions on general permits are noted as "complete" even if they lack specific water body or acre/CY data.
5. "Temp Fill Acres" is the sum of filled acres on which impacts have been determined to be temporary; they are also included in columns to the left and in "Total Fill Acres."
6. "Comp Mitigation Acres" are acres created, restored or preserved as mitigation for fill projects; they are not included in "Total Fill Acres". Mitigation is not necessarily in-kind.

Table 1B

FEDERAL WATERS - KNOWN FILL AND DREDGE DISCHARGES[1]

BY REGION AND WATERBODY TYPE

January 1, 2001 - December 31, 2002

Region	No. of Projects	Pct.[23] Records With Ac/ CY Data	Pct.[34] Complete Records	Wetland Fill Acres	Riparian Fill Acres	Streambed Fill Acres	Lake Fill Acres	Ocean Fill Acres	Temp Fill[5] Acres	Total Fill Acres	Comp[6] Mitig Acres	Dredge CY x1000
1	169	88	70	34.971	14.036	778.376	19.020	1.577	586.373	847.980	50.522	176.88
2	386	71	58	89.318	18.985	17.626	1.765	9.168	58.296	136.863	379.801	2568.84
3	223	86	74	12.118	7.424	28.649	4.437	23.356	23.709	75.984	54.711	1586.26
4	194	99	90	30.954	28.228	107.698	0	16.113	126.540	182.993	273.370	2552.05
5F	44	100	89	97.066	0.732	7.105	1.549	0	19.254	106.453	0.615	6.17
5R	130	92	79	48.796	11.383	147.918	3.042	0	16.442	211.139	36.834	106.82
5S	444	85	71	119.393	11.885	224.608	3.239	0	71.670	359.125	356.614	1191.46
6T	46	91	80	27.926	0.910	5.875	8.825	0	16.350	43.537	7.863	5.65
6V	12	92	67	0	17.430	11.459	0.144	0	15.789	29.033	0	0
7	23	61	30	25.180	14.360	125.904	0	0	29.464	165.444	1.010	2004.00
8	110	93	77	15.915	20.650	36.125	5.965	4.665	27.518	83.320	187.062	26909.03[7]
9	259	91	65	94.960	14.587	34.657	0.290	1.775	26.335	146.268	325.437	2017.05
SB	7	100	86	4.250	0	6.577	0	0	9.967	10.827	2.660	0
Total	2047	84	73	600.847	160.661	1532.577	48.277	56.654	1027.707	2398.966	1679.499	39124.22

1. Due to incomplete reporting, actual filled area and dredge volume are larger; see "Percent Records with Ac/CY Data" column. "Fill" includes permanent fill, temporary construction disturbance ("Temp Fill" column), and excavation. Columns do not include acreage/CY figures for denied projects.
2. "Pct. Records with Ac/CY Data" is the percent of RWQCB 401 actions, which specify a fill acreage or dredge volume. "Percent Records With Ac/CY Data" does not include Notifications submitted directly to the SWRCB.
3. With large data sets, rounding errors may cause apparent discrepancies between (1) the sum of the number of records calculated by applying the displayed percentages to the "No. of Projects" for each region and (2) the displayed column total.
4. "Percent Complete Records" is the percent of 401 actions, which include information, specified in SWRCB guidance: (1) receiving water name, (2) applicant name, (3) Corps permit type, (4) receiving water category (wetland, riparian, streambed, lake, or ocean), (5) fill acres (permanent and temporary) or dredge volume, and (6) type and acreage of compensatory mitigation. Actions on general permits are noted as "complete" even if they lack specific water body or acre/CY data.
5. "Temp Fill Acres" is the sum of filled acres on which impacts have been determined to be temporary; they are also included in columns to the left and in "Total Fill Acres. "
6. "Comp Mitigation Acres" are acres created, restored or preserved as mitigation for fill projects; they are not included in "Total Fill Acres". Mitigation is not necessarily in-kind. Includes 4/23/02 certification of 26900 CY for Bolsa Chica restoration.

Table 1C

FEDERAL WATERS - KNOWN DISCHARGES

BY PROJECT TYPE

SORTED BY FILL ACRES

January 1, 2003 - December 31, 2003

Project Purpose	No. of Projects	Fill Acres[1]	Percent of Fill Acres	Dredge Volume CYx1000
Channel Flood Control (CHFC)	79	554.8	27	0
Gravel Extraction & Mining (MINE)	14	380.7	20	0
Restoration Activitities (REST)	79	245.4	12	0
Urban Development (URBA)	206	238.0	12	0
Dam Construction & Repair (DAMS)	16	127.1	6	0
Transportation - Roads and Highways (TRRD)	184	106.5	5	0
Utilities (UTIL)	76	77.5	4	0
Transportation - Bridges and Crossings (TRBR)	107	77.1	4	0
Channel Stabilization (CHSTBL)	119	60.0	3	0
Boating & Navagation (BOAT)	130	55.0	3	6203.1
Mitigation Activitities (MITI)	14	46.8	2	0
Recreational Facilities (RECR)	30	36.1	2	0
Discharges Not Otherwise Categorized (OTHER)	29	28.1	1	0
Golf Course (GOLF)	5	11.4	1	0
Diversion Structures (DIV)	20	10.1	0	0
Outfall Structure (OUTF)	60	4.3	0	0
Transportation - Aeronautics (TRAER)	8	3.4	0	0
Hydroelectric Facility (HYDRO)	15	2.2	0	0
Data Collection (DATA)	14	2.0	0	0
Agricultural (AG)	8	0.6	0	0
Beach Enrichment (BEACH)	3	0.1	0	0
Unknown (UNK)	8	0.1	0	0
Construction (CONST)	2	<0.1	0	0
Transportation- Railroads (TRRR)	1	0.0	0	0

1. Fill acres total may exceed that shown in Table 1A because some projects may have more than one purpose. Includes both permanent and temporary fill.

Figure 1

FEDERAL WATERS - FILL ACRES

BY FIVE EQUAL DISCHARGE SIZE CLASSES - ALL DISCHARGES

January 1, 2003 - December 31, 2003

(*Number of projects in each class = 218)*

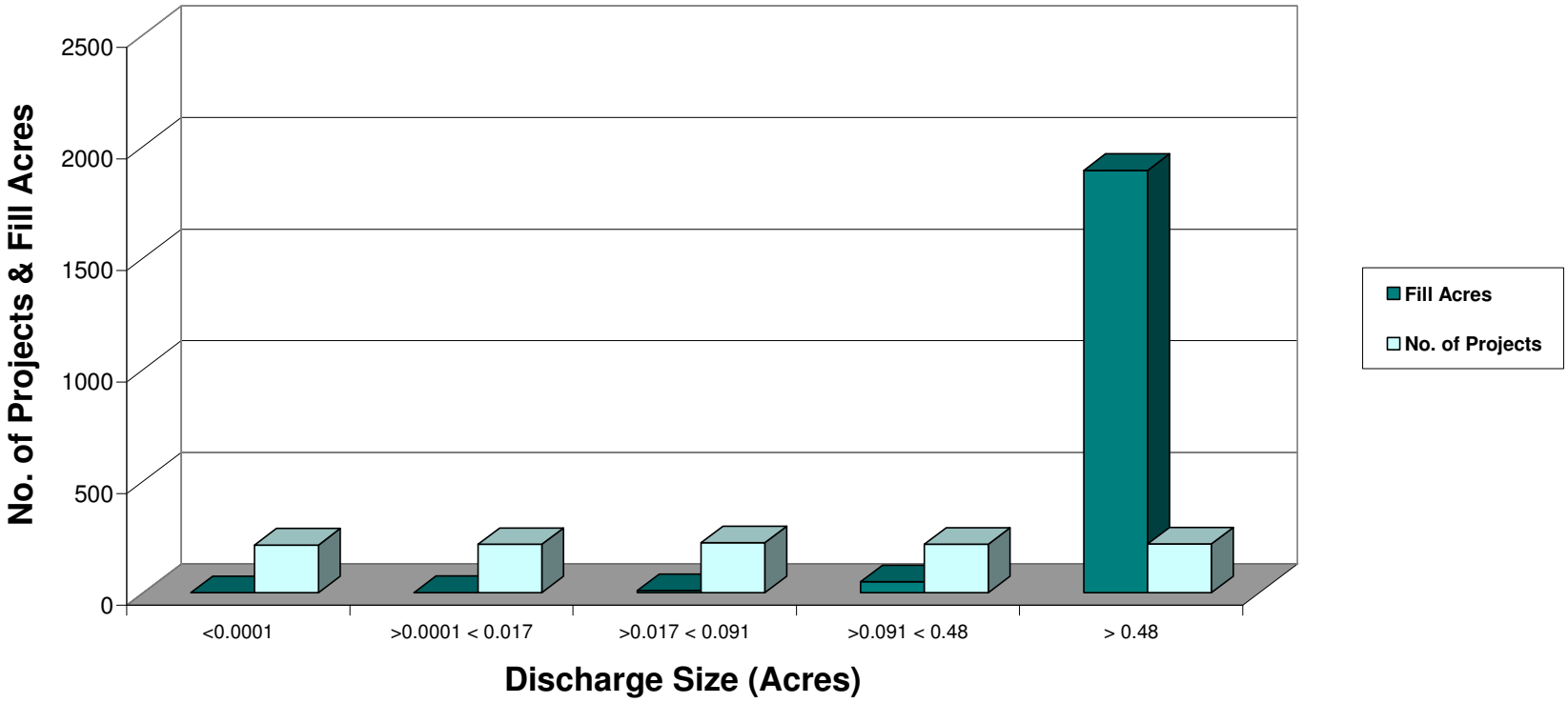


Figure 2

FEDERAL WATERS - FILL ACRES

BY FIVE EQUAL DISCHARGE SIZE CLASSES - ALL DISCHARGES

January 1, 2001 - December 31, 2002

(*Number of projects in each class = 409)*

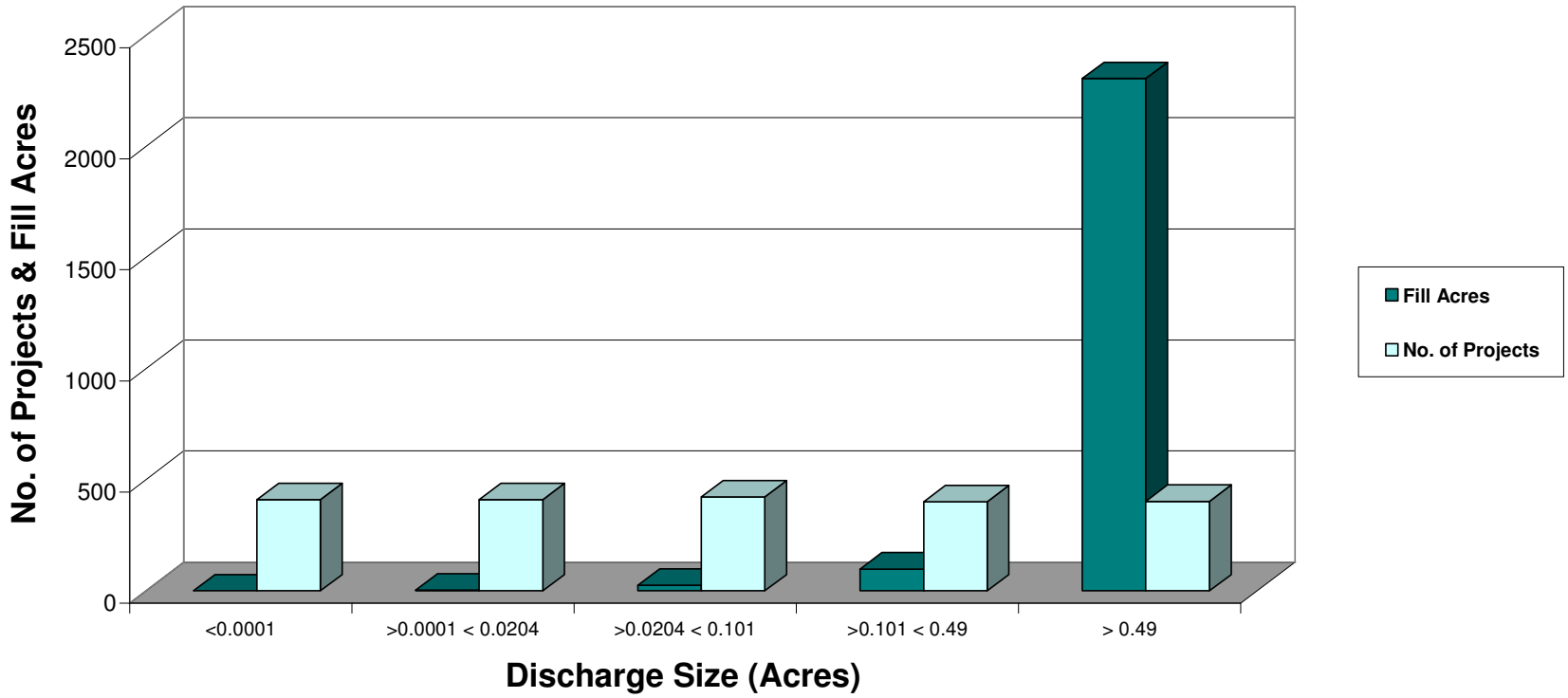


Figure 3

FEDERAL WATERS - FILL ACRES

BY FIVE EQUAL DISCHARGE SIZE CLASSES -

DISCHARGES GREATER THAN ONE ACRE

January 1, 2003 - December 31, 2003

(*Number of projects in each class = 28)*

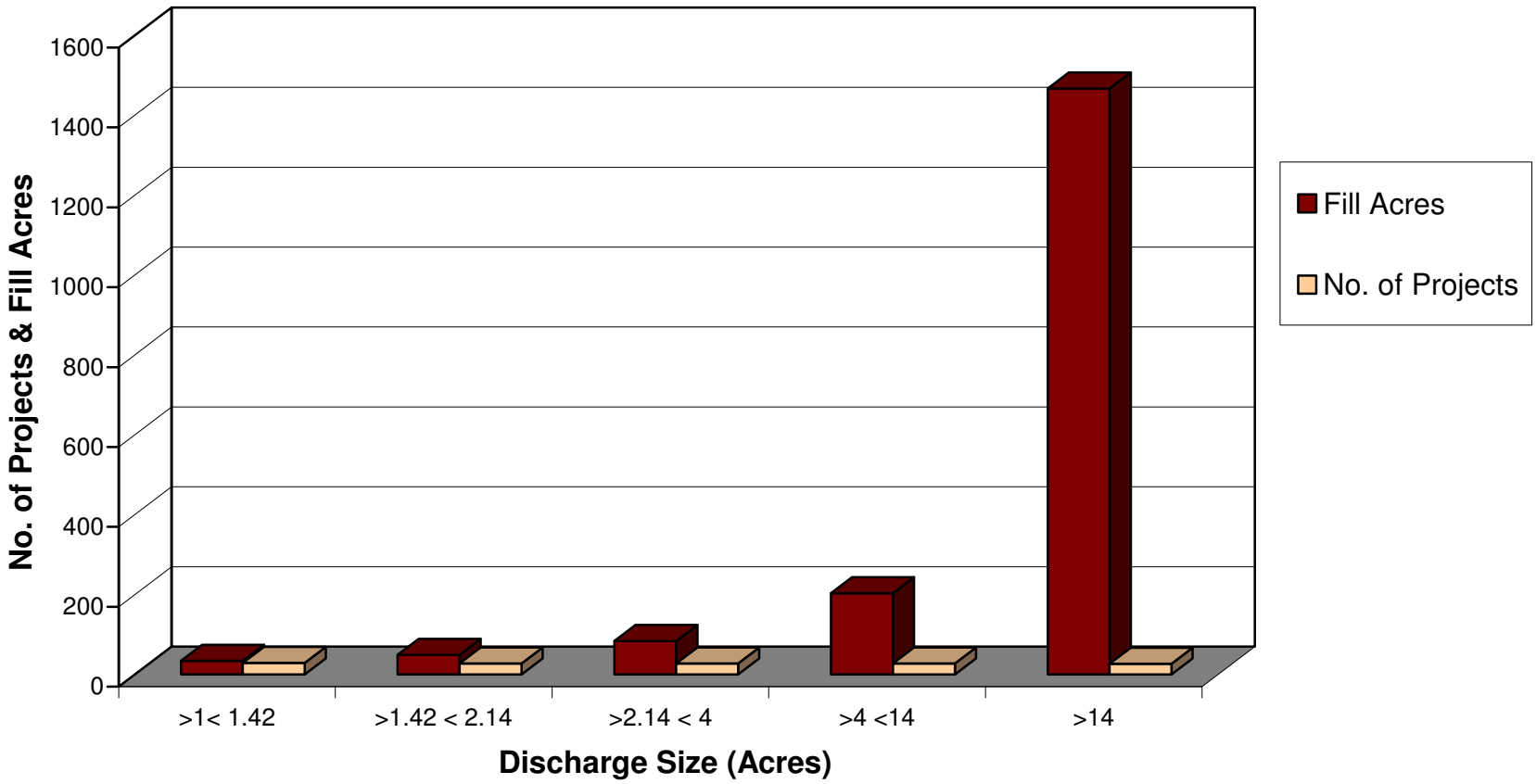


Figure 4

FEDERAL WATERS - FILL ACRES

BY FIVE EQUAL DISCHARGE SIZE CLASSES -

DISCHARGES GREATER THAN ONE ACRE

January 1, 2001 - December 31, 2002

(*Number of projects in each class = 53)*

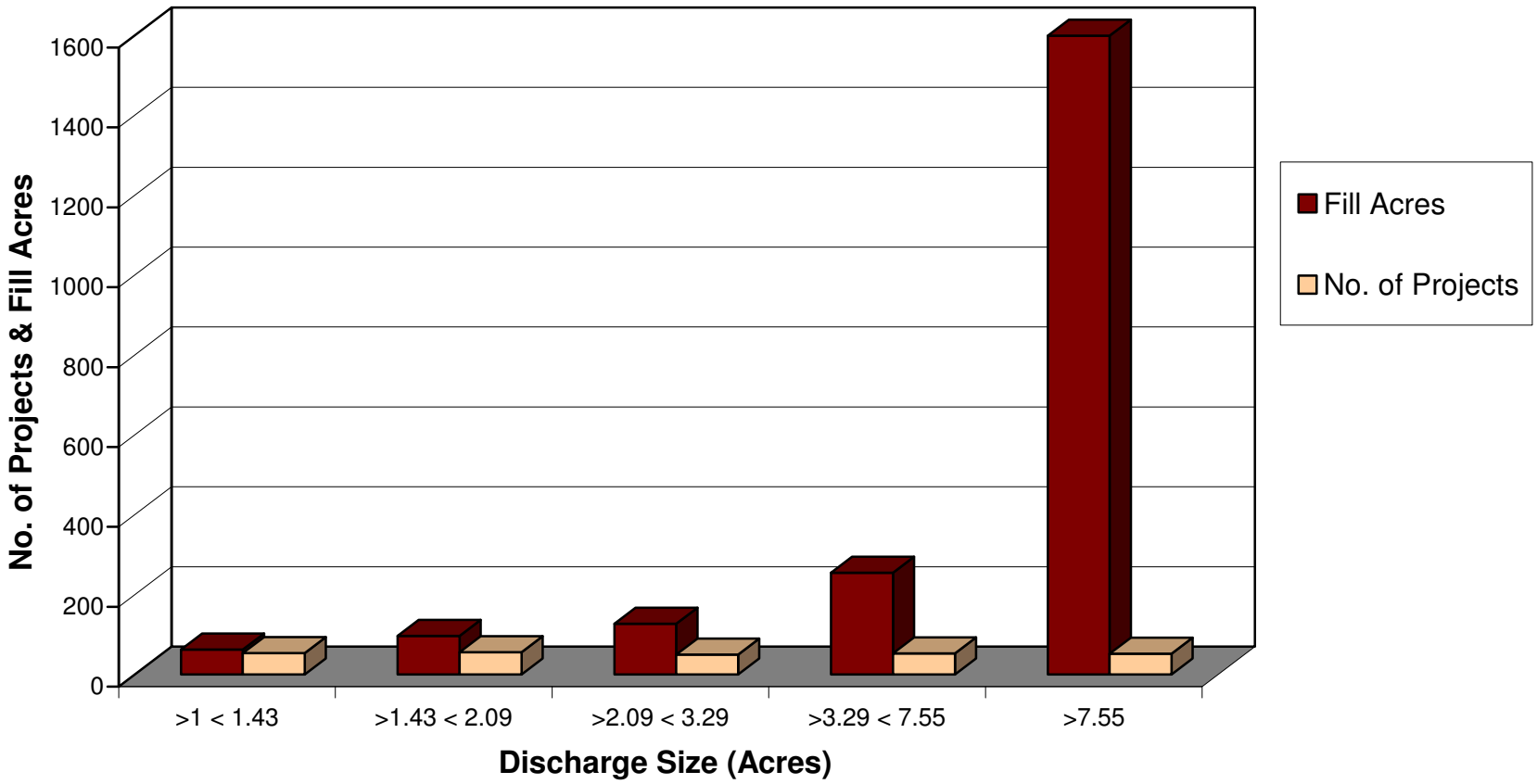


Table 2A

"ISOLATED" WATERS – DISCLAIMED BY USACOE PERSUANT TO SWANCC*

BY REGION AND WATERBODY TYPE

January 1, 2003 - December 31, 2003

Region	No. of Projects	Pct.[2][3] Records With Ac/ CY Data	Pct.[3][4] Complete Records	Wetland Acres	Riparian Acres	Streambed Acres	Lake Acres	Ocean Acres	Temp[5] Acres	Total Acres	Comp[6] Mitig Acres	Dredge CY x1000
1	2	100	0	0	0	0.251	0	0	0.100	0.251	0	0
2	3	67	0	0.360	0.100	0	0.220	0	0	0.680	0.300	0
3	0	-	-	0	0	0	0	0	0	0	0	0
4	8	38	0	11.204	0	4.760	0	0	0	15.964	0	0
5F	2	50	0	0.086	0	0	0	0	0	0.086	0	0
5R	0	-	-	0	0	0	0	0	0	0	0	0
5S	35	91	0	20.979	0	0	0.339	0	0	21.318	0	0
6T	4	50	0	0	0.500	0	0.040	0	0.500	0.540	0	0
6V	1	0	0	0	0	0	0	0	0	0	0	0
7	0	-	-	0	0	0	0	0	0	0	0	0
8	1	100	0	0	0	0	7.600	0	0	7.600	11.800	0
9	0	-	-	0	0	0	0	0	0	0	0	0
SB	0	-	-	0	0	0	0	0	0	0	0	0
Total	56	77	2	32.629	0.600	5.011	8.198	0	0.600	46.439	12.100	0

1. Due to incomplete reporting, actual disclaimed area are larger; see "Percent Records with Ac/CY Data" column.
2. "Pct. Records with Ac/CY Data" is the percent of Corps disclaimers, which specify a fill acreage or dredge volume.
3. With large data sets, rounding errors may cause apparent discrepancies between (1) the sum of the number of records calculated by applying the displayed percentages to the "No. of Projects" for each region and (2) the displayed column total.
4. "Percent Complete Records" is the percent of Corps disclaimers, which include information, specified in SWRCB guidance: (1) receiving water name, (2) applicant name, (3) Corps permit type, (4) receiving water category (wetland, riparian, streambed, lake, or ocean), (5) disclaimed acres (permanent and temporary) or dredge volume, and (6) type and acreage of compensatory mitigation.
5. "Temp Fill Acres" is the sum of filled acres on which impacts have been determined to be temporary; they are also included in columns to the left and in "Total Fill Acres".
6. "Comp Mitigation Acres" are acres created, restored or preserved as mitigation for fill projects; they are not included in "Total Fill Acres". Mitigation is not necessarily in-kind.

* Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers, U.S. Supreme Court, January 2001.

Table 2B

"ISOLATED" WATERS – DISCLAIMED BY USACOE PERSUANT TO SWANCC*

BY REGION AND WATERBODY TYPE

January 1, 2001 - December 31, 2002

Region	No. of Projects	Pct.[2][3] Records With Ac/ CY Data	Pct.[3][4] Complete Records	Wetland Acres	Riparian Acres	Streambed Acres	Lake Acres	Ocean Acres	Temp[5] Acres	Total Acres	Comp[6] Mitig Acres	Dredge CY x1000
1	8	50	13	0.790	0	0	0	0	0	0.790	0.500	0
2	63	48	27	9.237	7.478	0.481	0.620	0.022	7.288	17.838	5.910	68.00
3	3	100	0	0.350	0	0.010	0	0	0	0.360	0	0
4	12	100	0	162.630	57.350	4.190	0	0	1.100	224.170	0	0
5F	10	80	0	11.231	0.817	0.123	0	0	0	12.171	0	0
5R	0	-	-	0	0	0	0	0	0	0	0	0
5S	35	89	9	28.146	0.005	12.140	1.590	0	0	41.881	0.545	0
6T	0	-	-	0	0	0	0	0	0	0	0	0
6V	12	33	8	0.002	6.000	0.517	45.000	0	0.505	51.519	0	0
7	5	60	0	0	29.800	0	0.300	0	0	30.100	0	0
8	6	83	17	10.150	27.340	0	0	0	0	37.490	0.250	0
9	2	100	0	0.400	0	0	0	0	0	0.400	0	0
SB	0	-	-	0	0	0	0	0	0	0	0	0
Total	156	65	53	222.936	128.790	17.461	47.510	0.022	8.893	416.719	7.205	68.00

1. Due to incomplete reporting, actual disclaimed areas are larger; see "Percent Records with Ac/CY Data" column.
2. "Pct. Records with Ac/CY Data" is the percent of Corps disclaimers, which specify a fill acreage or dredge volume.
3. With large data sets, rounding errors may cause apparent discrepancies between (1) the sum of the number of records calculated by applying the displayed percentages to the "No. of Projects" for each region and (2) the displayed column total.
4. "Percent Complete Records" is the percent of Corps disclaimers, which include information, specified in SWRCB guidance: (1) receiving water name, (2) applicant name, (3) Corps permit type, (4) receiving water category (wetland, riparian, streambed, lake, or ocean), (5) disclaimed acres (permanent and temporary) or dredge volume, and (6) type and acreage of compensatory mitigation.
5. "Temp Fill Acres" is the sum of filled acres on which impacts have been determined to be temporary; they are also included in columns to the left and in "Total Fill Acres." "Comp Mitig Acres" are acres created, restored or preserved as mitigation for fill projects; they are not included in "Total Fill Acres". Mitigation is not necessarily in-kind.

* Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers, U.S. Supreme Court, January 2001.

Table 3A

ACRES OF COMPENSATORY MITIGATION[1]

BY TYPE

January 1, 2001 - December 31, 2003

Year	Created	Restored	Preserved	Not Specified	Total Compensation	Wetland/ Riparian Fill[2]	Compensation:Fill Ratio
2003	304	249	230	152	935	736	1.3:1
2001-2002	834	411	368	68	1681	762	2.2:1

1. Discharges to federal waters only.
2. Figures in the "Wetland/Riparian Fill" column do not correlate with figures in Table 1A because this column excludes acreage of bonafide "restoration" projects, the primary purpose of which is restoration of beneficial uses. The "Wetland/Riparian Fill" column reports both permanent and temporary impacts.

Table 3B

COMPENSATION FOR RIPARIAN-ONLY IMPACTS[1]

BY REGION

January 1, 2001 - December 31, 2003

2003

Region	Number of Projects	Fill Acres	Compensatory Mitigation[2] Acres	Comp:Fill Ratio (Comp:1)
1	21	5.3	<1	0.0
2	15	0.7	4.3	6.1
3	12	1.6	3.9	2.4
4	15	2.7	18.9	7.0
5F	0	-	-	-
5R	2	1.2	<1	0.0
5S	5	<1	<1	0.0
6T	0	-	-	-
6V	0	-	-	-
7	0	-	-	-
8	9	9.8	16.4	1.7
9	16	9.5	55.0	5.8
SB	0	-	-	-
Total	95[3]	30.8	98.6	3.2

2001-2002

Region	Number of Projects	Fill Acres	Compensatory Mitigation[2] Acres	Comp:Fill Ratio (Comp:1)
1	6	5.5	0.1	0.0
2	19	3.7	5.2	1.4
3	13	3.7	1.4	0.4
4	33	7.3	30.7	4.2
5F	4	<1	<1	0.0
5R	4	5.7	<1	0.0
5S	15	2.0	0.8	0.4
6T	1	0.8	2.8	3.3
6V	2	8.5	0.0	0.0
7	0	-	-	-
8	7	1.6	4.9	3.0
9	12	2.0	3.7	1.8
SB	0	-	-	-
Total	116[3]	40.9	49.6	1.2

1. Discharges to federal riparian waters only. Permanent impacts only.
2. "Comp Mitigation Acres" are acres created, restored or preserved as mitigation for fill projects; they are not included in "Fill Acres."
3. In 2003, 51 of 95 projects (54 percent) provided compensatory mitigation. In 2001-2002, 60 of 116 projects (53 percent) provided compensatory mitigation.

Table 4A

REGULATORY ACTION SUMMARY

DISCHARGES TO FEDERAL WATERS

January 1, 2001 - December 31, 2003

Year	No. of Projects [1]	Standard Certs	Conditional Certs	Denials	WDRs	WDRs Waived Unconditionally	WDRs Waived Conditionally	Notif's [2]	Enforcement Actions
2003	1091	472	578	26	15	3	26	2	13
2001-2002	2047	732	1247	42	28	124	310	8	14

1. Does not include notifications. "No. of Projects" may be less than sum of columns to the right because some projects may be regulated under both CWA section 401 and Porter-Cologne.

2. "Notifications" received, as required by SWRCB conditions for some certified Nationwide and other federal general permits.

Table 4B

REGULATORY ACTION SUMMARY

DISCHARGES TO NON-FEDERAL WATERS[1]

January 1, 2001 - December 31, 2003

Year	No. of Projects	Standard Certs	Conditional Certs	Denials	WDRs	WDRs Waived Unconditionally	WDRs Waived Conditionally	Notif's	Enforcement Actions
2003	56	N/A	N/A	N/A	4	2	0	N/A	0
2001-2002	156	N/A	N/A	N/A	3	13	45	N/A	2

1. Disclaimed by USCOE pursuant to SWANCC.

Table 5

REGIONAL BOARD WORKLOADS & ALLOCATIONS

BY REGION

	Allocation FY 03-04		Workload 2003					
Region	**PY Allocation**	**Percent of PY Allocation**	**No. of Projects[1]**	**Percent of Projects**	**Total Fill Acres[1]**	**Percent of Acres**	**Staff Hrs/Project[2]**	**Allocation/ Workload Index[3]**
1	0.3	3	262	8	1188	28	6.1	0.2
2	2.4	27	608	19	332	8	21.0	2
3	0.4	4	345	11	407	10	6.2	0.4
4	2.1	23	306	10	467	11	36.5	2.2
5	1.7	19	930	30	1016	24	9.7	0.7
6	0.4	4	90	3	330	8	23.7	0.7
7	0.1	1	50	2	205	5	10.7	0.3
8	0.7	8	174	6	122	3	21.4	1.8
9	0.9	10	363	12	184	4	13.2	1.3
DWQ	0	0	10	0	24	<1	-	-
OCC	0.5	6	-	-	-	-	-	-
Total	9	100	3138	100	4276	100	15.3	-

1. Period of record for number of projects and acres is January 2001- December 2003.
2. Staff Hrs/Project = (PY Allocation*1775 hrs/PY*3 Years)/(No. of Projects).
3. Projects & Acres Workload Index = % Allocation / [(% Projects + % Acres) /2].

Figure 5

PERCENT OF PROJECTS & KNOWN FILL ACRES

BY REGION

January 1, 2003 - December 31, 2003

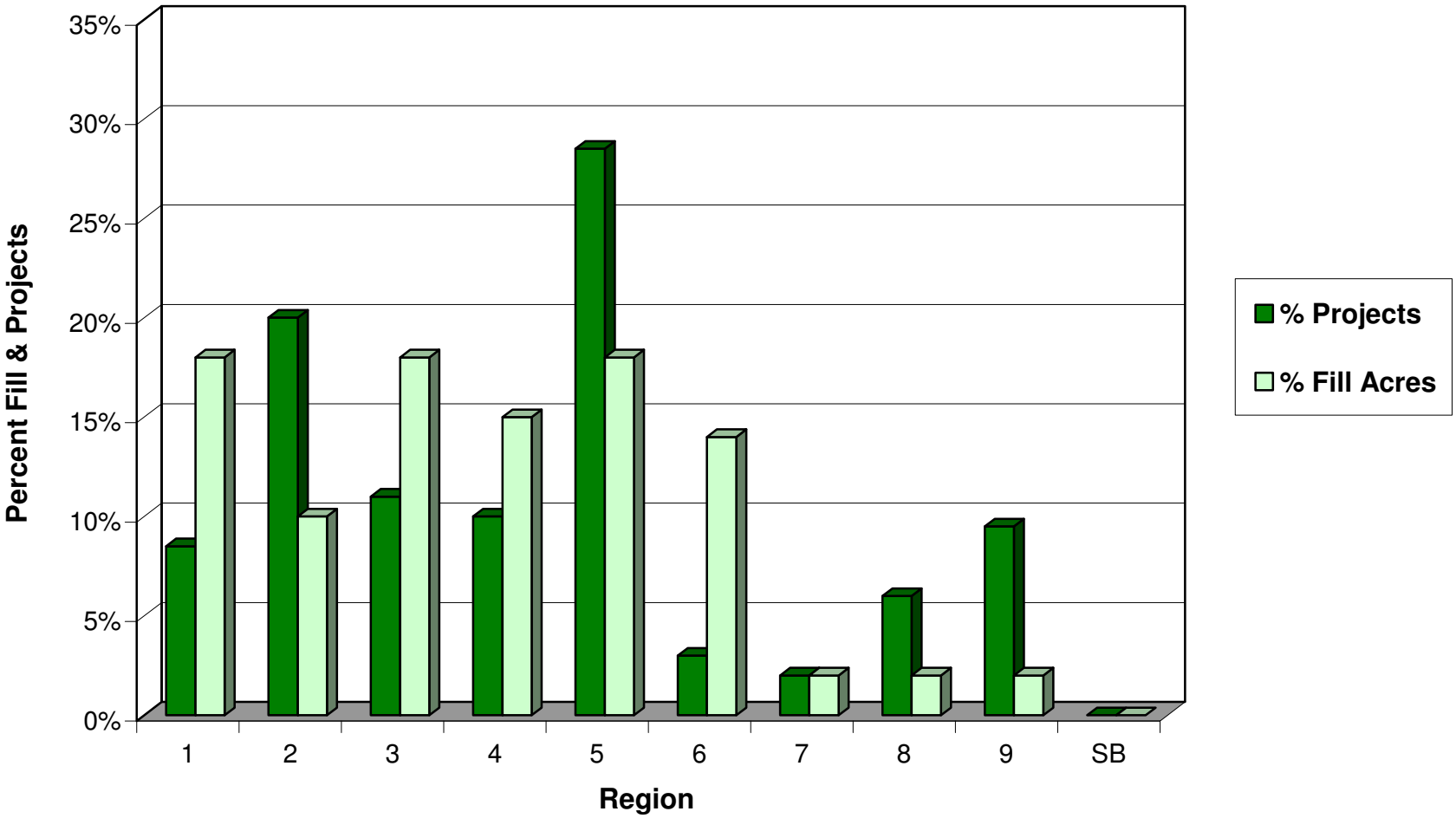


Figure 6

PERCENT OF PROJECTS & KNOWN FILL ACRES

BY REGION

January 1, 2001 - December 31, 2002

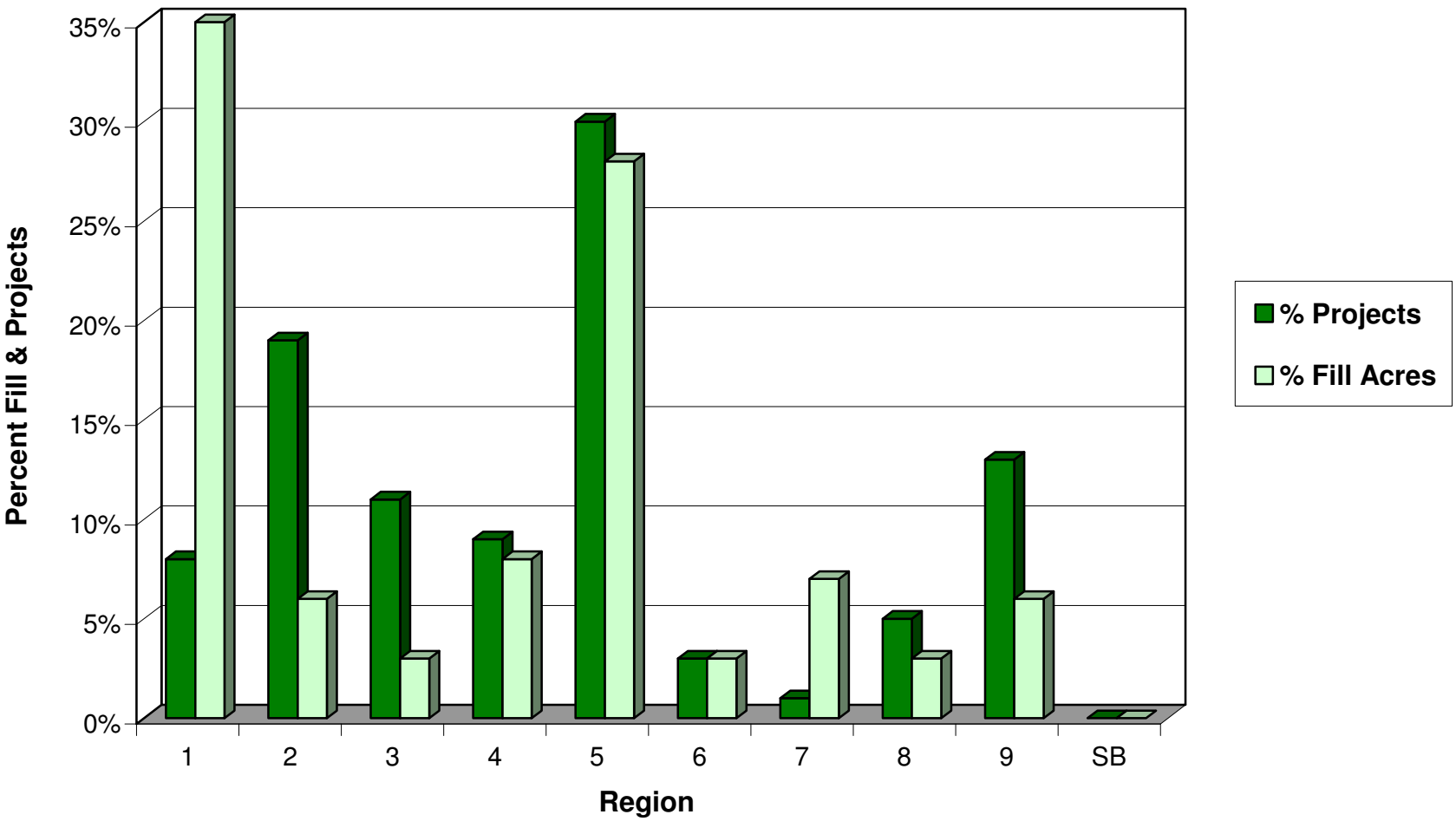


Table 6

USACOE PERMITS: NUMBER OF PROJECTS AND FILL AREA

BY PERMIT TYPE AND YEAR

January 1, 2001 - December 31, 2003

	2003		2001-2002	
Permit Type[1]	**Percent of Projects**	**Percent of Fill Acres**	**Percent of Projects**	**Percent of Fill Acres**
Nationwide	69	47	72	33
Individual	12	46	9	45
Regional General	2	1	<1	2
Rivers & Harbor Act	4	<1	2	<1
Letter of Permission	2	1	<1	<1
USACOE[2]	<1	<1	<1	<1
Enforcement[3]	<1	<1	<1	<1
Unknown	12	2	15	19

1. Some projects used more than one permit type and therefore contribute to more than one category, resulting in total percents greater than 100 in some columns.
2. Projects conducted by USACOE.
3. No CWA section 404 permit was issued.

CALIFORNIA
Water Boards

STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

P.O. Box 100, Sacramento, CA 95812-0100 • www.waterboards.ca.gov
info@waterboards.ca.gov

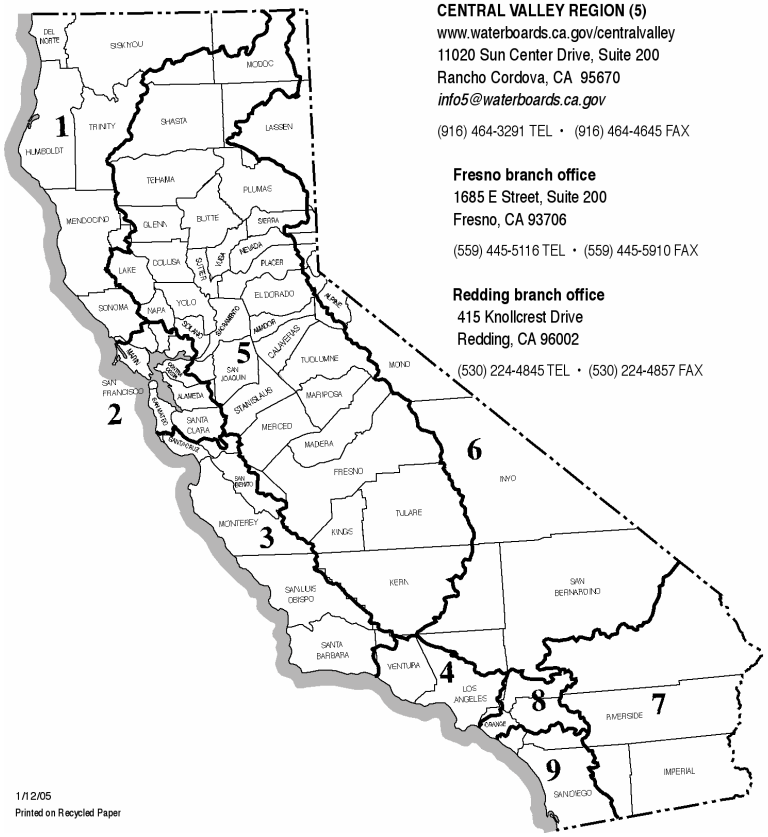
Office of Public Affairs: (916) 341-5254
Office of Legislative Affairs: (916) 341-5251

Financial Assistance information: (916) 341-5700
Water Quality information: (916) 341-5455
Water Rights information: (916) 341-5300

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARDS

NORTH COAST REGION (1)
www.waterboards.ca.gov/northcoast
5550 Skylane Blvd., Suite A
Santa Rosa, CA 95403
info1@waterboards.ca.gov
(707) 576-2220 TEL • (707) 523-0135 FAX

SAN FRANCISCO BAY REGION (2)
www.waterboards.ca.gov/sanfranciscobay
1515 Clay Street, Suite 1400
Oakland, CA 94612
info2@waterboards.ca.gov
(510) 622-2300 TEL • (510) 622-2460 FAX



1/12/05
Printed on Recycled Paper

CENTRAL COAST REGION (3)
www.waterboards.ca.gov/centralcoast
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401
info3@waterboards.ca.gov
(805) 549-3147 TEL • (805) 543-0397 FAX

LOS ANGELES REGION (4)
www.waterboards.ca.gov/losangeles
320 W. 4th Street, Suite 200
Los Angeles, CA 90013
info4@waterboards.ca.gov
(213) 576-6600 TEL • (213) 576-6640 FAX

CENTRAL VALLEY REGION (5)
www.waterboards.ca.gov/centralvalley
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670
info5@waterboards.ca.gov
(916) 464-3291 TEL • (916) 464-4645 FAX

Fresno branch office
1685 E Street, Suite 200
Fresno, CA 93706
(559) 445-5116 TEL • (559) 445-5910 FAX

Redding branch office
415 Knollcrest Drive
Redding, CA 96002
(530) 224-4845 TEL • (530) 224-4857 FAX

LAHONTAN REGION (6)
www.waterboards.ca.gov/lahontan
2501 Lake Tahoe Blvd.
South Lake Tahoe, CA 96150
info6@waterboards.ca.gov
(530) 542-5400 TEL • (530) 544-2271 FAX

Victorville branch office
15428 Civic Drive, Suite 100
Victorville, CA 92392
(760) 241-6583 TEL • (760) 241-7308 FAX

COLORADO RIVER BASIN REGION (7)
www.waterboards.ca.gov/coloradoriver
73-720 Fred Waring Dr., Suite 100
Palm Desert, CA 92260
info7@waterboards.ca.gov
(760) 346-7491 TEL • (760) 341-6820 FAX

SANTA ANA REGION (8)
www.waterboards.ca.gov/santaana
California Tower
3737 Main Street, Suite 500
Riverside, CA 92501-3339
info8@waterboards.ca.gov
(951) 782-4130 TEL • (951) 781-6288 FAX

SAN DIEGO REGION (9)
www.waterboards.ca.gov/sandiego
9174 Sky Park Court, Suite 100
San Diego, CA 92123
info9@waterboards.ca.gov
(858) 467-2952 TEL • (858) 571-6972 FAX

State of California
Arnold Schwarzenegger, Governor

California Environmental Protection Agency
Dr. Alan Lloyd, Secretary

State Water Resources Control Board
Arthur G. Baggett, Jr., Chair
Celeste Cantú, Executive Director